

UK JUNE 1980 60p. ONDING WORLD

RECORDING STUDIO

MIKE

Opens Our Test

Steve Hillage **Lenny White** Lester Bowie Don Weller

Recording World Tests: Mich 400 series desk; Studer B67 tape mestiline; Yamaha 2200 power amp; Courl 30 band stereo graphic eq. Features: Recording in the 80s; Sain studios; Audio shops survey; Studio Diary; APRS preview

Tests: Gibson Les Paul Active Artist; Manson 12 string acoustic; Rogers Garibaldi drum kit; Rickenbacker bass combo; Biamp 1282 mixer; Red Acoustics speakers; Speakercheck 10 inch units Pt II



AND RED

EXAMAHA

P2200 **Natural Sound Power Amp**



Circle 701 on Reader Service Card



usic has come a long way in the past few decades. But with amplifiers, it's been pretty much the same old thing — an amp in the top of a wooden box with some speakers mounted in the bottom. The only real change has been from amp manufacturers who have designed their own sound into their amps. But now, Roland has designed a system of amplification that designs your sound. We call it The Roland Rack.

The key ingredient in the Roland Rack is you. Because the modular design of our system lets you build your sound from the ground up. So, for the first time, you can have an amplifier that's exactly what you need.

The Roland SIP 300 Guitar Pre-Amplifier, for example, lets you control your own sound; rather than rely on your amplifier's. Colour the tonality with three highly sensitive tone controls plus a series of hi and lo filters.

Roland's discrete component technology allows all the advantages of tube-type pre-amps, with none of the drawbacks. The Overdrive section supplies an incredible 42 dB gain, and virtually no gain in undesirable noise. What's more, you can enjoy rich harmonic distortion, even at relatively low volumes. And the special effects loops are extra special — one before the pre-amp stage, and one after.

The SIP-300 performs well with any quality power amp. Of course, if you don't want to settle for just any power amp, try Roland's SPA 120 or SPA 240 Stereo Power Amps. And for bass guitar, there's the SIP 301 Bass Pre-Amplifier. The Roland Rack System also includes a Stereo Flanger, Vocoder, Pitch-to-Voltage Synthesizer, Digital Delay, and the incredible Dimension D.

This kind of versatility covers a lot of sound, but not a lot of space. In fact, one of our nicest features comes after the music's all over. Just close the door to the rugged rack case, and carry all your sound off stage in one trip.

The Roland Rack System. It's Your Idea.



ROLAND UK DEALERS

LONDON AND SOUTH

LONDON SYNTHESISER CENTRE, London (01) 387-7449

ROSE MORRIS, London (01) 437-221 | Westelli
ARGENT, London (01) 240-0084 | MIDLAI
MACAR, London (01) 836-2856 | WOOD
FREEDMANS, London (01) 539-0288 | SOUNE
KINGFISHER, Fleet, Hants, (02514) 21210 | CARSLB
HODGES & JOHN SON, Southend-on-Sea (0702) 613184 |
Chelmsford (0702) 66247 | Colchester (0206) 77463 | Send now for brochure on the Roland Rack.

Caravesend [0474] 66766
Chat ham (0634] 408989
Maidstone [0622] 58586
Leigh-on-Sea [0702] 712911
Westcliff-on-Sea [0702] 48324
MIDLANDS
WOODROFFES, Birmingham [021] 236-4992
SOUNDPAD, Leicester [0533] 20760
CARSLBRO SOUND CENTRE, Mansfield/Nottingham [0623] 26976
Sheffield
[0742] 663862

Romford (70) 44856

THE NORTH

ROCK CITY, Newcastle (0632) 24175

SIDE STREET MUSIC, Edinburgh (031) 337|1071

MC CORMACKS, Glasgow (041) 332-6644

HESSY'S, Liverpool (051) 2361418

LONDON SYNTHESISER CENTRE, Manchester (061) 236-6794

NORTHERN IRELAND

SESSION MUSIC, Belfast (0232) 38502

WALES AND THE WEST

EDDIE KING MUSIC, Bristol (0272) 36613

Cardiff (0222) 374358

SOUND CENTRE, Cardiff (0222) 34018 GREENHALGH Exeter (0392) 58487

Brodr Jorgensen (UK) Ltd., Great West Trading Estate, 983 Great West Road, Brentford, Middlesex. Tel: 01-568 4578, Telex: 934470. Circle 755 on Reader Service Card

exotic wood grains. See your dealer or send \$2.00 postage & handling for 16 page N. Hollywood, CA 91609 • (213) 782-3202

INTERNATIONAL DISTRIBUTORS

AUSTRALIA Ram Music Trading Co., 348 Punt Road, South Yarra 3141 Yarra Melbourne, Australia (03) 267-4418. BeneLux Galama Guitar Customizing, Box 594, Grontingen, Holland, 050-770-725. ENGLAND Chandler Guitars, 199 Sandy Combe Road, Kew, Richmond, Surrey, 01-940 5874. FRANCE Nashville Guitar Workshop, 18 Rue de Douai, 75009 Paris, France, 874-65-13, 285-82-47. GERMANY Musik Schell, Postfach 1235. Bleichereistrasse 2, 7336 Uhingen, West Germany (07161) 38566. JAPAN Moon Corporation, 1F Yamaguchi, Shoji Building, 24-14 Ebisu 1-Chome, Shibjuya-Ku, Tokyo, 150 Japan. SWEDEN Englund Musik AB, Box 610, S-125 06 HAGERSTEN Stockholm, Sweden 08 97 09 20. SWITZERLAND Zenker Musikinstrumente En Gros, Ch-4003 Sasel Postfach, Felerabendstrasse 14-22, 061-229996 & 229997. Telex 64831.

Contents

PUBLISHERS
Managing Director Richard Desmond
Creative and Editorial Director Ray Hammond
Market Development Director Malcolm Green
Executive Director Alan Marcuson
Company Secretary David Sarter

FDITORIAL

EDITORIAL
Editor David Lawrenson
Assistant Editor Siephen Brennan
Fediture Writer Lynden Barber
Supplements Editor Paul Ashford
Assistant Supplement Editor Tim Oakes
Project Manager (M&RW Test Studio
Keith Spencer-Allen
Editorial Assistant Janet Angus

PRODUCTION PRODUCTION
Group Production Manager Date Robinson
Production Manager Peter Still
Production Manager Peter Still
Production Assistant Karen Galedek
Art Director Harry Deighton
Studio Manager Frank Tyson
Artilsts: Dave Bassert, Malcolm Ferris,
Jane Novak, Denise Barry, Gary Shackman,
David Shaw, Ayimea Smythe, Chrissie Bellman
Photographer Simon de Courcy Wheeler
Photographic Assistant Mike Bassett

ADVERTISING Advertising Executive Mark Epstein Classified Ads Nick Ward Circulation Linda Kernan

CONSULTANTS

CONSULANTS
Robin Lumley, Dr Mark Sawiski MSc (Eng) PhD,
C end, MIEE, MAES, Siephen Delft MIMIT,
Ken Dibble MIDA, MAES, Alan Holmes, Tony Hymas,
Henry Roberts, Jim Rodford, Dave Mann BSc,
Mike Maran

USA
Editor J. C. Costa
Production Editor (London) Mike Feasey
General Manager Mitchell Hober
Advertisement Director Alon Kesselhaut
Advertisement Executive Marion Needhom
Administration Manager Rise Gerstein

GERMAN LANGUAGE EDITION Editor Wolfgang Bongertz Arf Director Thomas Scholz Administration Manager Stephen Kersten European Sales Manager Herbie Katz

IONDON
International Musician & Recording World is published monthly by Cover Publications Ltd., Grosvenor House, 141-143 Drury Lane, London WC2 STE. TELEX No. 24676. TELEPHONE (01) 379-6342. (01) 379-6947. Distributed in Greal Britain by Thomes News Services Ltd., Running Horses Yard, 41-43 Blacktrians Rd., London SET. Tei: (01) 928-6126/7. Printed by Woodford Litho Ltd., England. International Musician & Recording World is a trade mark of Cover Publications Ltd., 1980. While every care is taken in the publication of the magazine, the publishers cannot be held responsible for any results arising from the contents thereof. Subscriptions, 12 months only. UK: E7.50. Worldwide (surface maft) £13.00. US (includes 12 issues, shipping charges to New York, NY and mailing costs from NY): \$22. Second class postage paid at New Yark, NY and all additional mailing offices, Air mail rates Europe; \$49.00. South America and South Africa: £26.00. Australia and Japan: £32.00.

SALES AGENTS

NEW YORK 19th Floor, 1500 Broadway, New York, NY 10036 Tel: (212) 921 9050 (six fines) Telex: (230) 645459

SWITZERLAND SWILERLAND Badger Publications S.A., Rue de L'Industrie 16, 17 Filbourg & Switzerland Fel: (037) 244 470 Telex: 36450

Sole International Distributing Agents Gordon & Gotch (Canada) Ltd., 55 York Street, Toronto, Ontario MSJ 154, Canada Gordon & Gotch (Kustralasia) Ltd., Melbourne, Sydney, Brisbane, Adeloide, Perih Gordon & Gotch (NZ) Ltd., Wellington, Auckland, Christofhurch, Dunedin Central News Agency Ltd., South Africa.

SPECIAL FEATURES

44 Don Weller One of Britain's unassuming sax player's talks of life out of the limeliaht

76 Steve Hillage The enigmatic guitarist expounds his theories of music to Mike Feasev

with Steve Brennan

108 Mike Oldfield We chat to the studio wonder kid. in between his showering the IM&RW staff with champagne

144 Big Jim Sullivan - Part II The second

instalment of one of Britain's premier musicians. He expounds on booze, birds and boogie

156 Lester Bowie A history of jazz — Chicago style gleaned from a respected figure

152 Yamaha Market Report

DRUM SECTION

96 Rogers Garibaldi by Henry Roberts

90 Lenny White Bill Stephen interviews this highly successful iazz drummer

TEST SECTION

55 Soundcheck I The Rickenbacker Bass amp put through its paces by Dave Mann

58 Soundcheck II The Biamp mixer comes under the eve of Mark Sawicki

73 in Brief Dave Mann takes a look at the Ohm amp

51 Guitarcheck I A Gibson Les Paul Active Artist goes through the nimble fingers of Stephen Delft

53 Guitarcheck II 12 string Manson acoustic by Stephen Delft

61 Speakercheck I Ken Dibble investigates the Red professional **loudspeaker**

66 Speakercheck II The "Db" kid gets to grips with more 10 inch units

REGULAR FEATURES

25 Letters

164 Buzz

31 Albums

72 Guitar Workshop

81 Dealer of the Month Rod Argent

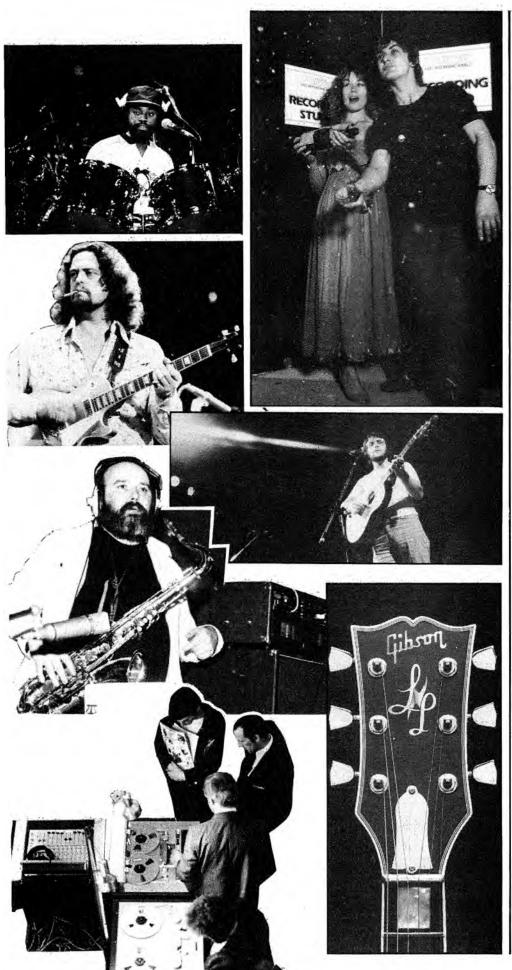
63 Trade News

167 Dibble's PA Column

162 Microphones Part 8, microphone applications

RECORDING WORLD

113 Recording World News/Views and Reviews



Editorial

As you can see from the front cover we have been spraying the bubbly around a bit. Mike Oldfield, no stranger to the studio himself, duly christened the IM&RW test bed studio. Needless to say the IM staff who were present restricted themselves to brown ale.

Studio enthusiasts will also note that this month sees the international exhibition of the Association of Professional Recording Studios (APRS). Held in the Connaught Rooms in central London, it contains stands from all the major recording studio manufacturers.

You will find a complete run down of all the exhibitors on page 121. If you want any further information on the IM&RW test bed studio then why not visit our own stand at the exhibition, which is number 91.

National Association of Music Merchants

Serving the Music Products Industry

500 North Michigan Avenue Chicago, Bross 606(1) (212) 527-3200



VOLUME 6 No. 6 JUNE 1980 (UK) JULY 1980 (US)

66 VICTORIA ROAD-ROMFORD ESSEX-ENGLAND TELEPHONE: ROMFORD (0708) 25919

sonighte by After four years of specialisation in the PA field

we can now reveal a new range of high power professional PA stacks available direct to you at manufacturers prices. These stacks are not toys - they are made from heavy duty plywood and are fitted with crossover networks where appropriate. Our experience and reputation in this field speaks for itself (ask our many satisfied customers) and our prices are unbeatable.

HIRE? WHEN YOU CAN BUY YOUR OWN PA FOR AS LITTLE AS:

1 KILOWATT, 12-Channel Rig Complete - £21.00 per week; 2 K/LOWATT, 16-Channel Rig Complete - £29.00 per week; 2 KILOWATT, 16-Channel Rig with RSD Mixer and Amp - £37,00 per week (also see rates below) (2 years repayment; Subject to Hire Purchase acceptance)



SHORT THROW RIG N/400 Pair of Full Range Cabs Total 400 watts £445 inc vat (£5.78 per week) RIG N/700 Pair of Full Range Cabs Total 700 watts £565 inc vat (£7.34 per week)



LONG THROW RIG L/400 Pair of Full Range Cabs Total 400 watts £445 inc vat (£5.78 per week) RIG L/700 Pair of Full Range Cabs Total 700 watts £565 inc vat (£7.34 per week)



SOUNDWAVE PA & LIVE SOUND CATALOGUE STILL THE MOST COM-PREHENSIVE CATALOGUE OF EVERYTHING YOU NEED IN PA. Now with supplement giving details of new rigs. Send a large stamped addressed envelope (17p) or 3 International reply coupons.

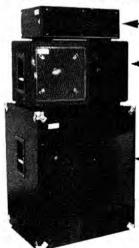


RIG G/1100 Pair of Mid/high Cabs Pair of Bass Bins Total 1100 watts £760 inc vat (£9.88 per week) RIG G/2000 Pair of Mid/high Cabs Pair of Bass Bins Total 2 Kilowatts £1085 inc vat (£14.10 per week)



RIG F/600 Pair of 3-Way Full Range Cabs Total 600 watts £585 inc vat (£7.60 per week) RIG F/1000 air of 3-Way Full Range Cabs **Total 1 Kilowatt** £715 inc vat (£9.29 per week)

NEW SUPER ECONOMY RANGE



100 watt H/F CAB £90.00 (£1.17 per week)

100 watt MID CAB £90.00 (£1.17 per week)

150 watt BASS BIN ■£170.00 (£2.21 per week)



*FREE DELIVERY ANYWHERE IN THE UK MAINLAND *

MIXERS, MIKES, POWER AMPS, CROSSOVERS, EQUALISERS, MONITORS-AT LOW PROFESSIONAL PRICES-ALL ON PERMANENT DEMO AT OUR SHOWROOMS

RING NOW OR SEND A LARGE 17p SAE FOR DETAILS.



SOUNDWAVEBASSPLACE

66 VICTORIA ROAD-ROMFORD-ESSEX-ENGLAND

TELEPHONE: ROMFORD (0708) 25919

IF YOU WANT A BASS PHONE 0708-25919

LET'S BE HONEST — WE WANT TO SELL YOU YOUR NEXT BASS GUITAR Whether it's an Alembic, or a beginner's job, we think you should buy it from us

why?

Here are just some of the reasons:

CHOICE — We have the largest selection of bass instruments in the country ACTUALLY IN STOCK (see below). You can try them all and choose to suit your budget

PRICE — Because we specialise in bass equipment we can offer the lowest professional prices on all models

EASY PAYMENT - Hire Purchase, Access, Barclaycard - Ring for immediate despatch

FREE DELIVERY - Anywhere in the UK mainland

EXPERT ADVICE - On strings, customisation, effects units etc

REPUTATION — We have one of the best in the business. No rip-offs. No cheap tricks. 100% reliability

MONEY-BACK GUARANTEE - on any unsatisfactory item

OUR RANGE INCLUDES: ALEMBIC HS ANDERSON ARIA BOZO PETER COOK SD CURLEE FENDER GIBSON GUILD HAGSTROM HOFNER HOHNER IBANEZ MUSIC MAN OVATION PEAVEY PURLE RENAISSANCE BC RICH RICKENBACKER SHERGOLD CARL THOMPSON WAL WESTBURY YAMAHA ETC

The best bass guitar and double bass and guitar pick-ups all in stock at low professional prices POLYTONE— Mini-Brutes I, II & III plus 101 and double bass and guitar pick-ups all in stock at low professional prices

and we do <u>mean</u> the best

TRACE ELLIOT BASS STACKS

are for the professionals. They are no lightweights and they are not cheap.

But they do the job.

Amplifying low frequencies is a science of its own and there are no short-cuts.

You need big power amps and heavy duty speakers and cabs. Illustrated are just two of the many options available from a truly comprehensive range.

We are serious about it. If you are too, send for details NOW.



fact: there's a Shure microphone that's right for your application & equipment...



breed of highperformance, studio-quality unidirectional condensers—technically stateof-the-art, exceptionally

rugged and superb

You've seen it on TV musical shows where sound quality is a must. Unidirectional, dynamic with exceptionally flat response, extremely low handling noise; mellow, smooth, and accurate sound.



The most widely used "on-stage" hand-held dynamic cardiold

microphone—the world standard noted for its distinctive, crisp sound.



famous UNI-DYNE® III family offers top value for money. Uniform cardioid pattern helps control off-axis colouration, background noise, and feedback.



handling noise.
Handsome, smooth looks with new
VERAFLEX® dent-resistant grille—a
favourite on-camera mic with soundmen and entertainers.



fact: the microphone is your link with your audience



ick Jagger

Take it from the Professionals...

A top-quality microphone makes a measurable difference in upgrading the sound of any system—and Shure microphones are universally recognized as the world's standard of quality. Wherever sound quality, reliability, uniformity, and intelligibility are prerequisites, you'll find that professionals choose, and use, Shure. You'll find more Shure microphones than any other single brand in applications as diverse as live entertainment, radio and TV, hotel and auditorium sound reinforcement, churches and cathedrals, boardrooms and council chambers, and public safety-anywhere that sound excellence is a prime consideration.

They are the reliable, professional connection between you and the people you're trying to reach. Send for complete literature. Please let us know your microphone application.

The Sound of the Professionals



Shure Electronics Limited Eccleston Road, Maidstone ME15 6AU Telephone: Maidstone (0622) 59881



"Having witnessed the sophistication of our new 24 track Otari in Gooseberry 2, we felt confident in relying on the MX5050B for stereo mix-down. In the event, the machine was so good we purchased two more."

Peter Houghton, Owner, Gooseberry Studios 1 & 2.*



- 1. Proper editing facilities with calibrated splicing block.
- 2. Four heads provide 2 or 4 track replay.
- 3. Bias and EQ adjustable from front panel.



4 Swernschle MAG acc. 5 IEC 60

5. XLR Connectors.

6. +28 dBm 600 ohm balanced output.

7. Cirect drive capstan servo with varispeed.

8. Variable or preset output level.

9. 70 dB (weighted) signal/noise ratio.

10. Sel sync on each channel.

Industrial Tape Applications, 1-7 Harewood Avenue, Marylebone Road, London NW1. Tel; 01-724 2497. Telex: 21879.

* Gooseberry 2 London, 1000 sq.ft. Cost £100,000. Equipment includes Otari MTR80, 24 track with auto locater, 3 Otari MX50508 stereo recorders. Soundcraft 32 x 24 console. Eventide harmonizer, Lexicon 224 computer reverb. Torsnoy monitors. AKG and Neumann microphones. Rates from £24,00 per hour.



NEW! MORLEY power amplifier has a big mouth

(It's a Volume pedal too!)

This amazingly unique 8 pound, multi-purpose portable amplifier-volume pedal shouts with David-Goliath roars that slam the amplifier industry out of a decade of doldrum copycat products. You use Bigfoot as a solo amp, in conjunction with and to master control other remote amps, or straight through as a volume pedal.

It pays off fast, loud and clear with sounds and distortions that range from the savage, snarling fury of a wounded jungle cat to a sound as clean and pristine pure as the driven snow. Use it with your own choice of any speaker system of 4 ohms or more. A neat option is a choice of Electro-Voice or Eminence speakers or of an empty enclosure for your own speaker.

Quality performance, power, and packaging make Bigfoot ideal for studio sessions and live gigs and you tote it into a club or outdoor arena as easily as you tote your cigarettes. Here's more that's new with Bigfoot:

- 25 watts rms sinewave continuous superclean output or 50 watts of square wave, impact power.
- Photoelectric Volume pedal controls volume of the amplifier.
- · Silent circuit AC on-off switch no clicks, pops, thumps.
- · Output jack for driving external amps or direct recording.
- Volume, treble, bass controls plus treble and bass boost footswitches.
- Tube type sound, clear sound, soft distortion, hard fuzz.
- Short circuit protection.
- Overload indicator lamp.



Morley -- the opto-electronic failsafe pedals -no pots, gears, or batteries.

6855 VINELAND AVENUE NORTH HOLLYWOOD, CA. 91605 (213) 760-3140

Send for our Free Cata Morley, 6855 Vineland No. Hollywood, CA 916	Ave.,
Name	
Address	
City	
State	Zip



Circle 787 on Reader Service Card

STACKS OF POWER

Marshall is still Number One!

British rock music dominates the world scene, and it's no surprise that the Marshall stack, originally exclusive to rock's elite, is now the first choice of musicians in the USA, and Japan, as well as Europe and the UK.

If you've never played a Marshall stack you're missing out on one of music's great and lasting thrills.

Stacks of Power: that says it all!

Marshall now produce a range of 7 valve heads:

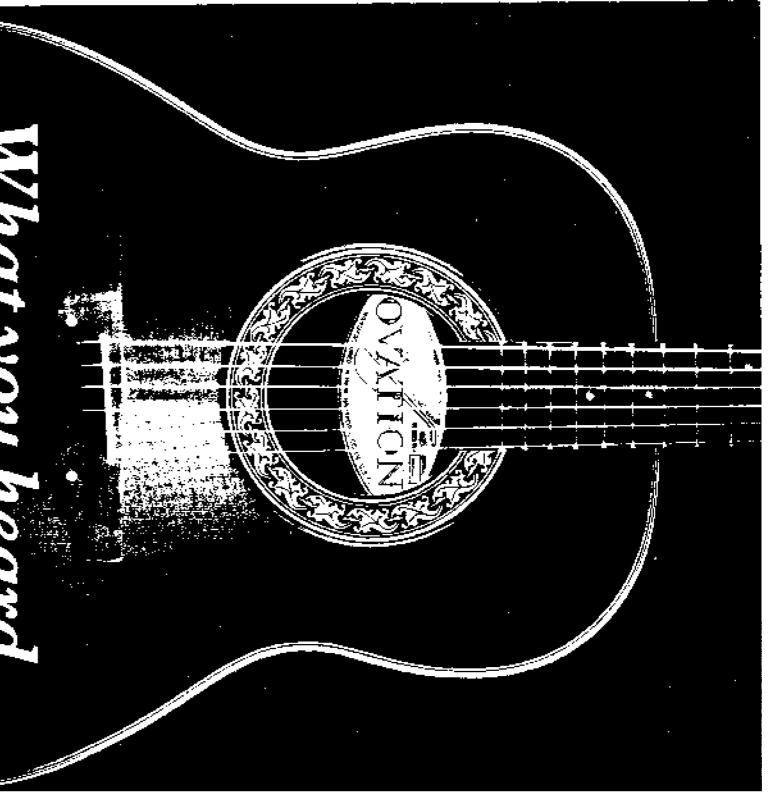
1959 100W Super Lead
1987 50W Super Lead
2203 100W Master Volume
2204 50W Master Volume
1992 100W Super Bass
1986 50W Super Bass
2959 100W Reverband Boost

4 x 12 cabinets are available in 4 different specifications, all fitted with Celestion speakers developed specially for Marshall.

1960 and 1960B 100W Lead/Keyboards 1935 and 1935B 100W Bass/Keyboards 1982 and 1982B 120W Lead/Keyboards 1984 and 1984B 120W Bass/Keyboards



Rose, Morris & Co., Ltd 32-34, Gordon House Road, London NW5 INE Tel: 01-267 5151



Ovation Acoustic and Acoustic-Electric guitars. Your ears know that what you heard was true.

Colleg Properties 成品等3十

When haying your Ovation guitar make sure it earries the Rose-Morris Ovation Guttar Preparation Document.
This is your guarantee that the instrument is fully warranted in the U.K.
If you are in any doubt, call us on 0.-2675151 quoting the serial number and model number – oh, reverse the charges of course.

P

Rose-Morris

Rose-Morris are the exclusive distributors of Ovation guitars in the U.K. and Eire.

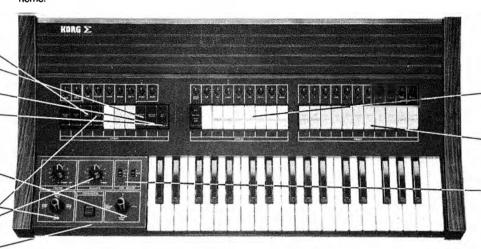
Rose, Marris & Co. Ltd., 32 Gordon House Rd., London NW5 1NE Tel. 01-2675151

Two more reasons why Korg synthesizers lead the world.

Korg are rightly regarded as the world's leading synthesizer manufacturer by many top musicians. Their amazing ranges of controls and effects give versatility far beyond the reach of most other synthesizers. This, combined with their tuning stability, reliability and unbelievable value for money, means that Korg lead the way in electronic music on stage, in the studio or at home.



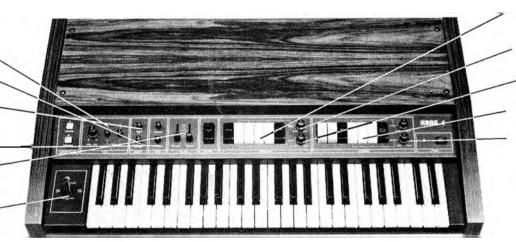
- 2. Quarter tone.
- 3. Multiple trieger
- 4. Keyhold.
- Joystick for high low pass filter.
- Programmable joystick control for pitchbend and modulation.
- 10. Volume balance
- 11. Portamento.



- Synth section with parameter adjustment.
- Instrument section with parameter adjustment.
- Programmable touch sensitive keyboard.

KORG SIGMA A monophonic synthesizer giving superb performance on stage, in the recording studio and at home. The eleven instrument and eight synth presets can each be individually adjusted to give exactly the sound you want to hear. But the unique feature of the Sigma is that all nineteen voices can be played together. Optional footpedals too, for even more tonal, pitch and volume variation. Use the Sigma to control other synths or as an input for sequencers. And all this for only £699 inc. VAT — far less than any other comparable instrument!

- Tunable oscillators
- Key click, electric piano.
- Brass cut of frequency.
- Ensemble and percussive tone control.
- Mixable volume control.
- Joystick control of pitchbend and chorus phase.



6. Percussive section.

Tremolo speed.

8. Decay length.

9. Ensemble section.

10. Attack/release.

KORG LAMBDA A fully polyphonic synthesizer with two separate groups of voicings, percussive and ensemble, all instantly selectable and fully mixable to provide as many separate tone colours as you need — simultaneously from one keyboard! Separate outputs from the two groupings allow a full stereo effect and the joystick and optional footpedal controls give wide tonal variations. R.R.P., £999 inc. VAT at your Korg Key Centre.



To Rose, Morris & Co Ltd, 32-34 Gordon House Road, London NW5 1NE.

I would like to know more about Korg synthesizers, please send me all the latest information and brochures.

Name....

Address.

Rose-Morris KORG

"Performs favourably in comparison with other makes

That's what Musician's Only said recently about the X-911 synth, purpose built by Korg for today's guitarist.



Only Korg have been able to come up with a guitar synth that's vice-free, stable and packed full of effects and controllable voices.

Using your own guitar and a normal guitar lead, the X-911 allows quick precise adjustment, with a wide range of preset voice selectors and tone controls. Imagine the combination of your guitar sound with electric bass, slow attack violin and a funky synth sound — simply by pressing the presets. There's a choice of optional footpedals too, to add to your dynamic control.

All things are possible with a Korg X-911 at a recommended retail price of £325 inc. VAT.



- 1. Input level adjustment.
- 2. Tuning, octave selection, and interval adjustment (of VCO).
- 3. Portamento adjusts time lag between
- Synthesizer signal selection and VCF control.
- Power on/off switching and volume control.
- 6. Instrumental sound selection and
- Synthesizer tone color selection and envelope adjustment.
- 8. Input jack for connecting guitar or other
- 9. Output jack for direct sound from electric
- Connection jacks for foot switches used to turn effects on and off.
- 11. Cancel switch to turn off all tone color switches at once.
- 12. Volume balance between instrumental and
- 13. Output jack.

To Rose, Morris & Co Ltd, 32-34 Gordon House Road, London NW5 1NE.

I would like to know more about Korg synthesizers, please send me all the latest information and brochures.



Built-in Rotary Speaker and Overdrive Effects... The Back-to-Basics Portable Organ



Reproduce that powerful, legendary sound with this truly portable combo organ. Nine drawbars-16', 8', 51/3', 4', 23/3', 13/5', 1'—for free creative control over tone color, with additional adjustable percussion volume and decay on 4' and $2\frac{2}{3}$ '. Adjustable key-click noise adds extra punch to the sound.

Built-in rotary speaker effect circuitry and

overdrive circuitry provide realistic rotating speaker sound and distortion with simple direct connection to any ordinary amp. No extra external preamp or effects unit is needed. The most widely used drawbar registration settings are preset for instant selection whenever needed.

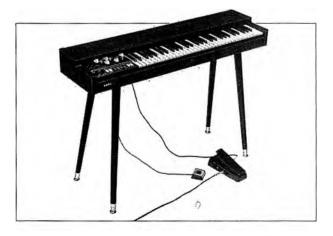
The CX-3 provides hard, dynamic organ sound for all applications in rock, jazz, and popular music.

◆KEYBOARD: C~C 61 keys ◆DRAWBARS X9: 16', 5½', 8', 4', 2½', 2', 1½', 1½', 1' ◆ PRESET ◆ DRAWBARS: I, II, III, Drawbars ◆ PERCUSSION: DRAWBARS: I, II, III, Drawbars PERCUSSION:
4', 2%', Percussion Volume, Percussion Decay
PROTARY EFFECT: On, Fast # OVER DRIVE
TONE CONTROLS: Bass, Treble # TUNE: Tune
(±50 CENTS) # VOLUME: Power & Volume,



key Click Volume ◆OUTPUTS: Signat Outs ×2 (High/Low), Accessory Send € NPUTS: Accessory Return, Rotary Effect (Slow/Fast) € DIMEN-SIONS: 1149(W) × 137(H) × 315(D)mm ●WEIGHT: 10.5kg ● ACCESSORIES: Dust Cover, Connection Cord

POWER CONSUMP-TION: Voltage (Local Voltage, 50/60Hz), Wattage (5W).





For details, please ask:

FOT GEGBIS, PIESSE ASK:
CANADA: ERIKSON MUSIC REG'D 7750 Route Transcanadienne,
St-Laurent, Qué., H4T 1A5.
FRANCE: GAMMÉ 17, Rue Laperouse, 93500 Pantin.
GERMANY: GOTTHOLD MEYER KG, 3550 Marburg 1,
HOLLAND: MILESTONE B.V. Postbus 207, 3330 AE Zwijndrecht.
ITALY: CGD MESSAGGERIE MUSICALI SPA via M.F. Guintifiano,
10, 20138 Mileso.

40, 20138 Milano, SWITZERLAND: MUSIK-MEYER AG. Musikinstrumente en gros,

Mühlehaldenstrasse 16 8953 Dietikon.
U.K. and EIRE: ROSE MORRIS & CO., LTD, 32, Gordon House Road,

London NW5 1NE. U.S.A.: UNICORD 89 Frost Street, Westbury, New York, N.Y. 11590.

Prices in Herry Prices in Herry Prices in Herry Ck Prices in Herry Ck

MUSIC GROUND

245 STATION ROAD, DUNSCROFT, DONCASTER TEL: 0302 843037 or 0302 841274

BULLETIN!!

DO YOU KNOW THAT?

- a) Many music shops give big discounts?
- b) Unfortunately, more (or less) all of them have insufficient stock to back up these offers?

BUT MOST OF ALL THAT?

c) Musicground give unbeatable discounts AND have everything in stock which is advertised?

TELEPHONE US NOW ON **0302 841274** FOR SERVICE AND ADVICE SECOND TO NONE, OR TAKE A TRIP TO DONCASTER TO SEE AN AMAZING RANGE OF GUITARS, KEYBOARDS, AMPLIFICATION, PERCUSSION AND ACCESSORIES LEEDS TO DONCASTER 29 MILES MANCHESTER TO DONCASTER 51 MILES LIVERPOOL TO DONCASTER 86 MILES LEICESTER TO DONCASTER 73 MILES BIRMINGHAM TO DONCASTER 94 MILES COVENTRY TO DONCASTER 94 MILES

IT'S WELL WORTH A TRIP TO DONCASTER, YOU'LL SEE

Keyboard Bargains dial 0302 843037 eg. Fender Rhodes Stage '73 Pianos. New at -£569

June Special Offer! Effects Pedals 25% off all DOD and Carlsbro (inc. P.&P.)

ALL PRICES INCLUDE VAT

Unrepeatable offer!! Carlsbro M130 Slave AMPS with LED display normally £159 Our Price £99

ALL GOODS ARE FULLY GUARANTEED

Guitar Bargains
Dial 0302 841274, e.g.
New Fender Strats £229
New Fender Precisions
£229
Ovation Glen Campbell
£325
B.C. Rich Mockingbird
Bass £595
Gibson Thunderbird Bass
£495

Dial 0302 841274 for fast confidential H.P. service. Mail order, part exchange, export all welcome. Reliable engineer on the premises for repairs, customising etc., branch: 19 Dauygate Centre, York. Tel: 0904 29192

Why Pay More? Phone MUSIC GROUND First

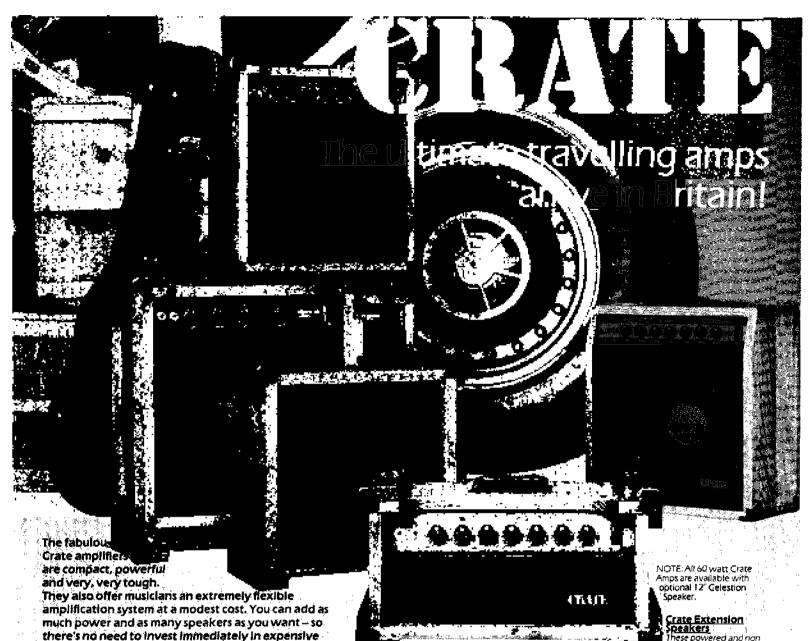




191 The Vale, London W3 7QS TF: 01-749 2042 (5 lines) TX: 289 38 (akgmic g)

Circle 762 on Reader Service Card

Name. Street_ Town. Postcode_



Crate amps and speakers are in solid wood cabinets with steel corners and handles, metal grills and 18 gauge steel chassis. Many other great features are described for each model.

Now you can get Crates in the UK - at our very low

direct import prices.

gear.

<u>Craté i Series</u> <u>Small and Powerful</u> These 20 watt RMS amps all feature solid Ponderosa Pine Cabinets with 10" or 12 Magnum Projector Crate Speakers, Each amp has a ine out for use with a separate power amp or plugging into a console mixing board.

No. CR-M – Crate Mini £89

A low cost Crate with separate gain, treble, bass and master volume controls. 20 watts RMS, 10" Crate Magnum Projector Speaker, Line Out

No. CR1 - Standard

20 watts RMS with 12" Speaker: Two inputs, gain, treble, bass, and master volume control. Separate line out. Ponderosa Pine Cabinet

COMING SOON!
New Crare Compact will
Charmel Mix E279
(with Celestron E319)
PLUS
Deluxe Charmel Mix C

PLLIS Deluxe Channel Mix Crate

With Celestion E3391

No. CR-1D Deluxe

Features 20 warrs RMS with 12" Speaker. Special bright switch and distortion control with foot switchable distortion. Gain, treble, bass, master volume, Line Out.

No. CRIR - Reverb

20 watts RMS with 12" speaker. Two inputs, gain, treble, bass, and master volume. Reverb.

No. CR-1RO Deluxe Reverb £149

20 watts RMS, 12" Crate Speaker with Reverb. Bright switch. Distortion potentiometer plus distortion foot switch jack. Gain, treble, bass master volume and reverb controls. Line Out.

Crate II Amps In Ponderosa Pine

Cabinets These compact 60 watt RMS

amps have all the features demanded by the working musician. Bi-Fet low noise ntegrated circuitry delivers the tonal warmth of a tube type amp. Mid Range Frequency Analyzer acts like a mid range parametric. Line in, line out for effects looping and a bright switch that gives a 20db treble boost. Available with a 12" Crate Speaker or British Celestion at extra cost.

No. CRII -- Crate Lead

60 watts RMS. Active tone controls with gain, treble, mid frequency, mid level, bass, master volume, bright switch, 12" speaker. Extension speaker jack plus line in, line out. Power transistors are attached to an external finned heat sink, No. CRIIC With Celestion

No. CRITRP Lead/Reverb

60 watt RMS amp with 12" Speaker and same

specifications as Model CRII. Has reverb, gain, treble, mid frequency, medium level, bass and master volume control, Solid Pine Cabinet. No. CRIIRPC With Celestion

No. CRIIRH 60 Watt Head

Now you can buy the Crate "Brain" separately. This rugged 60 watt RMS chassis comes complete with Accutronix reverb. Has line in and line out for effects looping. Same controls as found on CRIJRP.

No. CRI-B New Crate Bass

By popular demand, here is the moderately priced Crate Bass which delivers a driving punch through a specially designed ported cabinet. besigned ported cabriet. Has 20 watts RMS and a 12" speaker with a 30 ounce magnet. Controls include gain, bass, treble and master volume. Line Out. Solid onderosa Pine closed back cabinet.

CRIIR Crates

Solid Oak These 60 watt compact amps are housed in solid oak cabinets. The more road wear you give them, the better they look. Whether

you're in the studio or o stage, you can be sure that these Crates will deliver the punch that will blow em away: Hard driving power. night after night, session

No. CRIIRS Stained Oak

after session.

Rich Oriental Teak stained Rich Oriental Teak stained solid oak cabinet. 60 watts RMS of driving power. Reverb, 12" Crate magnum, projector speaker. Mid Range Frequency Analyzer acts like a parametric. Bright switch gives a 20db boost for incredible highs. Separate finned external heat sink keeps power transistors co No. CRIIRSC With Celestion £249

No. CRIIRN Natural Oak

This compact 60 watt Crate is housed in a natural oiled solid oak cabinet which has distinctive Scandanavian took. Reverb, 12" Crate speaker, master volume, treble, mid range frequency, mid level, bass, master volume. Line in - line out jacks plus extension speaker jack. Super bright switch. No. CRIIRNC With Celestion

These powered and non powered Crate speakers are the center pieces for the Crate system which allows you to add more power and more tonal versatility at a very modest increase in cost.

No. CR-KS Crate Kicker

Excellent for add on power to your present amp. Ideal as a powered monitor speaker at an incredibly low price. This 60 watt RMS power extension speaker has a 12" Crate Magnum Projector Speaker. Three coloured LED's let you know if your amp is coasting at normal or in a clipping mode. Separate volume control for power regulation. Front panel input and output jacks for daisy chaining. No. CR-KSC With Celestion

£189

Na. CR-EX Extension Speaker £59

Use this budget priced separate speaker enclosure separate speaker encoure to increase your sound level. When used in conjunction with any Crate II Series amp, you'll get more power and a marked increase in punch with the addition of the 12" speaker enclosure No. CR-EXC With Celestion

58/60 Oldham Street off Piccadilly Manchester M4 I LE Tel: 061-236 6794

88 Chalton Street off Euston Road London NWI IH Tel: 01-388 4094



NOW EVERYBODY CA

NEW — The first time these top American amps available in U.K!



Available

- send).
- * PATCH PANEL: stereo auxilliary inputs, stereo recording outputs, effects send, effects return (may also be used as monaural aux. input).
- * REAR PANEL: three way power switch, stereo speaker outputs, line fuse, stereo speaker fuses, line cord retainers, accessory AC outlet.
- * PLUS: colour coded control knobs, woodgrain side panels, optional leatherette carrying case.

88 Chalton Street off Euston Road London NWI 1H Tel: 01-388 4094

58/60 Oldham Street off Piccadilly Manchester M4 | LE Tel: 061-236 6794

IN AFFORD A MIXER



Circle 748 on Reader Service Card



The extraordinary custom-built Curlees at extraordinarily low prices

Genuine, original American-made models

(The 'USA symbol' on head is your guarantee of authenticity)

S.D. Curlee guitars have a worldwide reputation for the superlative craftsmanship and response of their instruments.

Set-in, bolt-on, double octave necks with the bridge and pickups mounted into the neck piece a brass anchoring plate to brace the neck and enrich sustain . . . gold Grover machine heads . . . Di Marzio pickups located in their own harmonic arrangements . . . selected natural hardwoods — mahogany maple or walnut bodies and maple or walnut necks — highlighted with seven full coats of hand-rubbed lacquer finish . . . all solid brass hardware . . .

These are just some of the fabulous features that go into the handmade quality of S.D. Curlee guitars and basses.

You've only to see the graceful lines and lovingly produced finish to appreciate the magnificence of the S.D. Curlee.

iish to appreciate the magnificence of the 3.0. Curies.
At our prices, these supreme instruments are truly a "gift".

SD Curlee Lead Guitars	Our Prices
Standard I, II & III	£299
Yankee	£299
Liberty	£349
Butcher	£399
Summit	£449
Curbeck	£349
SD Curlee Bass Guitars	
Standard I	£299
Standard II	£349
Yankee I	£299
Yankee II	£399
Liberty	£349
Curbeck	£349
Butcher	£399
Summit	£449
0.5	

"gift".	87		
		(4.1.00.1.4)	

22 Chalton Street off Euston Road London NW1 IJH Tel: 01-387 7626 58/60 Oldham Street off Piccadilly Manchester M4 I LE Tel: 061-236 6794

88 Chalton Street off Euston Road London NW I I HJ Tel: 01-388 4094



B.C. RICH Introduces

SON OF ARICH®

The first in a series of new Guitars and Basses



BC Rich Lead Guitar
Bich double neck
Bich
Bich
Mockingbird Super
Mockingbird Standard
Eagle Supreme
Eagle Standard
Son of a Rich
Son of a Rich with trem
BC Rich Bass Guitar
Mockingbird
Eagle
Son of a Rich

We proudly announce The London Guitar Center is the distributor of B.C. RICH products in the U.K.

88 Chalton Street off Euston Road London NW1 01-388 4094



58 Oidham Street off Piccadilly Manchester 4 061-236 6794



To receive our 12 page 1980 catalog send \$1.00 for postage and handling to:

B.C. RICH GUITAR CO., Suite 117, 4770 Valley Blvd., Los Angeles, Ca. 90032





MINNS MUSIC

CRANES IMUSIC

Shopping Centre	OURNEMOUTH.	5/7 Gervis Place		291277		72774 Sandoate	63574
Allders Limited, North End © 681 ONDON Brent Cross Centre G6 North Street 11 Lismore Road 19 Paris Street Shopping Centre Riverdale Centre Shopping Centre G7 Shopping Centre G8 Shopping Centre G8 Shopping Centre G9 Shoppin	BIRMINGHAM	Shopping Centre	2 632			156 High Street	4562
DNDON Brent Cross Centre 66 North Street 29400 BLACKPOOL Queens Square 2400 BLACKPOOL QUEENS QUEEN Square 2400 BLACKPOOL QUEENS QUEEN Square 2400 BLACKPOOL QUEEN S	POYDON		ප 681		SELFAST		
66 North Street 29400 BLACKECT, Queens Square 24 DASS SQUARE 11 Lismore Road 36831 20 Dunraven Place 20 Dunraven Place 20 Dunraven Place 21 DASS Square 24 Dunraven Place 25 D	ONDON			4433	BIRMINGHAM		
11 Lismore Road 36831 CARDIFF 7/13 Castle Arcade 19 Paris Street 50068 CARDIFF 7/13 Ca	BRIGHTON	66 North Street			BLACKFOOL		
Shopping Centre Riverdale Centre Shopping Cent				36831	5RIDGERD		
Riverdale Centre Shopping Centre Shopping Centre Shopping Centre Grosvenor Centre 14 Cornwall Street Arndale Centre The Third Spans Spans The Third Spans Spans The Third Spans Spans The Third Spans Spans The Third Spans The Third Spans The Third Spans Third Spans The Th				50068	CARDIFF		20858
Riverdale Centre 60441 HAVERFORDWEST 8 Old Bridge Deansgate, Kendal Milne Deansgate, Kendal Milne Deansgate, Kendal Milne 14 Cornwall Street 20991 176 Arndale Centre Arndale Centre 70470 Hanover Street 125 Mostyn Street 25388 Fill Street 125 Mostyn Street 34 Palmerston Road 22864 Missic Centre 14 Kenwyn Street 14 The Bridge 73a Union Street 73a Union Street 25 St. Mary St		Shopping Centre		33234	GRAIGAVON	The Shopping Centre	43458
Grosvenor Centre 33804 MANGHESTER Deansgate, Kendal Milne 14 Cornwall Street 2091 MANGHESTER 176 Arndale Centre 176 Arndale Centre Hanover Street 125 Mostyn Street 126 Masic Centre 14 Kenwyn Street 14 Kenwyn Street 14 Kenwyn Street 14 Kenwyn Street 15 Mostyn Street 15 Masic Centre 15 Mostyn Street 16 Mostyn Street 17 Mostyn		Riverdale Centre		4211	GLOUGESTER	47 Northgate Street	41551
Grosvenor Centre 33804 MANGHESTER Deansgate, Kendal Milne 14 Cornwall Street 2091 MANGHESTER 176 Arndale Centre 176 Arndale Centre Hanover Street 125 Mostyn Street 126 Masic Centre 14 Kenwyn Street 14 Kenwyn Street 14 Kenwyn Street 14 Kenwyn Street 15 Mostyn Street 15 Masic Centre 15 Mostyn Street 16 Mostyn Street 17 Mostyn				604471	HAVERFORDWEST	8 Old Bridge	
14 Cornwall Street		Grosvenor Centre		33804	MANCHESTER	Deansgate, Kendal Milne	
### ADDING Dutils Centre 75 595865 LANDLIBNG 125 Mostyn Street 75 75 75 75 75 75 75 7				20991		176 Arndale Centre	
25388	200LE	Arndale Centre		70470		Hanover Street	
### SQUITUSEA 34 Palmerston Road 82 22864 NEWPORT 5 Employee 62 80 80 80 80 80 80 80 80 80 80 80 80 80	READING	Bulis Tenire		595865		125 Mostyn Street	
TRURO 114 Kenwyn Street 78 0.268 0.8 K.DA.LE Music Centre 98 2.24 6.22 3.017 Om 14 The Bridge 58 89 8 9 7 85 100 85a Fishergate 98 549 3.018 Om 73a Union Street 58 868 Fill LB 125 The Moor 98 52 7 85 100 3.018 Om 22 St. Mary Street 58 88 98 7 7 85 100 38 98 85 10 8 38 98 85 10 8	30UTHAMPTON	155 Above Be?		25388		57 High Street	
TUHO	SQUTHSEA	34 Palmerston Road		22864		5 Emlyn Square	
10830047 73a Union Street to 23876 S.469912.3 125 The Moor to 246 VEYMOUTH 22 St. Mary Street to 36 03057 765000 WORDESTER 19 26661712.0 Equate to 2803	RURO			2269		Music Centre	852
10마입니스 Y 73a Union Street 중 23월76 동년본입니다 125 The Moor 영 27월 VE YNOUTH 22 St. Mary Street 중 03057 765000 방문(대학교 10 Block fine re 호텔보드로 경우 28학	MOTKTON					85a Fishergate	54990
						125 The Moor	24831
EOVIL 9 Glovers Walk % %7%0 WREXHAM 40 Regent Street % 2624	VEYMOUTH				WÇAÇESTER	19 Biackiniars Square	23022
10 10 20 10 10 10 10 10 10 10 10 10 10 10 10 10	EOVIL	9 Glovers Walk			WREXHAM	40 Regent Street	26248

Letters



MARTYN MAN

Dear Sir,

I would like to enquire if any publishers/retailers for the music of John Martyn exist as I would like to obtain some of the man's music, preferably in the form of a "book". This is the result of near insanity after trying to battle with Mr Martyn's preference for strange chords, and working out songs from records. I would be grateful if you could help me with some information on this.

David Bryce, Comber, Co. Down, Northern Ireland

Unfortunately there is no John Martyn songbook and no plans for one, but you may obtain the lead sheets for individual songs for 40p each from Island Music, 22 St Peter's Square, London W6 9NW.

VOX POP

Dear Sir,

I am really desperate, please could you tell me if my fave band, Ultravox, are still together. If so could you give me a rundown of the latest lineup and also a discography of past, present and future discs. Could you please tell me if any gigs have been lined up for this superior band. Thanks for a fab mag. More reviews on plastic music please.

Mark Lomax, Salford, Manchester

Yes, Ultravox are still together, their current lineup being Midge Ure (vocals and guitar); Warren Cann (drums); Billy Currie (keyboards and violin); and Chris Cross (bass). Keyboard player John Foxx and guitarist Robin Simon

both left in 1979. The band have released three albums, "Ultravox!" (ILPS 9499), "Ha! Ha! Ha!" (ILPS 9505) and "Systems of Romance" (ILPS 9555), all on the Island label, A compilation of the first three albums called "Three Into One" (ILPS 9614) is being released by Island on June 6.

The band have released a number of singles, which have all been deleted, but if you search the bargain racks you may be lucky. They are Rhythms' 'Dangerous (WIP 6315); "Young Savage" "ROckwrok" (WIP 6392): (WIP 6404); "Quirks" (WIP 6417), a free single given away with the "Ha!" album; "Slow Motion" (WIP 6454); "Quiet Men" (WIP 6459) and "Retro" (IEP 8), an EP, again all on Island.

They were recording a new album during May ready for release in the summer on the Chrysalis label and will be touring to promote it. A single will be released shortly before the album.

Guitar Mods

Dear Sir,

I enclose a 120 negative of my axe. No it's not a Sam Li custom as featured in one of your Steve Howe interviews but an Antoria Les Paul copy. It all started three years ago when I bought it for £134 — what a waste I thought at the time. No sustain, bad fret levels, linear pots and machine heads I could have made better myself. On the whole, one duff guitar, NO! Plank of wood.

I decided to get things right myself because money hasn't arrived in this part of the country yet. Starting with the frets, Lused an oil stone of all things, but with care and correct cambering to the bridge it has transpired that 1.4mm treble and 1.7mm bass is easily achieved. The bridge by the way is a roller type but I'm not sure what it came off... John Birch sold it to me for £2 about six years ago. The Bigsby unit also came from Birch about that time and both bridge and Bigsby were on my previous plank.

I went on to hot up the pickups but found the only way of doing it was to scavenge the works out of one and put both sets of coils in

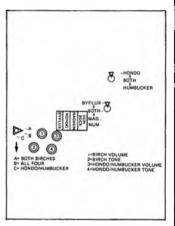
one housing, result a loud pickup with hi-fi response, rather like the sound from a Telecaster with both the pickups on, so I set it all in a poxy resin and had it all with no feedback. This left me with a problem, only one pickup. No sweat. I bought a John Birch Magnum and a Byflux since I didn't want DiMarzios. Three pickups? I couldn't work out the wiring so I just put the Birches on and replaced the linear pots with log 500K and 250K after re-reading one of your Hot a Copy Up type articles.

Now the guitar was a good worker but I still wanted more scope but couldn't see how to do it. About this time a friend got me to replace the pickups on a Hondo Ricky copy which left me with two Hondo pickups and my Humbucker to play with, interesting? Steve Howe, you've got a lot to answer for, Reading one of your articles on Steve Howe's guitars, my life was in the making. A Black Beauty, four pickups, "Christ" I thought, 'Four pickups!" Why not? Out came my chisel, in came three



nights of work. I made the two Hondo pickups into one and put in some more pole pieces, set that in a poxy and "Bam", a dull sounding loud anti-feedback humbucker type pickup. Getting all of these four in at the same time was no bother - all the height adjusters are on the back of the quitar, counter sunk so they don't catch me. But the wiring was a headache so I got a buddy of mine to work it all out. He said we'd need two threeway toggles, one three-way rotary switch, two volumes and two tone controls so he did the wiring.

Now when we got it in one



lump it was heavy, but by mixing the Birches with the other two and in combinations of both you could get it to sound like a Strat, an SG, a Tele and even a Birch J1. All that let it down were the bloody machines, so soon as I got the brass I invested in a set of Schallers. Thank you Sam Li, you must be a grand bloke.

Now you're saying how do I balance the two Birches against each other? I don't need to because if I set the Byflux for chords then the Magum is low enough then to just flip it on and play lead straight away. Besides if I had another two volumes and two tones to get complete control I'd need a master's degree or something to remember how to get A sound or B sound, and so on.

I hope you print this because to be honest I don't think people realise you can do a lot of things on a guitar yourself.

Brian Leslie Bromley, Selly Oak, Birmingham

RSD: Studiomaster British Dealer Network









TUDIOMASTER 400c AMP

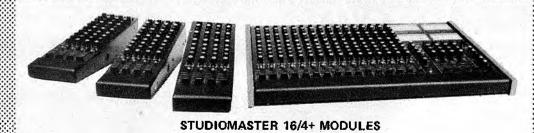






STUDIOMASTER 16/4

SIDE STREET MUSIC	EDINBURGH	031 337 1071
McCORMACKS	GLASGOW	041 332 6644
KIDD BROS SOUND	BELFAST	647566
HESSYS	LIVERPOOL	051 236 1418
TRACTOR MUSIC	ROCHDALE	56287
WIGWAM ACOUSTICS	HEYWOOD	68766
A 1 SERVICES	MANCHESTER	061 236 0340
S.A.I.	COPPULL	791 645
HIGHWAY MUSIC	MANCHESTER	061 833 0328
CARLSBRO SOUND	SHEFFIELD	663862
MUSIC GROUND	DONCASTER	843037
CARLSBRO SOUND	MANSFIELD	26199
CARLSBRO SOUND	NOTTINGHAM	704820
MUSIC STOP	WOLVERHAMPTON	29352
WOODROFFES	BIRMINGHAM	021-236 4992
SOUND PAD	LEICESTER	20760
BUZZ MUSIC	HEREFORD	52016
BIGGLES MUSIC	BRISTOL	552 147
CAMBRIDGE ROCK	CAMBRIDGE	65093
DON LARKING	LUTON	27195
E.S.S.	BARNET	01 440 3449
TURNKEY	BARNET	01 440
R.E.W.	LONDON WC2	01 836 2372
CHROME AUDIO	LONDON	01 995 4712
MACARIS	LONDON WC2	01 836 9149
KENNARDS	CANTERBURY	60331 9221
SOUNDWAVE	ROMFORD	25919
KENNARDS	ASHFORD	23226
HOLIDAY MUSIC	LONDON	01 558 2666



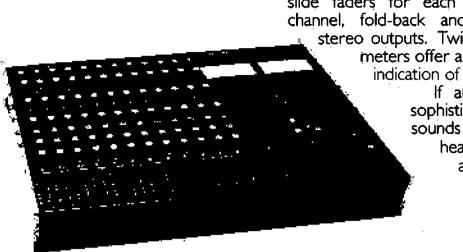
The R.S.D. 12/2 mixer is a professional desk design to provide close control over sound in small situations. Unlike most other desks, however, you don't have to junk the R.S.D. 12/2 when the venues get bigger and the money gets better. The R.S.D. expander modules allow you to add four channels at a time. You could end up at the Hollywood Bowl with a 32/2 R.S.D. desk still using the same basic R.S.D. 12/2 mixer you bought a year before (if only it really happened that quickly!).

The 12/2 offers input attenuation allowing you to provide mike, D/I or line input into any of the channels, full equalisation on each channel.

foldback mix facilities, effects or echo send and return and full stereo pan control. A PFM button allows the engineer to listen to any channel on its own at the touch of a button and naturally there are separate

ONE STAGE



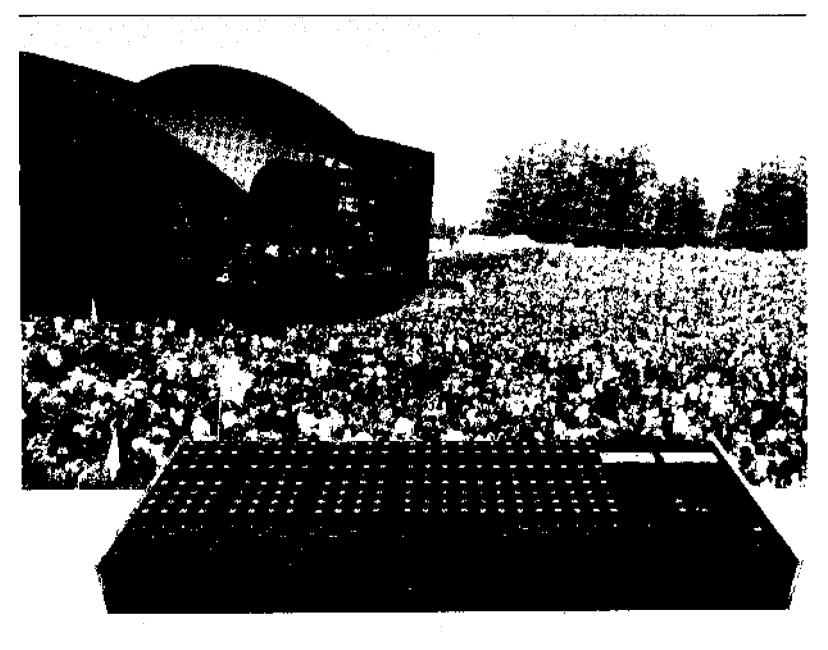


slide faders for each input channel, fold-back and the stereo outputs. Twin VU meters offer a visual indication of levels. If all this sophistication sounds a little heavy for a small

AT A TIME

12/2 mixing board, remember that the basic concept is EXPANDABILITY. Every R.S.D. 12/2 desk that's produced is fit and ready to become a 32/2 the next day if required:- Without increase in noise, without any loss of facilities and without costly "main frame" work becoming necessary.

The benefit to you is clear. Start with a professional mixer that's the right size for your performances. As you grow it can grow with you and instead of accepting insulting trade-in terms for your old mixer you'll always be able to keep control of your sound and your costs.



WHAT MUSICIANS SAY ABOUT



We are continually knocked out by the compliments musicians make on the guarantee cards which are returned to us. You don't have to be famous to get your name in print with Gigsville. We are pleased to list here just a few of the musicians who choose Aria, and the comments made about their guitars.

MUSICIANS COMMENTS

SB 1000 Huw Jones

Beautiful finish, wonderful to play,

amazing sound". Martyn Workman

Very good value for money. Excellent finish

lan Jones
"The good tone and fine finish,
attention to detail is why I bought this

guitar". S. Moorhouse "Brilliant"

R. Cullen "Aria guitars make their overpriced opposites look insignificant".

'All Aria basses I've tried have been bloody good professional

instruments" Paul Ibbott

"Very nice finish, good tone variation, ease of playing"

Keith Grant

"Beautifully made; incredible tone and power; amazing neck".

Carl Williams

"After trying several basses I found this to be the best".

SB 600

S. Egan "This is the best set up and finished

guitar I have seen".

J. F. Ralls

'Bloody amazing for any price, Don't know how you keep it low".

John Bell

"Excellent value - excellent at any

price PB 500

PB 500
Darrell Sherwin
"Already owner of SB 1000 bass (an ace bass). This PB 500 is the best Fretless ('ve ever played.

Congratulations. Keep up the good work lads!"

'Well made guitar, great feel, great sounds"

Well set up. Instantly playable.

Superb quality and value for money". Ashley Corbett "I think its a magnificent instrument". YS 500

David Marris "Aria Rule O.K."

S. Hardisty

"Superb" J. Waterston

'Best value for money I could find, very pleased". S. Cox

"Amazingly high standard of workmanship for price". Patrick C. Walsh

'Incredible value for money - Great!"

'Unbeatable for the money".

Paul Taylor
"Nicely finished, a very high quality guitar, for a very low price".

Simon J. Parker

"To become an outstanding player you need an outstanding instrument. I chose Aria".

William H. Angu "This is my first Aria guitar. I am a guitar teacher and will certainly recommend this make in future to all my pupils".

Tony Pickering

"Versatility of sound equal to a guitar twice the price".
TSD 400

"Very satisfactory and highly recommendable", PE 800

D. Cowan

Sheer excellence. By far the best value for money guitar available today

'Because of the quality, I know this instrument will last a lifetime".

'My first electric was an Aria and I

think they are the tops".

William Kesby

'As a left handed player I don't think I could have wanted a better finished model" LC 550

M. Murphy

'Quality at a price anyone can afford".

Martin Rae

"I could not be more satisfied with sound, quality and price".

9300 T. Blumer

Excellent value, beautiful depth and clarity of tone, superb playability. Feel that I'm playing a guitar in a much higher bracket".

M. Stiles

"Outstanding value for money construction and finish of the highest

L. Hawkins

'Aria products are reliable, have a good tone and are well finished".

9260

Tony Pickering
"Best value for money instruments you can get. Low price, high quality".

Michael C. Estell

'Very high quality - beautiful tone", D. A. Lawson "Pretty cool instruments at a healthy price. MAN!"

THANKS FELLA'S

Check these prices of the guitars, amp's and mic's shown in the Aria colour brochure in last month's "International Musician" and boogie on down to your local Agent before they sell 'em all'.

Catalogue	S.R.P.	Catalogue	S.R.P.	Catalogue	S.R.P.	Catalogue	S.R.P.
Number	Inc. VAT	Number	Inc. VAT	Number	Incl. VAT	Number	Incl. VAT
*PE 1000 GC	419.80	*YS 300	164.00	LW 25	128.30	MH 50	188.00
*RS 1000 Z	42 7.80	*YS 400	192.20	LW 25 T	136.40	MH 60	217.50
*RS 850	389.90	*YS 500	246.90	LW 20	117.60	MH 80	312.00
*RS 750	349.90	*FS 1000	399.90	LW 20 T	126.60	MC-70TD	44.60
*RS 600	291.50	ES 500	168.50	LW 15	89.10	MC-50SD	32.10
*RS 600 H	295.90	*PE 175	369.50	LW 15 T	94.50	MC-45SE	28.50
*RS 800/12	329.80	*TA 1500	449.00	LW 18	96.30	MC-38SD	3 0.30
*ST 1512	647.00	JJ6	189.90	LW 30	140.80	MC-35SD	26.80
*T\$B 350	182.70	JJ 12	205.90	LW 30 T	147.00	MC-30SD	25.90
*TSB 400	195.20	PB 6	229.90	A 548	49.50	MC-20SD	19.60
*T\$B 500	263.80	PB 12	247.80	A 549	64.50	4102	123.90
*TSB 550	290.50	AW 10	196.00	A 550	70.40	4251	139.90
*TSB 650	3 3 8.50	AW 20	222.80	A 551	83.00	2201	109.20
SB 600	184.50,	AW 30	229.90	A 552	93.00	0251	73.10
SB 700	248.70	AW 40	265.60	A 553	113.00	MX 100	75.75
SB 900	324.40	OW 45	133.70	A 554	112.00	MX 100R	84.70
SB 1000	361.00	OW 45 T	144.70	A 556	129.00	MX 120B	86.50
*TS 300	173.80	JW 30	141.70	A 557	146.20	MX 60	65.00
*TS 400	205.90	SW 30	136.40	A 558	171.00		
*TS 500	249.60	SW 35	147.90	A 559	209.50		
*TS 600	279.90	SW 40	168.50	A 54 3 F	150.60	* = With De	



South Drive, Phoenix Way, Heston, Middx. TW5 9ND Tel: 01-897 3*7*92

Guitars are available only from our approved Agents. Write or phone for your nearest stockist.



Empty Glass (Atco)

Well, well, what a surprise. So you thought Townshend was over the hill, eh? So you thought this would be yet another superstar's solo album ego trip, just a bunch of Who reject songs?

You're wrong. Townshend recently revealed that the Who had considered breaking up when punk came along. It may not have been such a disaster if they had done, and this album is the evidence, an unexpected burst of energy and enthusiasm that gushes onto the ear like the Mistral sweeping onto the south coast of France.

The reasons for this sudden rejuvenation are open to speculation, but playing with other musicians like "Rabbit" Bundrick on keyboards and Simon Phillips, drummer on six of the 10 tracks, must have had a positive effect. Townshend has broken out of the straightjacket of writing purely for the Who, and using other players has enabled him to record songs with a totally different feel to them. For example, "And I Moved", a tune which gradually unfolds over a fast, jazzy piano and drums background, its linear development not dissimilar to some of Weather Report's early material, such as "Unknown Soldier". And "Cats In The Cupboard", a fast shuffle beat with red hot blues harp from Pete Hope-Evans.

Space doesn't allow a detailed description of all the songs. but if you can only listen to one in your local record store try "A Little Is Enough". It's simply one of Townshend's best songs -- ever. And, incidentally, it sounds nothing like the Who, I can't remember the last time I heard a vocal performance that had so much honest, pained conviction. In fact Townshend's voice is one of the surprises of the album. I'd always thought of him as a comparatively weak singer, an opinion which now seems ridiculous.

There are a few up-tempo rockers thrown in, which should keep Who fans happy, including Townshend's putdown of certain rock critics, "Jools and Jim" ("Typewriter tappers, you're all just crappers"), and "Rough Boys", also released as a single and dedicated to the Sex Pistols and Pete's kids. Personally I'd rather have this alburn than "Quadrophenia" any day.

Lynden Barber

Produced by Chris Price. Recorded at Eel Pie Studios and Air Studios.

Engineered by Bill Price and Steve Nye.

Mixed at Wessex No. Two. Mastered at Sterling Sound, New York.



Baby's Got a Gun (CBS)

"I'm gonna give it to you We'll never part, you and me."

If you came across the above two lines during the first track of an album would it particularly endear the record to you? Well, would it?

So what's in a bad couple of lines, 1 hear you say? Well, everything, when the general level of musical and lyrical imagination throughout the rest of the record is equally dismal. The Only Ones have been the subject of much media raving, which I find about as understandable as a Bob Fripp interview. They come on like a mid-Seventies college support band, no-hopers with their roots in rock and roll's bleakest hour. Their songs are as predictable as a Willie

Whitelaw speech on law and order and only marginally more listenable.

The most distinctive feature of the band is Peter Perrett's high, lazy hazy vocals, which may appeal to some. Personally I find his voice irritating. On the album sleeve he poses' like a Jagger lookalike contest winner and then on the opening cut is careless enough to open his mouth and let the words "I've had enough of tragic people" fall out. Speak for yourself mate.

This album might make a good accompanying record to a guitar tutor — John Perry manages to run through every rock guitar cliche in the mere space of 40 minutes, no mean achievement. Listen to one track and there's a bit of feedback copped from Hendrix, put on "Re-Union" and you'll hear a sub-Clapton "Wheels of Fire" solo.

There is one redeeming track, the song "Me and My Shadow", a chugging Bo Diddley burner. CBS should release this as a single and delete the rest.

. Lynden Barber

Produced and engineered by Colin Thurston at Red Bus Studios, London.

Vocals recorded at Basing Street Studio, London. Engineered by Robert Ash.



Kevin Coyne

Bursting Bubbles Virgin

The erratic output of the unpredictable institution that is Kevin Coyne is brought up to date with the release of this his seventh album on Virgin.

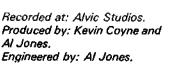
Bursting Bubbles is an eccentric batch of songs and poetry, that displays his capability to paint word-pictures with a detail that is not immediately apparent, perhaps due to his "buildozer" musical style.

"Children's Crusade" standsout as one of his best, a classic in every sense of the word, containing all the facets of Coyne's style — neat lyrics, a brilliant set of musical riffs and a vocal style that makes your hair stand on end.

There are sections of the album that don't match this, (mainly the second side) but the poor sections are vastly outnumbered by the bursts of pure emotion that epitomises Coyne's music.

An album that will be snapped up by the aficianados of the cult, but not one for a general audience. Until Coyne learns quality control he will always have a limited following in the rock world.

Tim Oakes





Peter Green

Little Dreamer PVK Records

Following the success of "In The Skies" last year, Peter Green releases the inevitable follow up. Happily Little Dreamer displays all of the feeling and emotion that went into the last album, plus a demonstration that he is back with us, and back for good.

For many people Green is mostly remembered for his work with the early Fleetwood Mac, "Need Your Love So Bad" and "Albatross" stand out as some of the Mac's finest tracks before Green left the band to persue his own personal feelings.

Here he takes up the cue where he left off, breaking into the blues market that Clapton (among others) left behind.

All the tracks are typical Peter Green, the heavy blues lyrics with the inevitable guitar solos and the traditional bass riffs, but Green instills a breath of life into the songs that gives them a power and style that is rare in today's sterile musical world.

The legendary figure of the blues boom, Green is almost guaranteed a success with Little Dreamer that should both endorse his following among the old fans, and bring a whole new generation into the fold.

For those not yet admitted into the cult, Little Dreamer will both surprise and certainly send you out searching for other early Green, Happy Hunting.

Tim Oakes

Recorded at: Rock City Studios, Shepperton. Produced by: Peter Vernon-Kell.

Engineered by: Mike Cooper.



In The Night Mercury

An astonishing album from Lindisfarne's assistant front-man. Astonishing in that it completely ignores the "Newcastle Stomp" in favour of a series of tight, well constructed and produced love songs that display both the virtuosity of Jacka on the man-



dolin and harmonica and his clear rich vocal style.

Comparisons with Lindisfarne and the other member's solo ventures would founder merely on the fact that Jackson is radically different, both in the content of the music and in the approach.

For a man who only started songwriting five years ago, Jackson has an almost poetic feel which benefits from the attentions of Charlie Harcourt. the co-author and arranger, in creating the tracks. Superlatives apart, In The Night will go on to become another of the Lindisfarne fans priority albums. Sadly it may well become labelled as such, when its audience is much more in the vein of Gerry Rafferty. If he can avoid the pigeon-holing Jackson will certainly have his own following, in much the same that Alan Hull gathered his with Pipedream, but it will rest on the weight of the live shows that he can put on. Jacka is not a solo artist, unlike Hull, and would have to commit himself heavily to promote the album with live appearances, hopefully he will carry some of this very fine material over to Lindisfarne in the same way that the other members have

contributed their solo work.

Tim Oakes

Produced by: Hugh Murphy. Recorded at: Regent Park Studios.

Engineered by: Steve Lipson & Julian Mendelson.

Isley Bros Go All The Way (Epic)

The Isley Brothers, like Stevie Wonder, deserve a place in pop history by virtue of their classic Tamla Motown hits of the Sixties alone. But again like Wonder they were not content to rest on their laurels, and in the Seventies moved on to more electronically orientated pastures, producing some of the best soul of the decade.

The question now is whether they can forge a new path for the decade ahead or whether they will just continue putting out albums like this. It's not that there's anything really bad about this record. In fact it generally keeps up the high standard of work we have come to expect from the brothers, but one does get a certain feeling of deja vu.

The title track opens the album, with a danceability quotient at least as high as

Chic's, and the rest of the side continues in the same upternpo vein. "Say You Will" features some typically sublime guitar work from Ernie Isley but is spoilt by sickly Mantovani string synth intrusions. Can't a band in the Isley's position afford to pay real violinists?

The rest of the album consits of disco workouts and smoochers that are admittedly several steps ahead of most other artists working in the same field but which do not fare well in comparison with some of the Isleys' mid-Seventies work. And there's absolutely no excuse for lines like "I got to give you the vibes." If you haven't already got any Isley Brothers records in your collection you're much better off buying one of their earlier platters like "3 plus 3" or "The Heat Is On."

Oh yeah, and it's about time they did something about those repulsive album sleeves.

Lynden Barber

Produced by: the Isley Brothers.

Recorded at: Bearsville Studios, New York.

Engineered by: Tom Edmonds assisted by George Carnell.

O,M.D.

OMD DinDisc

OMD (what a mouthful in full!) are a futuristic synth pop group recently scooped by Carol Wilson for the rapidly expanding DinDisc label. Starting as a duo, the main protagonists, Andy McLusley and Paul Humphrey joined forces after the demise of an off-beat band (The Id) in 1977, and added the talents of electronics whiz-kid and confidante, Chester Valentino, who just happened to be their manager.

This, their interesting debut album contains their song "Electricity" which sparked off their popularity around the North of England including eight formative and successful gigs at late lamented Eric's in Liverpool.

"Bunker Soldiers" the popular initial track, is indicative of the mood set by Orchestral Manoeuvres which varies between Kraftwerk and Yellow Magic Orchestra (sans disco-beat) with less of the accent of disco rhythms and more than a splash of OMD's own originality, OMD's format relies heavily on a droned lead vocal melody and firm bass line with about half of their material performed over a Revox backing track and added Syndrums. Although purists may scoff and spurn Orchestral Manoueuvres electronic garage-band ramblings as less substantial than the primordial Afro-American rhythms of Fripp, Talking Heads or Kraftwerk, OMD remain individual, if unsophisticated.

With few exceptions most of rock's experimental bands have been reduced to grotesque parodies, highlighting the social frustrations of our industrial depression via technopop. Out of these mongrelised movements one can only hope that Orchestral Manoeuvres represents a new respect for innovation born of Seventies experimental music. Meanwhile listen to "Dancing".

Mike Feasey

Produced by: OMD and Chester Valentino.

Recorded at: the Gramophone Suite, Liverpool.

L.K.J.

Bass Culture (Island)

Wait until your neighbours have gone out, place the aforementioned piece of vinyl on your turntable, turn up the bass and step well back. Bass culture indeed.

This is an album that will appeal to both the hardened reggaephile and the uncommitted listener with doubts about a whole album of reggae. The roots freaks will thrill to the masterful playing and Dennis Bovelf's dub echo effects, and the newcomers will be seduced by LKJ's charisma.

Linton doesn't sing so much as intone rhythmically, and if that sounds boring, it isn't, largely due to his lyrics and sincere delivery. When he says, referring to Southall police victim Blair Peach: "The SPG them a murderer/We can't let them get no furtherer", and "Is England becoming a fascist state? The answer lies at your own gate", you know he really means it. And with so many people in

the music business living in their own trendy little worlds, it's nice to see someone with their eyes open to what's going on around them. In "Di Black Petty Booshwah" also released as a single, he shows that not all the enemies are on the far right by sniping at black community relations worthies who "side up with the aggressor when the going get rough."

But it's not heavy politics all the way, and LKJ raises a few smiles with tines like "Working on the underground you don't get to know your way around" and "I asked if I could share your umbrella. You smiled and said 'what a cheeky little fella'. And there's an interesting brief experiment with free jazz at the end of the album, courtesy of altoist James Danton.

All in all, a very worthy successor to last year's Forces of Victory.

Lynden Barber Produced by: Linton Kwesi Johnson and Blackbeard aka

Dennis Bovell. Recorded at : Gooseberry Sound Studios.

Engineered by: John Caffrey and Mark Lusardy, mixed by Dennis Bovell.

Phil Lynott

Solo In Soho (Vertigo)

When most musicians forsake the confines of a successful group situation and launch into a solo venture, the result is often hardly memorable.

In many ways they see a solo album as an outlet for ideas which wouldn't normally see the light of day, but the usual outcome is an exercise in self indulgence. So it's a welcome relief to find that Phil Lynott's solo album doesn't fall into this category.

Solo In Soho is one of the most enjoyable albums I've played in months — you know, it's one of those that you find yourself playing at least once a day. It is a refreshing album that contains good pop songs and a wide variety of material.

Take the opener for example

"Dear Miss Lonely Hearts"

this features the current Lizzy line up, with their familiar
guitar phrases, but it is
perhaps slightly more lyrical
and pop orientated than the

usual band output. A number like "Tattoo — Giving It Ali Up For Love" is a great pop song incorporating a pop/soul backing of strings and brass and an excellent hook line.

The opener to Side Two "Girls" is another classic which features nice synth and string machine topped off with some nice production.

The variety comes in the shape of the beautiful "A Child's Lullaby" (once again a superb string arrangement), an Elvis lament in "King's Call" containing the subtle guitar sounds of Mark Knopfler, and the Kraftwerk influence "Yellow Pearl" complete with synths, Syndrums and Vocoder,

Throughout the album, Lynott's distinctive lip curling vocals are supported by some nice harmonies. Overall a great package — the lad will never starve.

David Lawrenson

Recorded and mixed at: Good Earth Studios, Soho and Compass Point, Nassau.

Produced by: Phil Lynott and Kit Woolven.

B.B.King

Now Appearing at Ole Miss (MCA)

What more can anyone say about B.B. King? Everyone should know by now that he is the ultimate expression of the blues. Having said that, it would be easy to pigeonhole him as the arch exponent of a past musical tradition and thus relegate him to annual outings to live on past glories.

However, anybody who has seen him live will realise that his music is timeless and thanks to his immense talent and the guidance of people like The Crusaders, he is just as relevant today.

This double album, recorded live at the University of Mississippi, fully showcases his talents as a musician, singer and performer. Standards like, "The Thrill Is Gone" and "Rock Me Baby" stand side by side with some of his more recent recordings like "Hold On" and "I Just Can't Leave Your Love Alone".

As always there is that stinging guitar, displaying every emotion from sadness through to anger and frustration, matched by a voice which is an instrument all on its own.

My only criticism of the recordings is that some of the numbers are over extended. This is great when you're hearing the man live, but it can pall a bit on record. Still an immensely enjoyable album and one which proves that great guitar playing is all about emotion not technique.

David Lawrenson

Recorded by: Fedco Audio, Providence, RI Additional recording and mixing at Electric Lady Studios, NYC. Produced by: SASCO Productions Inc.

Scorpions

Animal Magnetism (Harvest)

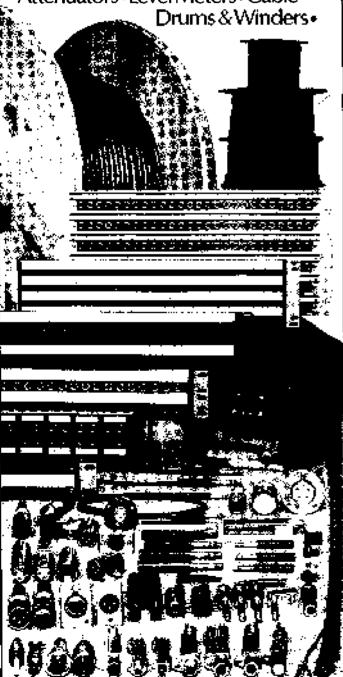
It would be too easy to dismiss this album out of hand but rock bands as successful as the Scorpions are really not that common outside of the English speaking world. In fact this is not a bad album but it does fall





STOCKISTS OF:

Studio Microphones • Monitoring Loudspeakers • Noise-Reduction Units Intercoms & Headsets Video Jackfields, Cables & Connectors • Audio Jackfields, Patchcords, Cables &Connectors • Multi-Pair Cables • SplitterBoxes•Wiring Aids•Racks & Cabinets • Microphone Stands & Accessories • Switches, Faders & Attenuators • Level Meters • Cable





Craftsmen to the world's musicians since 1887.

YAMAHA PRO CÉNTERS

Yamaha professional instruments are only available from the following Yamaha PRO CENTERS who are selected for their expertise and standards of service. When you buy from a PRO CENTER you get the benefits of Yamaha service and a 3 year guarantee.

South West and Midlands

South West and Midlands
Abbey Music Centre
46 Market Place, Burton-on-Trent,
Staffordshire — 0283 68404.
Coventry Music Centre
3/5 Whitefriars Street, Coventry,
West Midlands — 0203 58571.
Everymans Music
209 North Street, Bedminster,
Bristol — 0272 661445
Bill Greenthalgh
125/127 Fore Street, Exeter,
Devon — 0392 58487
Eddie King Music Ltd.
147a St. Michaels Hill, Bristol
BS2 80B — 0272 36613/39887
Eddie King Music BS2 808 — 0272 36613/39867 Eddie King Music 51 Cowbridge Road East, Cardiff. Kingfisher Music 20 Kings Road, Fleet, Hants. — 0251 421210 Modern Music 30 Castle Hill, Oudley, Worcestershire — 0384 55293

Wordestershire — USB4 55293 Eddie Moors Ltd. 679 Christchurch Road, Boscombe, Bournemouth, Hants — 0202 35135 See and Dee Music 25 Blackwell Street, Kidderminster, Worcester — 0562 60995

Worcester — 0562 60995
Western Organs
7 St. Owen Street, Hereford HR1 2JB.
— 0432 50277
Whitwams
70 High Street, Winchester,
Hants. — 0962 65253
Woodroffes
5/8a Date End,
Birmingham — 021 236 4992/3
Music Stop
106 School Street, Wolverhampton
WV3 0NR — 0902 29352

South East

ABC Music 14/16 High Street, Addelstone, Weybridge, Surrey — 0932 40139 Allens Music Shop 23/24 Broad Row, Gl. Yarmouth — 0493 2887

0493 2897 Andertons 5 Stoke Fields, Guildford, Surrey — 0483 38212 Andertons Modern Music 389 Oxford Road, Reading, Berkshire — 0734 415800

Berksnire — 0/34 415800 Axe Music 16 Mersea Road, Colchester, Essex — 0206 85652 Cambridge Rock 44 Newham Road, Cambridge — 0223 65093

0223 65093
Chase Musloians
22 Chalton Street, Olf Euston Road,
London N.W.1 — 01-387 7449
London Synthesizer Centre
60 Oldham Street, Manchester —
661 228 2565
Croydon Music Studios Ltd.
40 Station Road, Croydon, Surrey
CR0 2R8 — 01 688 0628

Freedmans 629-631 High Road, Leytonstone E.11 — 01-539 0288.

— 01-539 0288. Gigsounds Ltd. 85 Mitcham Road, Streatham, London S.W.16 — 01-769 5681 Honky Tonk Music 300302 London Road, Hadleigh, Essex — 0702 553647 John King 8 Richmond Road, Kingston-upon-Thames, Surrey — 01-546 9100

Live Music & Piano Centre 28 Filzwilliam Street, Peterborough — 28 Filzwillia 0733 67168

Soundwave 86 Victoria Street, Romford, Essex — 0708 25919 Essex — 0708 25919

Sound Gear

10 Southtown Road (percussion only),
Gt. Yarmouth, Norfolk — 0493 3746

South Eastern Ents. Agency
373/377 Lewisham High St., Lewisham,
London S.E.13 — 01-690 2205

Tempo Music 160 The Broadway, West Ealing, Middlesex — 01-567 0212 Wing Music 15/15a London Road, Bromley, Kant — 01-460 9080

Rose Morris 81 Shaftesbury Avenue, London W.1 — 01-437 2211 R.M.S. Eddle King 5 Langley Street, Covent Garden, London — 01-379 7022

A.1. Music 88a Oxford Street, Manchester — 081 236 0340 E. D. Brown 55 Darwin Street, Blackburn, Lancs. — 0254 54681 Lancs. — 0254 54681 E. D. Brown 1417143 Leeds Road, Nelson, Lancs. — 0262 66967, Carlsbro Sound Centre 183/184 Chesterfield Road North, Mansfield, Norts. — 0623 26976/26199

Carlsbro Sound Centre
13 Berkeley Road, Ecclesall Road,
Sheffield, Yorks. — 0742 663862

Frank Hessey 62 Stanley Street, Liverpool — 051 236 1418

951 236 1418
96hns Musle
142 High Street, Scunthorpe,
Lincs. — 9724 843800
Kitchens Ltd.
27/31 Queen Victoria Street,
Leeds, Yorks. — 9532 446341 Musical Sounds 274 London Road, Sheffield — 0742 50445/54381

0742 504-664381
E. D. Brown
Cooks Buildings, Abbey Road,
Barrow-In-Furness — 0229 30348
E. D. Brown
51/52 Friangate, Preston,
Lancs. — 0772 50132
Newtone Music
64 Market Street, Earlestown,
Newtone-E-Williows,
Cheshire — 09252 22514
Martham Sounds

Cheshire — 09252 22514
Northern Sounds
41 Jane Street, Workington,
Cumbria — 0900 4797
Power Music
134 Derby Street, Botton.
Professional Music Services
4 Freeman Street, Grimsby —
0472 44304

Rock City 10 Mosley Street, Newcastle-upon Tyne — 0632 24175

Newcasue-upon 1,770
Rock Island
10 Waterloo Street, Oldham,
Lancs. — 061 620 5011
Sound Pad Music Centre
84 London Road, Leicester -

Sound Pas Music Centre
0533 20760
Stephens Musical Instruments
70 Newbrigate, Leeds,
Yorkshire — 0532 34710
Whilesound
3 Albion Place, Sunderland,
Tyne & Wear — 0763 78058
G. A. Williams
Blackwelligate, Darlington,
Co. Durham — 0325 60454
Wisher (Derby) Ltd.
77/79 Osmaston Road, Derby —
0332 48156

Scotland

Bradleys 69a West Regent Street, Glasgow — 041 332 1830 191 32 1630 Round Sounds 177 Main Street, Wishaw, Scotland. Grant Music 53 Home Street, Edinburgh EJ3 9JP — 031 228 1704 McCormacks 33 Bath Street, Glasgow — 041 332 6644

041 332 9644
Magnum Sound
67 Stewarton Street, Wishaw, Scotland
— Wishaw 78761
Gordon Simpson
6 Stafford Street, Edinburgh SH3 7AY.
— 031 225 6305

Viking Vision 169 Commercial Street, Lerwick — 0595 3423 0050 3423 Strings Music 164 St. Clair Street, Kirkcaldy — 0592 52801



Albums

short because no one has done the Scorpions any favours, least of all themselves.

Heavy Metal is difficult to capture well on record. It has to have an aggressive atmosphere created while retaining the freshness and adrenalin of the stage sound. Principally, the Scorpions suffer from a rhythm section that walks while the rest of the band run, not helped by an unimaginative drum sound and all the guts being compressed out of the finished tracks, leaving them lifeless.

What no good points? Of course there are, It's not a bad album remember. Guitarist Rudolf Schenker and Matthias Jabs pull their weight, producing some fine riffs and harmony playing particularly on the opening cut, "Make It Real". Klaus Meine has a good voice and some fine technique but does not appear able to project a recognisable style through the production which effectively removes the character from the voice, He does, however, manage to sound remarkably like a Robert Plant (The Zoo, Animal Magnetism) and Jim Dandy (Don't Make Promises) with plenty of Ian Gillan sprinkled liberally throughout.

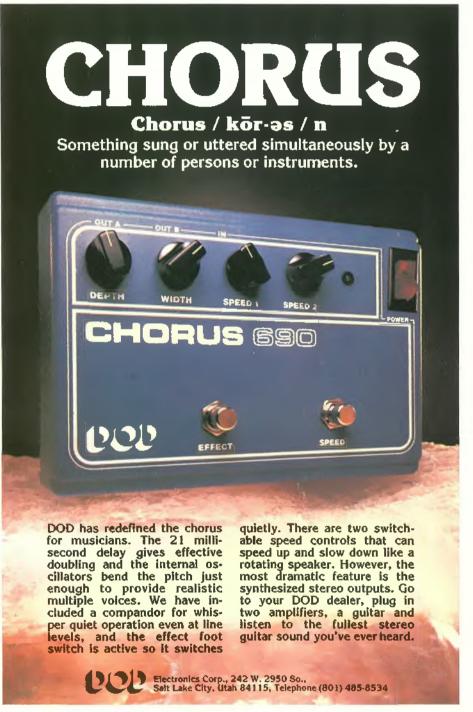
The best track for me is "The Zoo" with its power beat, meaty chords and very strong chorus line, closely followed by the title track where the production seems to marry best with the band's material. "Lady Starlight" is different to the rest as it uses a small string section and oboe to produce a song that contrasts well with the preceding heavy riffing. It gives Schenker an opportunity to show some fine guitar lines on the second instrumental section.

Lyrically, it's no great shakes but perhaps above the HM average with a slightly wider range of subjects and do I even detect an edge of humour in "Don't Make Promises"?

This must be a good album for those already committed to the Scorpions but not likely to capture new interest with its pedestrian production. A VW Camper in the Fast Lane.

Mick Down

Produced by: Dieter Dierks. Recorded at: Dierks Studio, Cologne.



U.K. Distributors: Strings & Things Ltd. Unit 2, Chapel Road, Portslade, Brighton BN4 1PF, Telephone Brighton (STD 0273)412554.

Distributed internationally by: E and E Instruments International, 23011 Moulton Pkwy., 87, Laguna Hills, CA 92653, U.S.A., Telex 182-291



SE-1 PHASER

Professional quality and our most affordable phasing device. The SE-1 reproduction of low and mid-range frequencies allows for a new sound dimension In all studio or live performance levels. The SE-1 includes separate slide controls for intensity level and speed variation.

Input impedance Output impedance Maximum input level Sweep speed Sweep range

500k ohm min. 10k ohm max. -10dBm 0.2 Hz 9 Hz

Signal/noise ratio Controls

4 octaves Ab0e-

L.E.D. (2 color)

Intensity level and speed variation Noiseless electronic F.E.T. switch (effect on/off)

Red (effect off) or normal signal

Jacks

Green (effect on) Input, output, AC adaptor input 9V battery (OO6P) included

Power supply Optional accessory

SE-UP AC adaptor



Introducing Big Jam effects pedals from

If the music looks and sounds great, chances are Big Jam is underfoot! Musicians at every level are adding magical excitement that only Big Jam effects can create. Big Jam's unique design allows the progressive artist to use his creativity to produce exciting, innovative sound treatments for outstanding audio effects.

Multivox electronic music engineers thought of everything when they designed the Big Jam series. They took Into serious consideration the real environment in which effects pedals are used. The result is a superior product line with the latest circuitry, operational features, and body design. Big Jam effects pedals are unmatched for sound reproduction, ease of operation and durability.

Special Bia Jam features:

LED indicator light: For instant recognition especially when 4 to 5 pedals are in use. The 3-function LED Indicator light permits instant recognition of operating mode. Red indicates pedal is on but effects are off; green indicates pedal on with effects operating; a flickering indicator light warns of weak battery.

Battery power check: The LED also serves as a power check for the battery. Thus maximum volume and sound clarity are assured.

Recessed slide controls: Front mounted for easy accessibility and visibility. Controls are recessed to avoid accidental movement. The slide settings give the musician precise control of sound reproduction.



Noiseless electronic switch circuitry: Eliminates clicking noises common with standard mechanical switches. Since there are no mechanical or moving parts, Big Jam is maintenance free.

Easy access battery compartment: Battery can be quickly changed without tools or coin.

Rugged die cast metal casing: Provides long time protection of internal state-of-the-art circuitry

Non-slip rubber sole: Avoids annoying and possible dangerous floor movement of instrument.

Color casing: Big Jam effects pedals are color coded for fast identification.

SE-2 SPIT WAH

The SE-2 creates an innovative funky wah effect by use of an envelope filter. Includes an up-down mode selector switch, 3 function filter choice, and separate slide controls for sensitivity and resonance.

inpul imo. Output imp Max. input level Signal/noise ratio Sweep level

Resonance Controls

500k ohm min. lk ohm max. -20dBm 90dB up 200 Hz-4kHz typ down 3kHz-200Hz typ 15dB

Resonance, sensitivity
Filter switch (HP - BP - LP)

LED (2 color)

locks Power supply Opt. accessory

Red (effect off) or normal signal Green (effect on) Input, ouput. AC adapter input battery (006P) included SE-LIP AC admitted



SE-3 COMPRESSOR

Especially recommended for electric gultar or bass players. The SE-3 produces distortion-free sustain and electronically adjusts for varying amounts of instrument input. Includes separate slide controls for sensitivity and level input.

Input imp. Output imp. Max. input level Comp. range Signal/noise ratio Controls

500k ohm min lk ohm max -1OdBm 40dB -100dB Sensilivity Level output

LE.D. (2 color)

Jacks Power supply Opt. accessory Noiseless electronic F.E.T. switch (effect on/off)
Red (effect off) or normal signal

Green (effect on) Input, output, AC adoptor input 9V battery (OOSP) Included

SE-4 OCTAVE BOX

Specifically designed for the electric gultar or bass player who wants to expand his solo performances by incorporating electronic octave effects into a studio or live environment. The SE-4 includes a 3 mode octave selector and separate slide controls for balance tone and level output.

Input imp. Output level Min, input level Signal/noise ratio Controls

500k ohm min lk ohm max. 4QdBm -90dBm Mode 1-octave up Mode 2-1 octave down

SE-UP AC adaptor

L.E.D. (2 color)

Power supply Opt accessory Mode 3-2 octoves down Balance-tone-level output Noiseless electronic F.E.T. switch (effect on/off) Red (effect off) or normal signal Green (effect on) Input, output, AC adaptor input 9V battery (006P) Included



SE-5 FLANGER w/AC adaptor

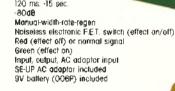
The most advanced state-of-the-art circuitry available. The SE-5 sweeps through the entire frequency response of amplified guitar, bass or keyboard instruments. Enhances reproduction of low, mid and high ranges for a total flanging effect. The SE-5 features individual slide controls for manual command of width, rate and a regeneration of frequencies.

Input imp. Output imp. Max, output level Delay time Sweep speed Signal/noise ratio Controls

LED. (2 color)

500k ohm min lk ohm max. -5dBm 05 ms -16 ms. 120 ms. -15 sec 8b08-

Jacks Power supply SE-UP AC adaptor included 9V baffery (006P) included



SE-6 SIX BAND GRAPHIC **EQUALIZER**

The missing link in sound reproduction for all amplified instruments or microphones. The SE-6 covers a frequency range which boosts or cuts six different octave bands enabling the musician to contour the sound to specific acoustic environments or personal taste.

Input imp Max input imp Control range

L.E.D (2 color)

Controls

500k ohm min lk ohm max -1dBm 100-200-400-800 1600-3200 Hz Noiseless electronic F.E.T. switch

(effect on/off) -85dB typ Red (effect off) or normal signal

Green (effect on) Input, output, AC adaptor input Jacks 9V battery (006P) included Power supply Opl. accessory SE-UP AC adaptor

SE-7 ANALOG ECHO/REVERB w/AC adaptor

The SE-7 Analog Delay combines superior sound with a separate reverb effect letting the musician create distinctive sounds at all performance levels. The circuitry of tomorrow in a small compact design, the SE-7 includes a separate switch for echo and reverb effect plus slide controls for delay time, number of repeats and balance for effect level.

Input imp. Output imp Max. input level Delov time Frequency

response (effect) Signal/noise ratio Controls

500k ohm min. lk ohm mex -5**dB** 30 ms - 200 ms

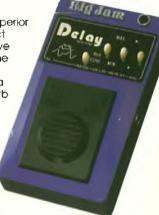
20 Hz (3dB tvo) More than 70dB Mode (reverb/echo) Delay-repeal-balance Noiseless electronic F.E.T. switch (effect on/off)

LED. (2 calor) Red (elfect off) or normal signal Green (effect on)

Jocks Power supply Input, output, AC adaptor input 9V battery (OO6P) included SE-UP AC adoptor included



Big dam



SE-8 DISTORTION

This traditional effects unit recreates the natural distortion and sustain quality originally produced by tupe-type amplifiers when they were overdriven. SE-8 includes individual slide controls for drive, tone and level output.

Input imp. Output imp. Max. gain Max. output level Goin control Signal/noise ratio Controls

500k ohm min Ik ohm max +50dB typ +10dB +50dB 85dB Np Drive-tone-level

Noiseless electronic F.E.T. switch (effect on/off) LED. (2 color) Red (effect off) or normal signal Green (effection)

Input, autout, AC adapter input Jacks 9V battery (OORP) included SE-UP AC adapter Opt. occessory



The ultimate phasing device destined to become a leader in design. The SE-9 features a fixed phase shifter circuit and a variable phase shifter circuit that allows the user to integrate two phasing effects simultaneously in one unit. The SE-9 also includes separate slide control for width, rate and resonance.

Input imp. Output imp Max input level Sween speed Sweep range Signal/noise ratio 500k ohm min lk ohm max -5¢B .2 Hz 8 Hz 3 octaves -70dB

Red (effect off) or normal signal

Jacks Inpul, output, AC adoptor input Power supply SE-UP AC adapter included 9V battery (600P) included

LED. (2 color) Green (effect on)



SE-11 JAZZ FLANGER

w/AC adaptor

A radical and totally unique sound effect device created for today's "new wave" music

A professional flanging circuit plus a separate overdrive distortion circuit allows the user to incorporate a flanging effect with a heavy distortion overdrive signal. The SE-11 includes separate slide control for manual, width, rate, regen, drive and level.

Input imp. Output imp Max. output level Delay time Sweep speed Signal/noise ratio Controls

500k ohm min 1k phm max 5dBm to -10d8m .05 ms -16 ms 120 ms -15 sec -80dB typ

Manual-width-rate-regen-distortion-level Noiseless electronic F.E.T. switch (effect on/off) Red (effect off) or normal signal

LED: (2 color) frigut, output, AC adaptor input

Jacks Power supply AC only

SE-UP AC adapter SE-11 will not work with a 9V battery and therefore none is provided

Introducing the **MULTIVOX** Pulse Regulator and Power Supply.

A state-of-the-art control panel for use with up to five pedals af once.

SE-XP PULSE REGULATOR/ POWER SUPPLY

Multivox designed this convenient unit to supply 9 voits of pulse-regulated DC power for up to five Big Jam effects pedals simultaneously. The Multivox unit supplies constant voltage regardless of demand

The SE-XP Pulse Regulator plugs into standard wall outlet and has five lack inputs for up to five Big Jam pedals.



SE-UP AC ADAPTOR

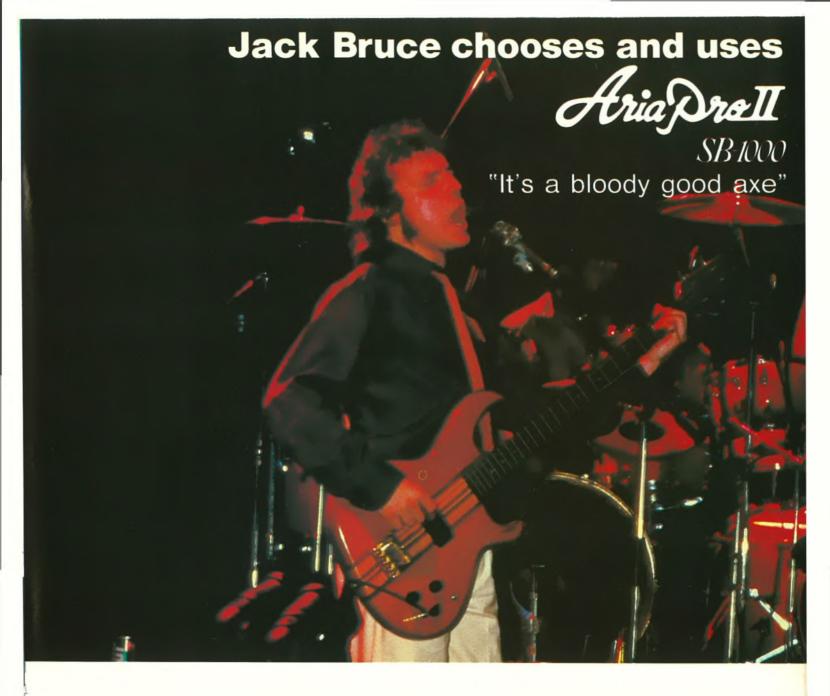
AC adaptor: Multivox Big Jam effects pedals operate on 9 volt battery power, or on AC line current with the Multivox No. SE-UP adaptor. Compact unit plugs into wall outlet and converts standard 115V-12QV (50-60 Hz) AC current to 9 volts DC. Also available is a Multivox AC adaptor that converts 220V-240V

(50-60 Hz) AC current to 9 volts DC.





370 Motor Parkway Hauppauge, New York 11787 Telephone: (516) 231-7700 Telex: 510-227-9866





Long scale with 24 frets. Built with alternate 5-ply laminations of maple and walnut running right through the body for transmitting maximum string vibrations to the pickups mounted in solid timber.

SUPER BALANCED BODY

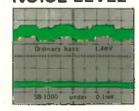
Designed to obtain the best possible balance combined with performance. Carved from solid Ash, tapered for correct weight distribution.

SB 1000 £ 361 Inc. VAT. U.K. S.R.P.



Reduces hum and unwanted noises from leads etc, caused by capacitance problems, without losing top frequency definition. Your amplifier reproduces only the sounds you want to hear... without external noises, Ideal for studio conditions(the Noise Killer is driven by 9 volt batteries and switches on when Jack Plug is inserted. Life approximately three months with 2/3 hours per day use).

NOISE LEVEL

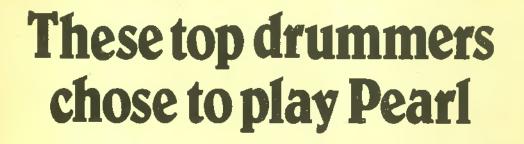


Reduced Noise Level of the SB-1000 is much lower than in other guitars without active circuits. It is ideal for D.I. where very clean sounds are essential.





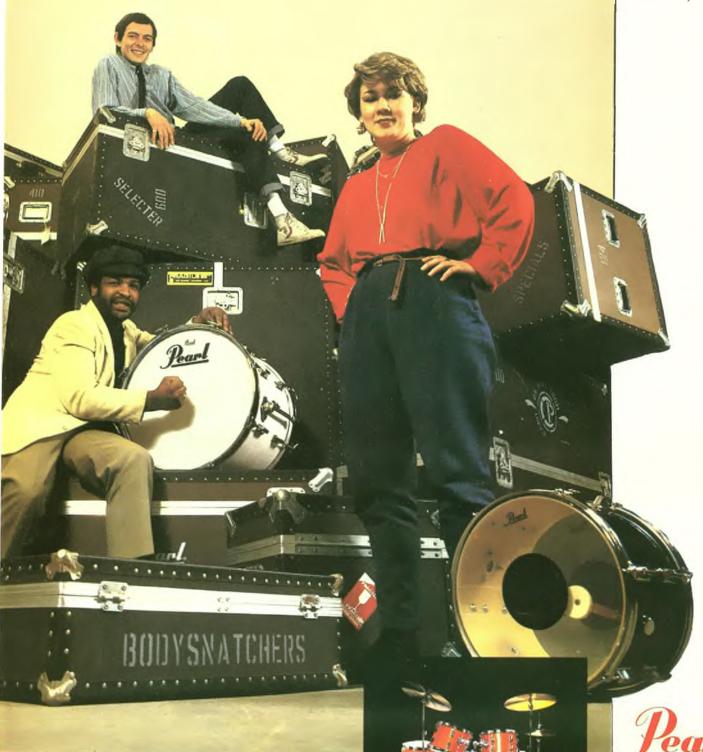
South Drive, Phoenix Way, Heston, Middlesex.



Brad of the Specials, H of Selecter and Jane of The Bodysnatchers all chose Pearl and bought their own kits.

Like all the leading names who play Pearl, they're not given any incentives to use or endorse the products.

They play Pearl because they want to.



Attract attention with Pearl

Pearl Music Ltd., 29-35 North Acton Rd. Park Royal, London NW10, Tel: 01-961 6644, Telex: 9951170

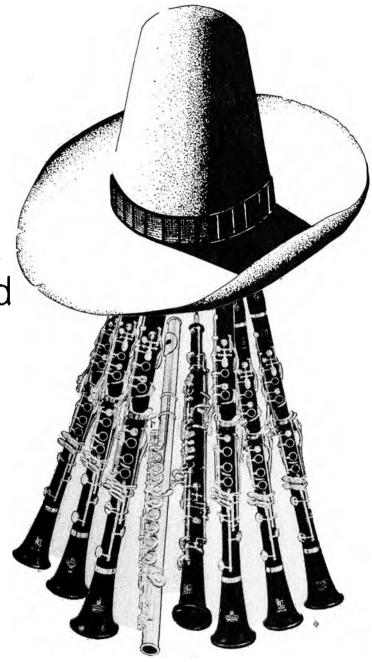
Reed about the

Woodwind Bonanza!

Boosey & Hawkes Clarinets and Flutes down in price — and delivered at the drop of a hat.

- * Regent Bb Clarinets are now available from stock (and they are down in price to £137.50 incl. VAT).
- * The Edgware Bb Clarinets are once more available in wood and there's a matching Ag model.
- * The Emperor Bb Clarinets and Flutes (down to £167.50 incl. VAT) are still amongst the most popular instrument for the young musician.
- * The 926 Imperial and the 10.10 Symphony Clarinets are played in nearly every professional orchestra in the United Kingdom.

They are all available **NOW** from stock. Send or phone in your order today.



Edgware Bb Clarinet Outfit	£185.00
Emperor Bb Clarinet Outfit	£250.00
Imperial Bb Clarinet Outfit	£439.95
10.10 Symphony Bb Clarinet Outfit .	
Regent Oboe Outfit	

and the famous REGENT Bb Clarinet Outfit now reduced to £137.50 — and EMPEROR Flute Outfit down to £167.50.

Deansbrook	awkes (Musical Instruments) Ltd., Road, Edgware, Middlesex. Nour brochure on your Waodwind Range:-
••	brochare on your woodwing hange
Name	· · · · · · · · · · · · · · · · · · ·



Deansbrook Road Edgware Middlesex HA8 9BB Tel: 01-952 7711

Weller's One for the Money



Don Weller is best experienced through a haze of red light and cigarette smoke from a crowded floor. The booze and the ambience and the striking, phenomenally agile tenor sax conspire to weave a patented form of sorcery designed to close down all sensory inputs save sight and sound - but especially the sound. Huge chunks of virtuoso melody come ripping off Weller's instrument as the rest of the band fill in the space behind him, building a gantry from which Weller himself plunges into deep space with the impetuosity, studied coolness and technical expertise of the first astronaut. He does what he does with breathtaking abandon, but at the end of his break everything is back to where it should be, neat and tidy, ready for the next solo, chorus or verse.

Don Weller gives the impression of untidyness, but is really extremely meticulous. He is a paradox, not only in this respect, because although he is a great talent he will never be rich. As long as the music industry rewards form instead of content, and image instead of reality, people like Don Weller will continue to play in their own particular fashion. In this way, perhaps it's a good thing that 98 per cent of A and R men can't ever see the woods for the dollar bills.

Don Weller is not very famous, though he once toured with The Sensational Alex Harvey Band, and has recently played alongside of Alan Price. As an indication of Weller's commitment to what he's doing it's well to bear in mind that he was offered a retainer of a hundred pounds a week by Alan Price, who wanted first offer on the tenor player's talents. Weller declined the offer — on the grounds that he wants to play, not sit at home waiting for a phone call.

And play he does, not only with Alan Price, but also with the Weller/Spring Quartet, an outfit he's formed with drummer Bryan Spring, an erstwhile colleague from the Stan Tracey Octet days. Together with Martin Blackwell on piano and Roy Babbington on bass, (who once trod the boards with Soft Machine) the Weller/Spring Quartet is poised for some kind of international recognition. They are aiming for exposure at both the North Sea Festival, the Montreux Festival and the Nice Festival, too.

It's the first time that Weller has been involved in anything as overtly commercial as this. Up to now, apart from touring with Harvey's band, Weller has done relatively little on the Continent, and though it's widely acknowledged in Bri-

tain that he's one of our world class horn players, he's done little to push himself onto a wider audience.

This is largely due to his reluctance to become involved in any kind of business deal. He regards record companies, managers, agents and suchlike with deep suspicion, sure as he is that the one aim of their life is to part him from his money. And he's perfectly justified in this attitude. But still it's kept him away from a more general acceptance of his talents.

However, with the release of the Weller/Spring Quartet album Commit No Nuisance on Affinity (AFF 44), he's got no choice but to commit himself to all the gigging and promotional activity that such a record deal entails. And that's good for everybody, not only the accountants, because it means that more people get to hear him play.

Commit No Nuisance came about due to the persistence of the A and R man at Charly Records — a chap named Joop Visser: "This guy kept coming to the gigs and saying 'I want to make a record' and eventually I met him in a pub at Hammersmith, and his office was just around the corner. He gave us an advance and we recorded the album in three days."

That was July 3, 4 and 5 last year at Blackwing Studios. In these days when rock bands lock themselves into studios for months to try and do something well, then it's refreshing to see that musicians exist who can produce good music at the merest provocation.

"We had to rehearse in the studio first to get the numbers going," explains Don, "and actually arrange some of them. Some were written in the studio then rehearsed and then played. I think I'd prefer one rehearsal before we go in next time, though the next one is going to be live. Overall I was satisfied, yeah. There were little things in it I would prefer not to have done, but it's too late now. I'm talking about arrangements. I do all the arranging, so it's my fault.

Don is a big guy, not prone to sartorial elegance. He carries a lot of weight, is balding and likes to tipple a Youngs beer at his local in Streatham. He's old enough to have a 15 year old punk for a son. Not what Mickie Most or Tony Hatch would call star material if presented to them on New Faces, but of course in the jazz world its the tone of the instrument, the creativity of the player and the dexterity of his execution that is most important, not looks. How does such a beautiful saxophone sound emanate from such a plain looking guy?

We could go some way to answering this question by looking at the horns

that Weller uses. His tenor is a 1967 Selmer Mk6, and "it's still a great horn" according to Don. It was busted at the time of my visit, but another one had been borrowed to enable Don to carry on working. He also has a Buescher tenor, and an unspecified soprano.

"I used to have the lot — alto, tenor, baritone... but I had to sell them all, except the tenor, to keep out of debt. I'd like to get them back but they're such a price now, aren't they?"

A Lawton 8 star mouthpiece is used on the tenor, with strength 3½ reeds, usually Rico Royales or plain Ricos. The Royales are preferred because they last longer and they don't get soggy. The ordinary Ricos go soggy after three or four blows, according to Don. He's used the plastic coated ones, but dislikes them because of the edgy sound they produce.

Weller admits that his tenor set-up could change because the more a horn

"I don't know all about mouthpieces, or all about reeds, or all about saxes"

player blows the stronger the embouchre gets, and he reckons that in the near future he'll probably be moving up to four strength reeds. Also, next year he thinks he may need a slightly wider lay. though he's been using the present Lawton for almost 10 years: "I had a great sound at first, with my first Lawton, but gradually the sound became thinner, and I thought well, I'll have to step it up. I like Lawtons better than Links. Some people like Links better, but a lot of that is fashion. Way back in the Fifties Stan Getz used to use a white Brilhart, one of those big, fat ones, with the black square on top. So everybody says, oh Stan Getz uses that, so everybody gets on to white Brilharts. There were white Brilharts all over the place. I had one for a while. And it was horrible. Couldn't get a sound. Everyone was trying to sound like Stan Getz and not making it. I still can't make it.'

Weller has developed his own sound, though. "Yeah, now, eventually. Trying to get the right noise coming from the instrument, that's the most frustrating thing. And it's still frustrating now, sometimes. I know what I want now, that's the main thing. Starting off you really don't know what you want.

"You hear someone play and think 'great sound that, I wish I could get that' then you hear somebody else, and you're dotting about trying to sort it all out. Sooner or later you've got to say: 'I want to play this sound.' I know what sound I want, and it comes out. But sometimes it doesn't. I still get frustrated now..."

Weller doesn't believe too much in the mechanics of saxophone sound. He maintains that it's largely trial and error, and that it's never predictable. It's this elusive quality that he loves about music. If it were possible to merely combine the right elements of mouthpiece lay, reed strength and make, and tone chamber size and shape, then that would make Don unhappy: "I'm glad it doesn't work like that".

Does Weller's vibrato come from the iaw?

"No, from the throat...not from the throat, from the gut. A little more, a little less, it's natural, you just don't think. How is it done? I've never really thought. That's why I wouldn't make a good teacher. I don't really know all about these things. I don't know all about mouthpieces, or all about reeds, or all about saxes. I don't even want to think about it. I just want to play."

At this stage Weller becomes a little excited, as if angry at his inability to express in words what would be a simple matter of expressing were he speaking with his saxophone. But still we press on, verbalising the techniques that are stored somewhere in the Weller entity.

"I worked out the harmonics of the sax myself. Some saxophones are better than others for harmonics. I often used to wonder why I couldn't get these harmonics when other blokes could, then I got my Selmer Mk6 and suddenly it was all there.

"The ones just above the range of the instrument are the hardest. G is OK, G sharp is a bastard. A is OK, and B is OK. I probably don't use the fingering that's in the books, but then I never saw them. Though that's got to be the best way to do it.

"I try to open the throat more, and push forward on the reed slightly. The most important thing to do is think the note before. You have to know the note before you play it. You don't just put your fingers here and blow. So you think of it and pitch it, maybe move a tiny bit onto the reed, open the throat



and go for it. I can reach G above top D. I can get up to the D then I can use one finger on the fork F, just that one."

Reluctant as he is to communicate or even ponder these technicalities, it can't be doubted that indeed a rare intelligence utilises them on stage. For all his apparent lack of knowledge concerning the mechanics of saxophone playing, Weller has been tutored fairly extensively.

It was listening to Benny Goodman that hooked him first, though that was on clarinet, an instrument that Weller's father bought him after considerable pestering. This was at the age of 14, and young Weller was duly packed off to classical clarinet lessons for a period of four years. It was Lester Young and Stan Getz who prompted him to pick up a sax — which the long suffering father had to fork out for. This horn was a tenor, an old Deerman: "it cost 40 quid. It was horrible but I wanted it so badly that I overlooked the fact that it was so bad. It was out of tune, and it kept falling apart. The crook kept falling off and it started to unweld. It didn't put me off."

He got another tenor after that: "that was an old Conn. Normally they're pretty good, but this was even flatter than the first one, The top notes were really bad."

Weller would keep the horn in tune through sheer willpower, just like he does now with his battered old anonymous soprano. The early Sixties saw Weller being tutored by Kathy Stobart and her husband in a student big band. He missed the heyday of the big band scene, but saw some of the action in Eric Winston's outfit for one summer season. It wasn't until 1968 that he gave up his day job, this coincided with buying his Selmer.

About 10 years ago was when Weller began to get proper jazz bookings. Like many other jazz players, he first got a start at The Bull's Head in Barnes, South West London. Now, he's getting about all over the country, and is touring for a quarter of the year, a proportion of time which should increase when the Continental bookings begin to come on stream. And there's no reason to think they shouldn't.

The only thing that could get in the way of the Weller/Spring Quartet now is Weller's own reticence. And that would be a tragedy.

Once before Don fronted his own band — perhaps fronted is the wrong word here because Weller himself is such a democrat within a band's format — which met with much acclaim but did relatively nothing internationally. This was the highly praised Major Surgery, which Weller fitted in around his gigs with the Stan Tracey Octet. The band cut an album, but lacking as they were in the machinery of the music biz, i.e. manager and publicist and accountant, they didn't ever become viable and eventually they split up. But they did produce some memorable music.

It doesn't look like Welfer will duplicate the moves that left Major Surgery penniless. As he admits: "everybody likes money". He regards realistically the possibility that the Quartet could well be gigging on the same circuit as the Hubbards, Getzes and Paraphernalias of this world if everything goes right, and he looks on this with some kind of hopefulness. Nice and the Montreux festivals are the gateways to this kind of acceptance on the continent.

But even if the Weller/Spring Quartet did achieve that kind of success, it's fairly certain that in Britain we'll still be seeing them in a dark pub backroom, through a miasma of red light and cigarette smoke while the booze and the numbers do their action and the geometric melodies of Weller's horn will continue to weave magic from thin air.

Steve Brennan

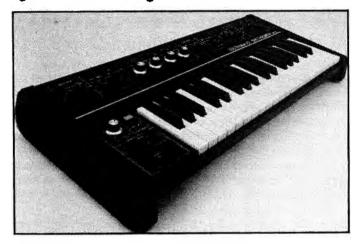
SH-09, Gateway to Synthesis

More and more musicians are getting into Roland's amazing electronic music system via the SH-09, the small but full-featured synthesizer that's currently breaking all sales records at Roland dealers.

'Don't be stuck with a controlled by other Roland trade-in' is the principle that keyboard players, many of them first time synth buyers, follow when they invest in the SH-09. Because this synthesizer has been deliberately designed for the musician who's going places, and who wants equipment that will grow with his ideas. That means, firstly, that it is built to uncompromising Roland standards, to make it compatible with some of the most sophisticated equipment in the world. Second, it means the SH-09 has a total interface capability, using the standard Roland one-voltone-octave voltage-to-pitch ratio combined with standardized circuitry and 'envelope follow' synchronization. This makes it

synths in a 'slave' status, to synchronize with Roland programmed rhythm units. to interface with the CSO-100 168-note digital sequencer, and, in short, to link up with the entire Roland electronic complex from the prestigious rack mounted equipment to the foot-pedals and products vet to be announced.

In addition to all this, the SH-09 is a pretty impressive piece of electronic engineering in its own right. It's characterized by exceptionally stable pitch and tone colour and features facility, sub - oscillator modulator with sample/hold facility for random sound patterns, pitch bend control, and all the standard controls of a suitable to control or be small but well-equipped



synthesizer.

The Roland SH-09 is meant to provide the firsttime buyer with a synthesizer he may well keep throughout his playing career, but carries a 'first synth' price-tag which has more than a little to do with its current popularity. Due

to technical and marketing achievement that is nothing less than remarkable the price of an SH-09 — and with it the price of entry into the Roland electronic world - has been kept down to around £250. A Roland 'first', whichever way you look at it.

The O9 Series-A Story of Family Ties

Roland have introduced the 09 series at a time when there are plenty of manufacturers frantically marrying up silicon chips to small keyboards in order to compete for the lower end of the synthesizer market. Companies that have been producing hard, and producing with their heads down, without really assessing what the musician is looking for when he considers buying his first electronic keyboard.

Roland have looked around, and have been inclined to consider how they can scale down their more famous and prestigious instruments to fit into the lower price bracket, than to design a deliberately 'budget' line which might lack the quality most performing musicians regard as a 'must'. The SH-09, for example, is based on the SH-2, and the popular SA-09 Saturn and RS-09 organstring 'hybrids' are backed by the keyboard technology that leads the world, with ideas developed for the top Roland organs and synths.

Finally, the 09 keyboards constitute a family because they offer total interface capability. As firsttime electronic keyboard buys, this means they can be added to rather than replaced as the musician's career progresses and he looks for further effects and facilities to put over his musical message. The 09 series will never be obsolete because it will interface not only with a large proportion of the current Roland range, but is designed to a system that will be used in Roland effects still only at concept stage.

In this way, the economically priced 09 series has a guaranteed place in the future of music - as part of one of the world's greatest electronic families.

Echoes of the Future-from Roland

The RESOI and RE201 from Roland are among the finest echo and reverb units available, turning the smallest of rooms into concert halfs and increasing the power of your performance. The RESOL Chorus Echo is an updated version of the RE301 with an even better signal to noise ratio, the addition of balanced and unbalanced XLR sockets but. despite these plus points, the price slavs the ome as the existing RE301 Chorus Echo.

The RE301 is a top flight professional unit.

combining Echo with Reverb and Chorus, plus the innovative Sound on Sound facility which allows you to adjust the return rate so that you can play over your own work. An effect which previously could not be achieved without recording studio facilities, Sound on Sound makes a single voice sound like an entire chorus, a six-string guitar like a 12-string and a violin like an orchestra! For recording purposes the unit is also fitted with a specially designed 'noise reduction' facility, to return the input sound exactly, eliminating all hum and rattle. With advanced LED metering, tone, repeat and volume controls, the RESQLis an ideal unit for live, high-volume work also recording where the very highest standard

The RE201 is the most popular of the Roland Echo Units, offering no less than three individual inputs, each with independant mixing facilities, three spring reverb sections, a free running tape system, together giving a completely noise free copy. There is also the incredible 12 Mode Selector, taking in all four echo facilities, all 7 echo/reverb capabilities and direct control of the master reverb section.

For the creative musician this offers the

ultimate in flexibility, a hardworking and rugged unit that can be used for rehearsal, writing

or recording, or can be connected direct to the PA to give performances that extra boost. As a result of sustained demand and hard narketing, the price is reduced by 20% with effect from June 1st.

Also in the echo field, Roland are ready to announce the release of yet another addition to the incredible Roland Rack System, a new rack-mounting echo unit. The new SRE 555 has been specially designed to interface with all the other compatible 'Rack' units. The construction and design are the same as the new RE501, but with a smooth running, automatic roller slide out action for tape changes — all this at only 20% more than the RE501

All these tape echo units use the Roland RTIL rapeloop which provides a minimum of 300 hours playing time.



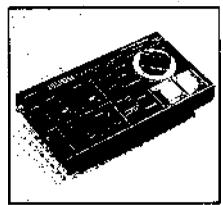
A Doctor to help with your Rhythm

Would you go to your doctor if you had a drumming problem? More and more musicians are turning to the Dr Rhythm from Roland, and with a programmable selection of six 16-step rhythm patterns, two 12-step patterns and 'A' and 'B' inversions, the Dr Rhythm provides the perfect percussion, and 'remembers' even when it's time to change the batteries.

The Dr Rhythm's popularity could have something to do with the three sound settings available, snare drum, rim-shot and bass drum, to which you can also add a fixed hi-hat beat. It could also be the accent control, letting you fix the emphasis of the beat, or the sensitive volume, tone, tempo controls and start/stop facility which can also be activated by the optional footswitch.

Whatever the reason, musicians everywhere are finding that the Dr Rhythm provides sharp, precise, computerised percussion up to and sometimes beyond the standard of

conventional drumming. Like all Roland units it can also be interfaced. and is especially dramatic when combined with the CSQ-100 digital sequencer. As for the operating procedure, the Dr Rhythm won't take up much of the time which you should be using to entertain your audience. It's not quite as simple as tapping your foot — but it comes close!



And an even faster Rhythm

Much of today's music is based on clear-cut and precise rhythmic backing to a level where human error becomes a very high factor. To eliminate this, Roland introduces the CR-78 Compurhythm, perhaps the most important advance in percussion since the drum kit!

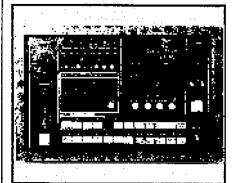
Based on a microcomputer, the CR-78 can recreate 64 presets at the touch of a button, and these can be produced in any of 14 different instrument voices. Tempo, Fading, Accent and Start/Stop facility can be used in conjunction with the preset controls or under manual operation.

The voice capability includes Bass Drum, Snare Drum, Rim-Shot, Hi-hat, Cymbal, Maracas, Metal Beat, Claves, High and Low Bongo, Conga, Tambourine, Guiro and even Cow Bell! The controls are laid out to allow fast, simple and effective changes to the rhythms, making the CR-78 ideal for live work. It can be triggered by remote or manual control, by interlink with synths or by connection with sequential circuitry. The Mode switch is coupled to a memory, allowing interface with the variation control for the addition of rolls. frills and breaks to the basic rhythm. LED tracking over a four base horizontal display

allows you to see exactly where the rhythm is in relation to the additions to the basic beat essential when syncopating.

And after the end of the piece, the CR-78 features two types of fading out, Long Fade and Short Fade in addition to the Start/Stop facility.

All this is encased in a natural wood finished cabinet, weighing in at just over 101/2 pounds making it a striking addition to any rhythm section.



The way a Vocoder should sound-VP 330

The inclusion of no less than three tone generators makes the Roland Vocoder Plus an arrival in polyphonic technology. The three generators, Vocoder, Human Voice and Strings can be independently assigned to cover the whole keyboard, or either half of it. They are fed into separate outputs so that the Vocoder Plus can be run in stereo.

The Strings have a warm, rich sound that is consistent over the entire keyboard and the tone and attack characteristics of the sound can be controlled independently of the other functions, sharing only the release time facility.

The Human Voice gives an uncannv resemblance to a human choir, the Vocoder Plus gives one 'female' and one 'male' chorus on the upper half of the keyboard, while the lower half gives two 'male' choruses. All of these can be coupled to an ensemble effect which can expand their power and 'space' even further.

The Vocoder Section is as versatile as your voice. It takes the characteristics of the voice, sung or spoken, processes it, and uses the information to modify its own waveform signal accordingly. A devastating effect.

For live performance the VP-330 will fill out your sound to unreal levels. Imagine a full orchestra and choir backing your band! In the studio, it will take in the external signal of a vocal or instrumental section and allow you to play in harmony with it. The harmony signal can be simply and easily modified to enhance the full power of the fundamental note.

A new dimension to keyboard playing, the Vocoder Plus offers capability both as lead and as backing to any kind of music. Whatever you play the VP-330 can expand and give a new depth to your performance - live or recorded.





Jupiter 4 - Memory Bank

As the market leader in polyphonic synthesis, the new JP-4 gives the musician unlimited freedom of expression over the whole spectrum of sounds that this incredibly versatile synthesiser can create.

Featuring an innovative micro-chip memory facility, the JP-4 can be programmed with up to eight individual sounds, which can be stored and recalled at the touch of a button. From the point of view of live performances, this frees the musician from the problems of having of having to patch and mix the required sounds during the performance. All the sounds that you need can be created prior to your appearance, ready to be called up at the relevant time. To prevent inadvertant removal of the programs, the JP-4 also has a locking Protection facility which, when coupled with the memory's own isolated power supply, will retain any sound almost indefinitely.

As well as the eight programs, there are also 10 other pre-set sounds, Bass, Clavinet, Piano, Strings,

Voice, Trombone, Sax, Trumpet, 'Force', 'Funky' and Synth, giving the instrument amazing versatility. Capable of creating any sound you want, the JP-4 features a 49-note keyboard, which can be extended to seven octaves using the VCO Range Switch and the Transposition Facility. The Transposition Facility is connected to the Jupiter's complement of four modules which can give a preset Arpeggio with four modes, UP, DOWN, UP & DOWN and RAN- DOM. This in turn can be connected to the Key Assign Mode Button which controls the four control function patterns of the synthesizer modules.

The Jupiter-4 Compuphonic also boasts full polyphonic or monophonic operation, a complete stereo ensemble, and a multi function Bender which allows LFO control of the VCO, VCF, and/or VCA for pitch bending, tone colour bending and/or output level bending of the accents.

Remote control facilities give even wider scope, with VCF (±2 octave), Damper (external control input) and external control of the arpeggio facility via a rhythm box.

The Jupiter 4 was a complex synthesizer to design, and is a complex synthesizer to describe. It is a tribute to the Roland genius that it is positive and straightforward in operation, and for this reason it has become perhaps the most popular quality polyphonic synthesizer in the world.



MP-600 Electric Piano-Graphically Different

All the problems of combining the portability of the standard electric piano with a true acoustic piano sounds are now solved. It's as simple as that. For keyboard players there will never again be the problems of creating that elusive acoustic sound live on stage.

Featuring a full six-band graphic equalizer the new MP-600 can control the sound over a huge ± 12dB range from 100Hz to 5kHz

covering the entire range of the pianos 64 keys. There are three basic sounds available, Soft Piano. Bright Piano and Clavichord, but by varying the setting a whole new world of piano sounds can be explored. There is also a decay time control allowing the ambience of the notes to be controlled manually, giving the player limitless variation on the piano 'theme'.

All the facilities are con-



trolled from a simple slider system giving the piano a speed of adjustment that most of today's performers would consider vital. It is, in fact, the ideal modern piano — a portable, adaptable instrument that sounds Grand...



If only Georgie Fame, Zoot, Money or Procul Harum had played a VK-1!!

The name of Roland has long been associated with innovation in electronic instruments, but innovation can take many forms—even the form of restoring to musicians one of the most popular sounds of a previous decade, in a reliable and economical solid state package.

The sound is that of the drawbar organs of the '60's, now undergoing a resurgence of popularity sadly at variance with the availability of these



venerable instruments. The innovation is the Roland VK-1, purpose-built to give the sound of the old drawbar instruments, but with all the reliability of Roland

electronics, making it, unlike the organs it emulates, a practical proposition for touring. The VK-1 has nine drawbars together with presets for Ensemble, Full Tibias, Theatre Brass, and a complete range of percussion. Controls are provided for brilliance, volume, and tuning plus Chorus Vibrato with depth, speed, and on/off control.

A full specification, a classic sound, and complete playing control together with total portability. And, at £650, the VK-1 promises to be one of the organ bargains of the 1980's. An achievement!

Getting The Right Sequence-SH2

The sophisticated SH-2, Roland's 'stage synthesizer with studio features', is already confirmed in its popularity not only by virtue of its own features and facilities but as a 'system synth'—an instrument designed to operate at the centre of an electronic system limited only by the musician's own aspirations.

Recently, however, considerable attention has been focussed on the interface potential of the SH-2 plus the CSQ-100 digital sequencer—not because the interface is possible—that can be taken for granted between components of the Roland system—but because of the dramatic impact this teamup can have for the whole of 'synthesizer rock'.

The CSQ-100 has been developed from the MC-8 microcomposer that is already widely used by leading artists. The new digital sequencer is capable of storing up to 168 notes in its electronic memory, which has the useful feature of LED indicators showing how much of the memory is 'in use'. In combination with the SH-2 which is already noted for its unusually wide repertoire of sounds, the CSQ becomes a virtuoso. You play the 'sequence' sections on the synthesizer for direct

memorizing, and pitch can then be added either seperately at a constant time value or with variable time values to be added afterwards. In addition Rolands newest 'robot musician' offers variable tempo, instant transposition to any key, variable protamento, and an automatic bypass circuit means that when the sequencer is not in operation the synthesizer can be played normaly without the need for changing patch cords.

Implications of the new CSQ-100 for the owner of the SH-2 (or the owner of any other one-volt-one-octave standard synthesizer) are little short of revolutionary. Using a sequencer of this calibre not only adds another member to your band, but puts within your reach musical effects beyond the capability of any human musican. Built to operate with guitar synth and vocoder as well as the conventional synthesizer, the sequencer will fill in the groundwork for flights of creative improvisation that would be impossible without it. For the rock musician, the age of computer technology has paradoxically resulted in a degree of freedom and spontaneity of expression never before known.



The RS-09—A Double Winner for Roland

Just a few keyboard 'combinations' come out as more than the sum of their parts. The Roland RS-09 organ/strings is one of them. It couples the colour and scope of an excellent 'Strings' section with a rich organ sound, and offers many features that have never been combined in a single manual portable keyboard.

The result is a handsome, easy-to-operate 44-note instrument that for many bands is going to be seen as the ideal keyboard formula. It features full transposition facility, easy mixing of 8', 4', 2', and 1' notes by simple slider controls, master volume, tone and tuning

controls, plus vibrato and envelope control. And all packed into a unit weighing just 16,1 lbs.

The connector plate on the rear of the unit allows full interface with other effects and with synthesizers. There is also a stereo/mono selector on the output to allow wide spread stereo panning, and guitar and microphone signals can be added to the ensemble modulator section to add even more scope to a unit that might be the most versatile of its kind ever produced — if there were any others of its kind to compete with!

Guitarcheck

GIBSON Les Paul 'Artist Active' R.R.P. £782

a series of three guitars currently available from Gibson with so-called "active" electronics, Many instruments are available, from various countries, which claim the feature of active electronics; there is some possibility of confusion, because not all makers mean the same thing by this. In the case of this "active" Les Paul model, "active" means that it has bass and treble controls which can boost and cut the ends of the sound spectrum, and also a built-in compressor/expander unit. This can be set to emphasize the explosive beginning of a note, or to sustain the tail end of a note. Although this would seem to be an impossible contradiction, I have found that if vou operate both compressor and expander switches, the circuit appears to expand the beginning of the note, compress the middle, and sustain the tail-end, all at the same time. Compression and expansion ought to cancel out, but in practice they appear not to. The effect of adding the "expansion" switch when the compressor is already switched in, is not very obvious, but it usefully masks some of the side-effects of a relatively simple compressor system. A certain technique is necessary to get the best out of this compressor. The most useful ground rule seems to be that if you intend to play a sustained solo on the top strings, do just that, and leave the bass strings entirely alone until the end of the solo. If you alternate high single strings with chunky chords at just the right speed you can make the gain bounce up and down like a demented swell pedal. The simple solution is don't do it. Play either solid rhythm or single string solos, or if you want to mix them, turn off the compressor.

The Les Paul Artist is one of

possible to play against the attack and recovery time of the compressor control circuit, in much the same way as one can play against the cycling time of a phaser — or even a tremolo unit if you are into that sort of thing. It is a technique, like any other, and it has to be learned. While you are learning, you will find the device much more forgiving if you keep the expander switched in at the same time as the compressor.

Using the expander alone does not seem to present any real problems. It gives an emphasis to the beginning of a note or chord, reminiscent of the off-beat up-stroke style of the Ska/Rock Steady/Reggae tradition which has found a place in modern city music. The expander also seems to give some increase in overall brightness of the sound. This can be removed if you don't want it, by turning the treble tone control down, about half a division. If you want more brightness and bite in the sound, with or without the other effects, turn on the "Bright Mode" switch and you will have lots more "Bright" with very little extra noise and hiss. This is basically a trebleboost circuit, but treble-boost devices have a reputation for high hiss levels, and most of them deserve it. As Gibson seem to have found a quiet one, they are probably right to call it something slightly different.

As far as I can tell, the pickups are not "superoverwound - hyperflux specials" but the basic, standard Gibson humbucker, you all know and love. While playing the guitar over a couple of days, I became aware that something about the sound did not fit with what I expected to hear from a Les Paul Gibson. Now there is no reason why one guitar must sound like another. However, I was

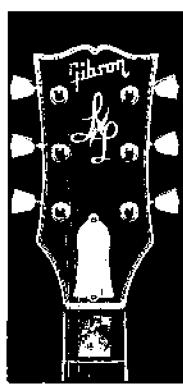
curious about why this guitar should sound so subtly but clearly different from other recently-made Les Paul models. It has all the appropriate mechanical features for a good Les Paul, and apparently, standard pickups. Why should it sound different?

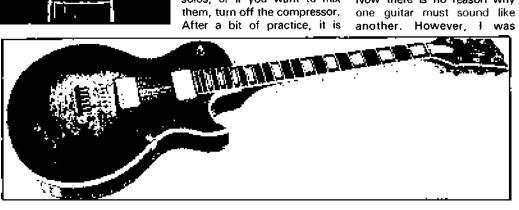
After some experiments, I think I can offer a partial answer. The standard Gibson humbucker is usually heard, known and loved, while connected to several meters of guitar lead, an amplifier input stage, and assorted volume and tone controls at both ends. To put it as simply as possible, this makes the guitar sound slightly different, and in a way which cannot exactly be compensated for by the guitar tone controls. All the components normally connected to the pickup (called the pickup "load") can be approximated by a small capacitor and a resistor connected in parallel, directly across the pickups.

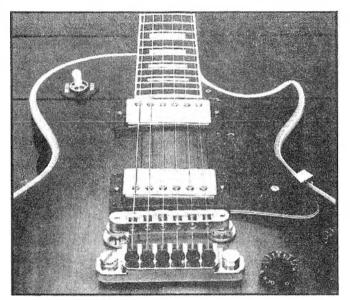
This guitar contains two rather complex circuit boards, which are better left undisturbed, but there is access directly to the pickups across the center solder tags at opposite ends of the pickup selector switch, at the back. Representative values of capacitor and resistor, 800pF and 330 kohms, connected across these tags, removed a slight wiry edge from the sound and shifted the "voicing" of the quitar to something which I felt more comfortable with. A resistor of 470k with the capacitor gives a slightly brighter sound than usual for a Les Paul model, but still to my ears, preferable to the standard sound of this instrument. I settled on this, as a compromise between what the designer intended and what my ears could come to terms with, in a reasonable time.

I hope the designers of the Artist are not too much upset by this retrograde step, but I cannot disappear into the woods with the Artist and a battery amp for three months. If I had three months' free time (what a lovely thought), I would prefer to spend it improving my playing.

This is a new instrument: it does some things differently, and it will do some other things which a standard guitar won't. I think most people will need a







little time to understand it properly, and get the best from it. At the moment, I find it easier to deal with the expander, compressor, bright mode, and active treble and bass controls, while at least the basic sound of the instrument is something which I already know and understand - hence the pickup loading components across the back of the switch.

If you like the sound of the Artist as it is, don't think that any modification to any guitar is bound to be an improvement. Usually it is not, and sometimes the result sounds worse than before. If you share my traditionalist reservations about the basic sound, the suggested modification is not permanent, and can be removed at any later time. If your solder joints look grey and lumpy and you tend to melt the plastic off the ends of wires, then let a good repair man do the job; it should not cost much.

The other unusual feature on this guitar is the fine-tuning tailpiece. You really have to try this to appreciate how good it is. As the principle has been in use on bowed string instruments for many years, I am surprised that it has not appeared on an electric guitar before now. One very early sample of this tailpiece, which I tried about a year ago, suffered from stiff adjustment screws. rather defeating the idea of a fine adjuster. However, all those which I have tried recently have worked smoothly and efficiently. This is a simple mechanical device, with no batteries, no integrated circuits

and not even a flashing LED to its name, However, I believe it represents a basic improvement in electric guitar design.

The original Gibson Tunamatic bridge, with adjustable string saddles, was a similar milestone in electric guitar design: it is difficult today, to imagine a modern électric guitar of this type without some sort of intonation adjustment built into the bridge. I wonder how many other guitars will now sprout fine tuning adjusters. The construction and materials of this guitar are basically similar to those used in the Gibson Artisan, reviewed earlier, and not very different from any other Les Paul model. The body is mahogany, with a carved maple front in the usual Les Paul contoured shape. On this guitar, there is a bevelled cutaway at the back of the waist, on the bass side, which some people find more comfortable than a completely flat back. Also the neck on this model is made from maple, not mahogany, and is shaped a little flatter than usual at the back. This is continued into a rather square-edged heel where the neck joins the body. I am happy with the feel of the neck, but I would find playing on the highest frets more comfortable if the heel could be rounded over a bit more.

The fingerboard is good quality ebony, nicely finished with bound edges and attractive figured pearl block inlays. The frets are the usual Gibson wide type - neatly fitted and smoothly finished off. All fittings are gold-plate, including

the machine heads, on which some of the buttons unfortunately feel a bit loose. This is due to play between the buttons and their flattened spindles, and can not be taken up by the torque adjustment screw.

Conclusion

Alright, let us accept that things have come round in enough of a circle that it is possible to be a traditionalist about electric guitars. That in itself is ironic. I am quite happy about the expander, compressor and the extended tone controls, but I am used to hearing pickups with all the 'problems" of lead capacitance and amp loading, and I think I prefer them that way for the present. If you wish, the Artist can be adapted to give the usual sort of basic Les Paul sound, by a small modification which is simple, cheap, and easily removed, later on.

The neck tends to be "square" at the back, rather than round. I like this, but I think the matching "square" heel could be improved. I like the fine tuning tailpiece, but I am not too impressed with the machine heads on this particular sample, considering its price. The lacquer and edge bindings are finished to a high standard. Personally, I would prefer a slightly warmer brown colour to the wood, as is sometimes produced by applying a red/brown base stain between dark grain filler and clear or lightly tinted lacquer.

The Artist is quite a heavy guitar; this is probably necessary for it to sound like a proper Les Paul, Even without the compressor, it has pleasing sustain properties, and does not appear to cause unwanted whistling feedback when played at high levels. Although this is presumably some sort of psycho-acoustic effect, I was more pleased with the instruments natural, uncompressed sustain when the pickup loading R/C network was connected across the switch tags. Finally, the Gibson Protector case in which the guitar was delivered is strong, and must have the most comfortable and well thought-out handle in the business. The case clasps are equally good, but almost any clasp can be damaged by really rough handling. As they are not a standard type, it may not be easy to find replacements in a hurry. I am sure Norlin have some spare clasps tucked away somewhere. I don't think it would do any harm to have a few of them in stock with Gibson dealers around the country, along with other guitar spares. I find it much easier to obtain most spare parts now than it was a few years ago. but it would be utopian to assume that all dealers consider a comprehensive spares stock to be of vital importance.

The more cautious of our readers may prefer to order a spare clasp in advance and indicate tactfully that they would prefer to buy the spare clasp, the case (and perhaps the guitar inside it), all at the same tîme.

The Les Paul Artist is one of three "active" Gibson guitars. The other two are the RD Artist '79 and the ES Artist Active. Personally, I like the Les Paul model better than the RD model, although I am sure many players would disagree and I look forward to the opportunity of reviewing the ES Artist in the not-too-distant future.

Finally, this seems to be another of those guitars which lay down and sleep when the battery gives out. I am not too happy about that idea. I would prefer to see some form of bypass switch, even if it provides volume control only. Gibson have more confidence in musicians' memories than I have.

Stephen Delft

Instrument: Gibson Les Paul Artist Serial No: 73529656

Scale length: 625mm String spacing at bridge: 51mm String spacing at nut: 35mm Fingerboard width at nut: 42mm Depth of neck at fret 1: 21mm Depth of neck at fret 12:

Depth of neck at fret 15: 46mm Action as supplied: 1.2mm Treble; 1.9mm Bass Lowest recommended action under our standard conditions: As supplied. Frets on fingerboard: 22 Body joins at fret 18 on treble side Heel starts around frets: 12-13

Typical body depth at edge: 50mm

Guitarcheck

MANSON 12 String £474 inc.VAT

It makes a refreshing change to review a guitar which does not have to be plugged in somewhere. This 12 string from Manson guitars, is almost the direct opposite of most 12-string guitars which you will see about in the shops. Its sound is light and delicate, and it is easier to play than many six-string instruments.

The back and sides and most of the neck are made from light brown. American mahogany, the front is a golden-coloured spruce, the fingerboard is ebony, bridge and trimmings are dark rosewood, and the whole instrument is finished, without tinting, in a waterclear glossy lacquer. Almough It is a gloss lacquer, there is just enough of the wood grain texture last to prevent it from being a dead-flat mirror gloss,

It looks bright and shiny, but it looks like wood!

Apart from one ring of Abalone in the soundhole decoration, all the decorative inlays and edgings are fine wood veneers. The only bit of plastic on the guitar is on the bodies and buttons of the machine-heads — and with 12 machines at the end of the head there is some point in using the light-weight nylon-bodied Schallers.

The neck is fairly wide and deep, with a shape at the back somewhere between crescent and shallow triangle. The fingerboard is relatively thin and the crescent shape continues almost to the edges of the fingerboard before turning inwards. This makes the edges of the fingerboard feel rather abrupt, and I would prefer a bit more rounding-over towards the edges of the fingerboard. However this sort of neck feel is characteristic of the "English" style of steel-string guitar making: many players were brought up on it and would not have anything else. irrespective of cost or prestigious names. The neck on this sample has fixed internal reinforcement, but I am told that more recent models have adjustable truss rods.

The fingerboard is of average width for an acoustic 12-string, with frets which are medium width and fairly high. On this sample, some of the higher frets over the front of the body are a bit uneven, and would be improved by a light fret-stoning.

It is easy enough to build a 12-string guitar which is as tough as an old boot, impervious to climatic changes, total immersion in sea water, or contact with flying beer mugs. Unfortunately, the result usually also sounds like an old boot. If you want something which is a bit more rewarding to play, there are several reasonably tough and reasonably sensitive 12-string guitars available from the better American and Japanese makers. These respond quite well to medium/light or light strings, played with a plectrum, or thumb and finger picks. Unless you are lucky, with a particularly nice one, playing such guitars with fingers alone can be hard work and tends to go through

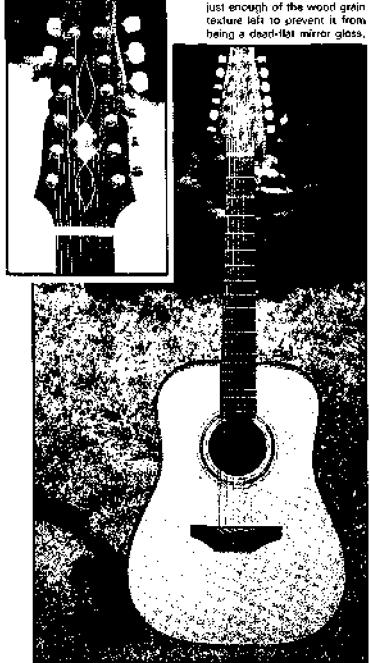
fingernails very quickly. It is possible to strengthen the nails with bits of modern alchemy, such as "Super glue" and tissue paper, but this requires careful maintenance, and may eventually cause skin irritation in some sensitive people.

There is an alternative course. Some of our own English guitarmakers are producing a different kind of 12-string instrument which is intended for playing with fingers, or with a light and controlled picking style. These instruments are intended for light strings only and need only gentle picking to produce low to moderately-high sound levels. In other words, they are very sensitive, and playing them is not hard work.

They have a delicacy of tone which is very difficult to obtain from a more heavily built instrument. However, because of the lighter construction and lighter stringing, they usually perform less well when pushed to maximum volume. Unless you need the absolute maximum volume (for example, in playing unamplified for 'medieval" catering events or outdoor singing), you would do well to consider and compare both kinds of 12-string instrument.

The other disadvantages to the more slightly built instruments are that initially they may need more frequent adjustments until they have settled down and also that they may be more sensitive to climatic changes, such as the shift from cold damp winter days to warm dry summer ones. In the long term they are not, in my experience, less stable than the more heavily built instruments. In some cases, they may be more stable, because the lighter stringing and lower stresses on the instrument compensate for the lighter construction.

This Manson G 12 model is a fine example of the lighter and more sensitive kind of 12-string. It is more beautifully made than many American and Japanese imported instruments and can compare favourably on price and performance. It also has the unusual property that all the strings play in tune at the top end of the neck. Usually, 12-string guitars have an approximate intonation setting at the bridge



which is a compromise between the requirements of the low bass strings and the high octave strings.

On this quitar, as you will see from the photos, each pair of strings has its own angled bridge saddle, to give the best possible intonation from both high and low strings. This can only work exactly with a specified set of strings at a specified string action and tuning, but it is going to be rather better than usual for most typical strings and action settings. The strings supplied appear to be the 12-string set from Handcraft, with these strings, a first position E-chord, moved up to the octave position is practically in tune against the remaining open strings. Try this on any other 12-string, (It produces some unhappy results on quite a few six-string duitars as well.)

It is quite possible to make any well made guitar work as well as this, but as you can see, the resulting bridge is quite complicated, and most makers don't go to the trouble. It is possible that some players

would not find this degree of accuracy any advantage, however, most 12-string players complain about various aspects of tuning difficulties, and anything which reduces this would seem to be a step in the right direction.

I am less happy about the relative heights of the strings at the bridge. On this instrument, they are set almost level with one another and I prefer more of an arch, to raise the middle strings above the outer ones. Which you prefer, will depend on your own playing technique.

Also on this sample, the action is really too low. It was low, but perfectly playable when the guitar was delivered a few months ago, but since then the quitar has settled a bit, and the sudden change from damp weather to warm weather has exaggerated this. The present saddles in the bridge are very low and slightly higher ones would solve the problem. As the present string angle at the bridge is fairly small, this would, if anything, improve the tone slightly.

This review instrument had only just been completed when it was delivered to me and for reasons which I have explained, I am not surprised that it now needs some action adjustments. Many makers and many retailers prefer new instruments to be returned for checking and adjustment after about three months for just this sort of reason, It is obviously not an ideal situation, but I consider it a normal one. Good instruments need a little bit of care and consideration. especially at first. It is not like buying a cupboard.

Conclusion

This is not a booming, chunking 12-string. The sound is like the guitar: interesting, sensitive and light. It is intended for playing fast, intricate bits of music with fingers or a light picking technique, and I find it very well suited for this. If you play it hard with a pick, the result is a tight, breathy rhythm sound which may be useful for recording, but lacks clarity for acoustic work. The individual notes are submerged

under a wash of string noise. However I don't think this one was ever intended to lead community singing, and it is a kind of instrument which is simply not available from any of the 'big names'

I am delighted to see that so many of our home-grown instruments are quite beautifully made, when compared with American and Japanese guitars. Keep up the good work gentlemen and keep in touch: there is no reason why the major companies should have the review columns all to themselves

Stephen Delft

Scale Length 643 mm. String spacing at bridge 59mm String spacing at nut 44 mm Fingerboard width at nut 49

Depth of neck at fret 1: 22 mm at fret 10: 26 mm Action - see text. Frets on fingerboard 20. Body joins at fret 14. Heel Starts around frets 12-13. Typical body depth at waist

95 mm.

Shadow Transducers. Because there's a difference between louder and better.

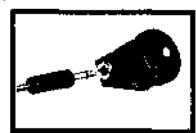
Acoustic guitarists deserve to be heard. But not at the expense of altering subtle notes and overtones by electrification. Shadow tranducers give you the widest frequency range, the volume you need and all the pure, natural acoustic sounds your music demands - without making your acoustic guitar sound electric. And you

won't need a preamp. So don't get lost in your group. Play acoustically and be heard. Natural acoustic sound without electrification. That's the difference

between louder and better. Ask your dealer about Shadow transducers.

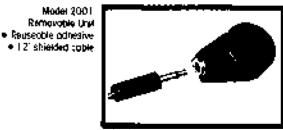
SHADOW OF AMERICA ELECTRONICS CO., INC. 22-42 Jackson Ave., New York 11101 USA SHADOW K&M

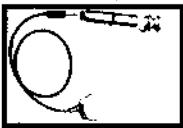
8520 ERLANGEN In der Zeil 39 WEST GERMANY



Model 2000 Removable Unit

- Adjustable volume
- Reuseable adhesive 12' shielded cable





Model 2500E Invisible Permonent Mount Unit

- End Pin
- All mounting hardware
- 12' shielded cable

Soundcheck

RICKEN~ BACKER _ 50 watt TR50B Combo £ 235.14 inc.VAT.

The arrival of a new amp from a manufacturer not normally associated with amplification is always interesting but with that manufacturer being Rickenbacker and this being a bass amp it is worth taking an even more careful look.

What is perhaps surprising is that rather than bring out a top-of-the-market product as with their range of basses, Rickenbacker have chosen to market a range of low cost amplifiers and speakers. The company say they have a complete range of combos ampheads, cabinets and PA systems.

Owning a Rickenbacker 4001 stereo bass myself, I do have more than a passing interest in this particular unit which is a fully transistorised 50 watt bass combo.

As can be seen, the design of the combo if fairly conventional. The enclosure is completely sealed and constructed from %-inch chipboard

covered in black vinyl. Chrome corner caps are provided with two large fixed wheels mounted at the back of the cabinet. Normally these wheels are held off the ground by hefty rubber feet but if the cabinet is tilted back then these wheels allow the cabinet to be manoeuvred very easily.

The electronics are mounted onto a single chassis which sits along the inside top of the cabinet. The front panel is angled back slightly as is the cabinet just at the top, to allow easy access to controls. The control panel is finished in black and silver as are the rather large control knobs.

In fact the overall appearance of the combo is rather plain but functional. It seems that Rickenbacker have thought very carefully about the design and have chosen to keep it fairly basic. In fact although the combo may not look anything special it is extremely strong and robust and looks as though it will stand up

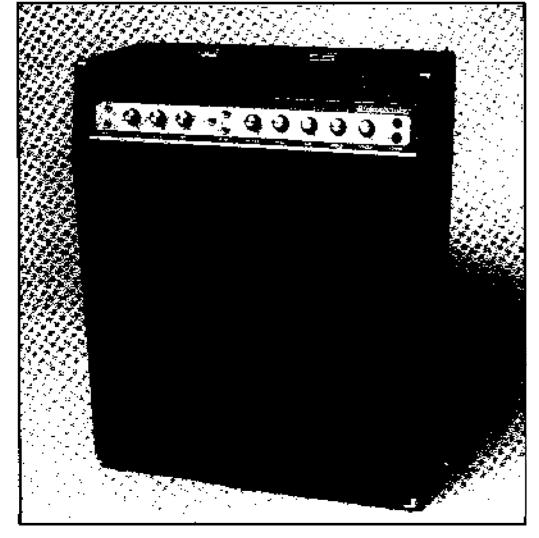
to a lot of rough treatment.

Right, now a quick run down on the electronics. Two separate channels are provided with a grand total of five inputs including one stereo input for direct connection of a stereo bass (providing you have a stereo jack to jack lead).

The left hand channel has just three controls, volume, bass and treble with two different sensitivity inputs. The right hand channel has two differing inputs as well but has the addition of a mid-range control and a distortion control. This distortion pot has a click stop at the bottom end of its travel which switches the distortion circuitry off. Apart from the mains on/off switch, neon and master volume, that is about all there is to it. Interestingly if you connect up a Rickenbacker stereo bass direct to the stereo jack, the treble pickup is connected through to the right hand distortion channel and the bass pickup to the left hand chan-

Okay, so how does it sound? Having been used to an amp with tone controls and graphic equalisation I was a little worried that this amp might be a bit of a disappointment. It is not possible to obtain a wide variety of sounds but the basic sound itself is quite good. For the first series of tests I just used the stereo bass and to be honest was quite knocked out by the sound. As many Rickenbacker owners will probably testify, it is all too easy to overdo the piano bass type sound and the best sound is really without too much equalisation. The amount of control on the bass pickup channel was about right for providing a nice low bass sound.

Certainly, the extra midrange control in the second channel was necessary to obtain what I would call the hollow type sound. Mixing these two channels together resulted in an overall sound that was exceptionally good. The distortion control on this second channel is quite interesting as it offers only a small amount of variation when switched in. In practice the amount of distortion produced was not very great but then it didn't need to be. Obviously for a stereo bass where



distortion is required on just one pickup for whatever reason, it is not really necessary to provide loads and loads of overload distortion. The sound produced by this circuitry was not what you would call a valve sound but more a straight transistor "clipping" which is fine for bass.

The next set of tests was done with a Fender Precision which I was, to be honest, a little worried about. The combo had obviously been set up very carefully for use with a Rickenbacker bass and I was just concerned that perhaps it would not perform quite as well with other basses.

I have to admit that I was both surprised and a little disappointed at the same time with the results. It has to be said that considering this is just a 50W combo it is remarkably loud and punchy. With the Precision, however, it was difficult to set the sound up just the way I wanted. The left hand channel did not have enough tonal range to handle it properly (too middly) while the right hand channel, with its extra mid-range control, could not quite approach the nice "funky" type Precision sound.

It is a fact that it is quite difficult anyway to handle a Precision properly without the correct equalisation to start with or a graphic equaliser. The sound this amp produced was good but ordinary.

Having felt that the combo had been set up specifically for stereo basses I then linked the two channels together (via a splitter) to see what would happen. The results were much much better. The Fender started to sound much more like it should. When wound up high at a gig the sound was excellent (using the splitter lead).

What you have to remember of course is that although this bass combo is an American import and a Rickenbacker at that, it offers remarkably good value formoney and that if all sorts of extra facilities (including a graphic equaliser) were added then the price would start rocketing.

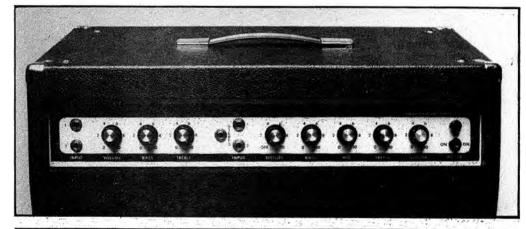
Considering its compactness and modest power output the acoustic output of this combo is very good. Power output on its own is not important, however, it does produce a good 50 watts rms into 8 ohms. The power output was measured into 4 ohms (78 watts) but this would not be recommended normally for

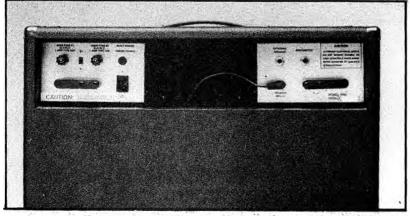
fear of output stage damage. Anyway, overall verdict on this amp — excellent value for money.

Dave Mann

Dave Mann gained an honours degree in Electronic Engineering at Southampton University in 1972. Since then he has been working in Television and Sound Studios with more recent involvement in the design of guitar amplifiers. He is also a member of a regularly gigging band.

RICKENE	BACKER 50
L POWER OUTPUT	56.25 watts rms into 8 ohm 78 watts rms into 4 ohms @1kHz just prior to clipping
. INPUTS - SENSITIVITY	
L.H. Channel	- 1-120mV - 2-260mV
R.H. Chappel	- 1- 97mV - 2-200mV
VAX T/P	
L.H. Channel	1-400mV 2-840mV
R.H. Channel	- I-450m¥
	-2- 1.1V RMS volts for full O/P
DISTORT CONTROL-RANGE	- 8.5d8
TONE CONTROLS-RANGE	
L.H. Channel	Bass@40Hz - 20dB
R.H. Channel	Treble @ 7kHz — 32dB Bass@40Hz — 18.9dB Treble@ — 32dB Middle@300Hz — 12dB
S. STEREO 1/P	- Tip to r.h. channel - Ring to l.h. channel - Sleeve to earth
HUM AND NOISE	
Both yels down	- 78.7dB
Both vols max	-68.3dB
Distort max	-63.9dB





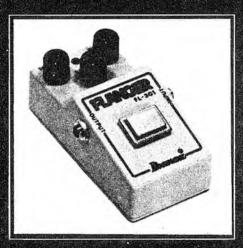
Your Style?

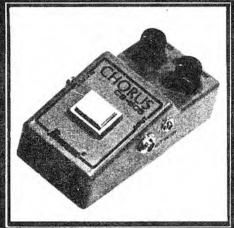






Polish It!







FL301 FLANGER

A breakthrough in circuit designhas produced this magical little box – the Ibanez Mini Flanger, offering a wide range of control and an extremely low signal to noise ratio.

The flanger has speed, width and regeneration controls, silent F.E.T. switching an L.E.D. to indicate circuit status and battery life.

The unit operates on two 9v batteries, and an external D.C. socket is provided for use with power adaptors.

CS505 CHORUS

The Chorus is the latest model in the new generation of banez effects units, and as always sound quality and reliability have been prime considerations in its design.

Speed and width controls give many subtle variations to the depth of your instrument sound, and the twin outputs enable truly amazing stereo effects to be set up.

The chorus is complete with noiseless F.E.T. switching, external D.C. socket and L.E.D. circuit indicator.

TS808 TUBE SCREAMER

Once you've heard the Tube Screamer you'll know why it's already beginning to put other distortion units in the shade.

The overdrive, tone and balance controls give a tremendous range of sound from a warm, sizzling over-drive through crisp sustain to rocks raunchies, scream—tube screaming, in fact!

The unit is housed in a rugged die cast casing that is both functional and durable.

Silent F.E.T. switching and an ED array t indicator are provided.

more information on

effects units

Parameters units



Availible from

JAMES T COPPOCK (LEEDS) LTD Highfield House Royds Lane Leeds LS12 6LJ

Soundcheck

BIAMP 1282 Mixer £590 inc. VAT

For quite a few years now, it has been relatively easy to buy both medium or large mixing desks with comprehensive built-in facilities. But when looking for smaller size consoles we were faced with a rapidly shrinking number of features, only the basic systems being available, but even these were not at a very basic price. This is where BIAMP Systems score heavily with their Model 1282, which is a portable mixing system providing comprehensive and professional facilities, normally to be found on expensive ranges of mixing consoles. BIAMP Systems Inc from Beaverton, Oregon, are quite well known in the industry for their whole range of semi-modular small mixer models, such as the 8802 and eight-channel mixer the 1682 - a 16-channel mixer - or the 6702 - a six-input stereo output system.

All - the 8802, the 1682 and the 1282 desks — use identical channel electronic hardware modules - manufactured in substantial quantities which means that BIAMP are in a good position economically to produce basic console subcomponents, consequently proving their claim " ...to make possible high performance levels comparable to the finest recording studio mixing consoles - at a fraction of the cost".

Good news for the small touring groups searching for small PA mixing consoles or stage sub mixers is the 1282 BIAMP desk, which is slimmer and lighter than the majority of systems incorporating a similar number of input channels. This compact console measures just 27 inches (width) by 5% inches (height) and 16½ inches (depth) weighing in at around 9.5 kilos.

Construction

To begin with, a look at the channel modules. Each module on this console has three bands (low, mid, high) equalisation, monitor, pan, reverb/effects, attenuator (gain), and 54mm channel fader potentiometers. The input channels (similar to the Biamp 8802 and 6702 and 1682) are completely separate until linked on the pan/monitor PSU etc busses. Inter-

channel pan bus enables signals (one to 12) to be routed to the required left/right output stages and monitoring can be controlled by each channel's rotary pot.

For the master section, the features include: left and right main faders, monitor/effects send, reverb level and reverb pan, aux level and aux pan followed by three separate low frequency filter networks provided individually on the left and right output as well as on the monitor.

From the practical point of view, the BIAMP 1282 offers both low and high Z input facilities, wired to XLR Cannons and ¼ inch jacks on all 12 inputs. All in/out coming signals leads are fed into the rear of the desk, so the front and facia sides are positively free from any cables.

With the exception of the previously mentioned 12-channel inputs, the remaining rear panel patching facilities are as follows: left and right main outputs (balanced and unbalanced); monitor output (balanced and unbalanced); effects send; aux input pan (echo return); aux in left and right, followed at the end by stacking inputs for the monitor and effects busses.

A pair of separate lighted VU meters on both outputs should give you a rough idea of the nominal operational levels. However, both meters seem to be very small, and therefore make it quite difficult to read these levels accurately. As you will have noticed earlier, each channel's control fascia has its own reverb/effects pot provided for reverb send level to the large built-in Accutronics/Hammond spring device mounted on the back of the console and linked via a pair of coaxially terminated screened leads. Twelve small transformers provide balanced channel inputs, designed to match low impedance, balanced or unbalanced microphones into a higher impedance circuitry. These transformers are enclosed in a screened case to minimise hum pick up.

The desk comes coloured in black matt, the best side up has a simulated rosewood effect, bordered with black vinyl ribbon. One of the quality features of this console is the elegant control knobs (16mm

diameter) fitted with knurled blackgrips and capped with an aluminium disc marked with a silver line.

To turn to the electronics, we find an identical situation as on the BIAMP 8802 desk where each of the input channel modules (approximately 13 inches long) houses all components for balanced input transformers through to all the channel controls and 100 per cent of the chanel circuitry.

It has recently become fashionable in "op-amp" designed mixing consoles to use transistors as the active elements rather than operational amplifiers as these proved to be too noisy, and thus often lacking in the required bandwidths for professional work sessions. On the other hand high performance and low noise op-amps proved to be a bit too expensive for the popular market. BIAMP solved this dilemma by using a specially designed op-amp the BIAMP NS7841 device (Signetics) - which has improved noise performance.

The 1282 output modules are also identical with those from the 8802 i.e. fitted with the provision for VU meters, driven by individual rectified circuits and controlled by a pair of internal pre-set controls. Both scales of the illuminated meter are calibrated to (-20; 0; +3) VU standard and the meter itself happened to be an ARC GIY 05 of Japanese origin.

A word about the components, which in this case are of professional grade and seem to be reasonably selected for the work load to be faced. The quality of workmanship is of usual BIAMP standard and the unit as a whole inspires confidence.

Conclusion

Indeed, to be fair, after reviewing the BIAMP 8802 console some time ago, which is in fact a smaller version of the 1282, I shall be repeating a few points raised earlier such as:

- Too small a size VU Meter, which unfortunately does not allow for convenient monitoring.
- Lack of any form of headphone monitoring, which often proves to be very useful, if not absolutely necessary
- Absence of any decent

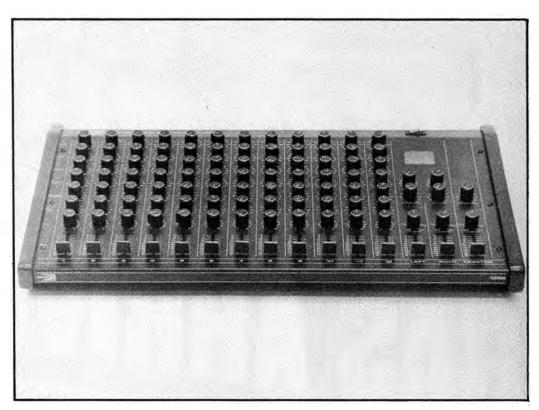
technical literature on the 1282 mixer referring to its operation, setting-up procedure etc.

On the other hand the BIAMP 1282 mixer proved to be extremely versatile, fitted with a number of valuable features (similar to the 8802) such as: transformer balanced inputs; electronically balanced outputs; low frequency filters on L&R outputs and monitor; range of fairly efficient controls; comprehensive range of patching facilities; flexibility on inputs ie XLR Cannons (Lo Z) and Line outputs 1/4 inch jacks (Hi Z).

My bench test agrees with virtually all the manufacturer's specification figures, but then again I did not have that many to go by. The desk is built and finished to a professional standard.

Just a few words to end off with, all components and materials are very good and in conjunction with the superb quality of the workmanship I can recommend the BIAMP 1282 mixing desk for most small PA and semi-permanent installations.

Mark Sawicki



Analyse-Equalise-Eliminate

Formula Sound help you eliminate your sound problems with the S19GA by combining the functions of an analyser and equaliser. This easy to operate unit is approximately half the cost of a conventional analyser and fits into a rack space of only 5¼". The S19GA is a half octave stereo 19 band

graphic equaliser/analyser with dual L.E.D. display. By using half octave filters twice the control of standard octave

devices is achieved.

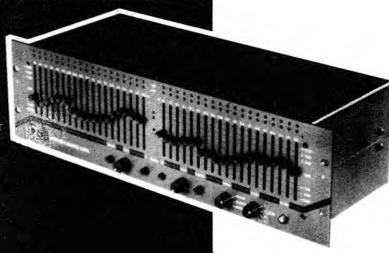
For the Studio the Si9GA enables the engineer to adjust his monitoring equalisation with confidence, knowing that the balance he hears is what's on tape

For the Concert Hall – the S19GA is an invaluable gid to compensate for poor hall acoustics.

Sound reinforcement - switching the S19GA analyser display to visually monitor programme lets you pinpoint and tune out acoustic leedback.

For the serious audiophile – the S19GA offers professional analyser facilities at a realistic price for domestic use.

Full professional specification - Maximum level + 20dBV. Equivalent input noise 90dBV. Total distortion less than .01%.



More information from



3 Waterloo Road, Stockport SK1 3BD. Telephone: 061-480 3781. Telex: 669249.



Mr. Twang has arrived, and buying music gear will never be the same again. Mr. Twang imports directly, in bulk, bringing you massive savings on many exciting new names in international music equipment. Mr. Twang's huge buying power also means big savings on leading names also. Mr. Twang dealers also have credit and part exchange facilities. Look for your nearest Mr. Twang Dealer-He stocks more. For less.

CASH OR CREDIT DEALS ON FENDER, RODGERS, RHODES. YOUR NEAREST DEALER.

YAMAHA SYNTHS PIANOS from £199 HOHNER CLAVINET PIANET DUO reduced

from £710 to £399

DIRECT IMPORT DEAL!! 5 piece drum kits (complete with fittings) only £ 295

Barnsley: Kitchens of Barnsley, 33 Peel Street. Tel: 0226 5867.
Bedford: Mr. Music, Bromham Road, Tel: 0234 50861.
Bedford: M. Crymble Ltd., Dublin Road, Tel: 0232 26818. Bradford: Kitchens of Bradford, 26 North Parade:
Tel: 0274 23577.
Cardiff: Sound Centre, 9 St. John's Square. Tel: 0222 34018.

Hernei Hernestead: Mr. Music, 24 Bridge Street

Huddersfield; Kitchens of Huddersfield, 5-7 Market Avenue.

Kent Unisound, 48 High Street, Chatham. Tel: 0634 44068. Leads: Kitchens of Leads, 26 Queen Victoria Street, Tel: 0534

Liverpool: Hessy's, 62 Stanley Street, Tel: 051-2361 418. London NW8: Unisound, 213 Kilburn High Road.

Newcastle Upon Tyne: Kitchens of Newcastle, Higham House, New Bridge St. Tel: 0632 22965.

Newport: Sound Centre, 107 Commercial Street. Tel 0633 66814.



BULK BUYING POWER!

Speakerchec

The RED Professional Loudspeaker is made in London by a newly formed company based in Chelsea, trading as RED Acoustics Ltd. At present this loudspeaker is the only product manufactured by the company and is intended for practically any professional application - from top quality domestic listening to studio monitoring and from live performance sound to discotheques, It is of remarkably small external dimensions, boasts an incredible performance capability and is of a totally original and unconventional design. It is also very, very expensive.

The system consists of two 21cm drivers, each working in minute separate infinite baffle. enclosures of just 8.5ltrs each individually driven by its own separate 150 watt power amplifer and a pair of high frequency dome radiators driven by a third power amplifier this time rated at 50 watts. Special design attention has been given to obtaining a wide uniform forward dispersion and to this end, the front of the 21cm bass/midrange drivers are fitted with special "tristar" deflectors and the high frequency units are arranged to cross-fire in the horizontal plane.

Each of the 150 watt power amplifiers are fed from separate power supplies so that in the event of a failure of one 21cm driver or one amplifier, the remaining drive unit or amplifier can continue to function. The power feed to the high frequency amplifier is derived from both power supplies in such a way that in the event of either supply failing, it can be powered by the remaining channel.

A further sophistication is the inclusion of an electronic switch which, in the absence of an input signal for about five minutes, will automatically switch off the amplifiers and will restore power the instant a new input signal appears. This function is monitored by the illumination of the RED motif at the top right-hand corner of the speaker grille.

The loudspeakers are designed to be driven from practially any pre-amplifier or mixer and has selectable low or high input sensitivity or balanced line input. In addition to

this, a continuously variable input control is provided and the maker's claim that the unit can be matched to any input signal above 300mV with no upper limit without any possibility of overloading the system. The input is terminated in male and female XLR/3 connectors, a five pin standard DIN socket, a phono socket and a standard ¼ inch 2 pole jack socket, although on one of the sample pair delivered to me, the XLR connectors had been incorrectly wired so that the input was wired to pin 3 instead of pin 2. The mains power input connector is the standard CEE/22 "Europlug" and a shuttered mains output socket is provided to permit the loudspeakers to be cross-linked from a single mains power feed up to the 6A maximum current rating of the CEE/22 connector.

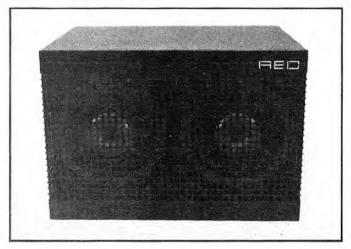
The standard of workmanship and overall quality of manufacture is of a very high order, with the cabinet soundly constructed from high quality plywood, finished in a sandtextured black paint, all exposed metal parts finished by black anodising and all electronic components would seem to be of the highest quality. The rear panel is taken up entirely by extruded aluminium heat-sinks to ensure cool continuous running even at maximum power levels and the printed circuit boards of the amplifiers and other electronics are attached to these on the inside of the cabinet. the various sections of which are interconnected by means of a system of multiway connectors.

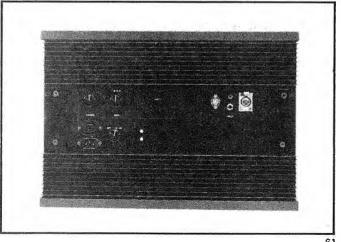
The 21cm drive units are made for RED by Volt Loudspeakers and the 25mm high frequency units are by Audax. Both components would seem to be of very high quality. To me, the complete loudspeaker with its black anodised metallic grille, illuminated RED motif and black finished cabinet has a most professional aspect about it, is small enough to be installed in almost any situation and should be acceptable in almost any decor scheme in studio control room or home. It is evident that a considerable amount of careful thought has been put into the design from theoretical, aesthetic and practical aspects, although due to

the large magnets of the foudspeaker drive units and large toroidal transformers, it is exceptionally heavy and awkward to handle.

Listening to these loudspeakers in an average domestic environment is indeed a pleasure and the LEDs are among only a few loudspeaker systems that will generate a comfortable listening level of 100dB(A) in my front room without audible stress and without inducing listening fatigue on a selection of rock music. Even that elusive bass note on Pink Floyd's "Arnold Lane" is reproduced without difficulty. although with this particular track it is necessary to turn down the overall SPL due to the comparatively high levels of fundamental low frequency information present on the record. 100dB(A) would seem to be about the maximum comfortable level before distortion at low frequencies on most programme material becomes objectionable and tests carried out in RED's demonstration room and in my own lounge produced similar

RED PRO speaker £1.725.00 inc. VAT per pair





Speakercheck

results in this respect.

It will be evident that a loudspeaker of this type cannot be tested in the same way as a conventional loudspeaker, as without monitoring the output power of all three of the integral amplifiers and summing the individual results, it is not possible to relate the acoustical performance to the input power as is the usual practice.

In any event, with a product of this type, amplifier power is irrelevent and it is only the output sound pressure level which can have any relevance as a reference point. Therefore, we have taken our normal sinewave frequency response plot at a sound pressure level of 80dB at 1kHz at one meter and related all our measurements to some appropriate SPL (sound pressure level). In any event, we ran into difficulties straight away, as our frequency response plot in no way confirms the + or - 3dB tolerance published in the manufacturer's specification. No matter where the measuring microphone was positioned, whether this was on the central axis of the entire system, on the top or bottom forward tweeter axis, or offset to the actual tweeter axis, at

one or two meters distance, we always came up with a very large dip in the frequency response between 1kHz and 10kHz.

At best this din is about 10dB down and at worst, as much as 20dB down. The reason for this is undoubtedly phase cancellation due to the way in which the various drivers are spaced over the front of the enclosure and using single frequency testing, these effects can be clearly heard by moving one's head from side to side at about two meters in front of the cabinet. Over the rest of the spectrum, the response is very smooth indeed with particularly good low frequency performance for such a small enclosure.

Nor were we able to agree with the maker's maximum continuous sound pressure level figure of 115dB at one meter for any frequency over the range of 150Hz to 2.5Hz. At this SPL we measured over 30 per cent distortion at 150Hz. dropping to 6 percent at best at 500Hz. Outside this range. third harmonic distortion rose to 130 per cent at 40Hz and 100 percent at 3kHz and this was considered excessive by any standards. From our

measurements the units seemed relatively happy at about 102dB with THD averaging about 2 per cent, but even then, there is still a peak of third harmonic of 60 per cent at 50Hz, This figure did not change to any significant extent at 96dB SPL except that the third harmonic peak at 50Hz had dropped significantly to 10 percent.

The maker's statement regarding the polar response also proved to be at variance with our results, as we found considerable lobing of the forward pattern at 1kHz and 2kHz in the horizontal plane and considerable irregularity in

the vertical plane at 4kHz, 8kHz and 16kHz due to phase cancellation effects. The effect of the cross-fired high frequency units is plain to see on the horizontal polars, and the dispersion is broadened out to over 240° at 4kHz. Altogether. these are a fairly predictable set of polars for the transducer arrangement employed and although not the most uniform, they will provide good dispersion in a normal listening environment where rnom reflections and reverberation will fill the "holes" and mask over the irregularities.

We have made no effort

RED Professional Loudspeaker

Recommended retail price: Dimensions:

Weight:

Drive unit compliment:

Crossover Cabinet system: Electronic section: £1,725.00 per pair including VAT 480mm (19") wide x 345mm (13%") high x 335mm (13%") deep

32Kg (70lb)

2 x 210mm (8") bass/mld cone

2 x 25mm (1") high frequency domes 2-way active at 2.5KHz

Infinite baffle

2 x 150 watt power amplifiers 1 x 50 watt power amplifier

1 x active crossover/pre-amplifier

1 x electronic switch 2 x power supplies

Performance Specification and Test Results (complete integrated systemi

Parameter

Manufacturers Bating

40Hz - 18KH2 + 3dB

Frequency Response

graph given Max. com, SPL: 115dB for single sound

150Hz - 2.5KHz @ 1m in full-space (anechoic)

THD:

1 per cent for single sound above 100Hz @ 100dB SPL @ 1m in half space

Input impedance: Input

Greater than 68K ohm

300mV min. sensitivity: continuously variable

Power requirements: Polar response: 240v 50/60Hz AC @ 400w

'Beamless, nondirectional front response 120°H x 90°V uniformly covered front space

Rest Result

40Hz - 20KHz @ BOOB SPL - see text 102dB for 2 per cent THD above 100Hz @ 1m anechoic — see text

2 per cent 96dB SPL above 100Hz @ 1m anechoic - see text

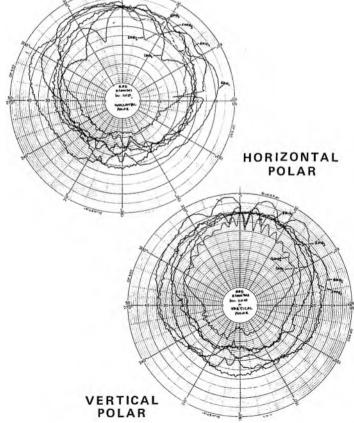
Parameter not measured 17mV for 80dB SPL @ tm. 100mV for 96dB SPL @ 1m. 1v for 115dB SPL @ 1m see note Confirmed @ 115dB

SPL @ 1m 98°H x 180°V @ 500Hz 50°H x 82°V @ 1KHz 24°H x 68°V @ 4KHz

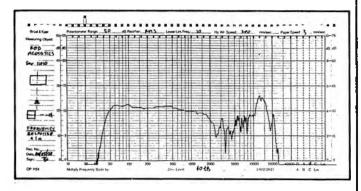
210°H x 186°V @ 164°H x 116°V @ 8KHz

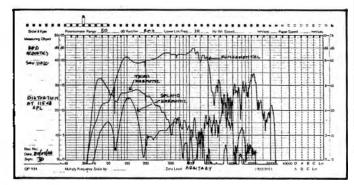
86°H x 34°V @ 16KHz (included angle @ -6dB)

Note, input sensitivity measured with input selector set for 'Hi' sensitivity and variable sensitivity control set at full clockwise rotation.



Trade News





whatsoever to conduct any tests on the electronic sections. of this loudspeaker. We have treated the amplifiers etc as part of the "loudspeaker" and intrinsic to its overall being. However, for information purposes we have noted the input signal requirement for specific sound pressure level outputs and these are shown in our results table. We were also able to confirm the mains power consumption figure as published.

There is one other factor which is not in fact specified and which we did not measure, but which in my opinion is unacceptable. This is residual noise present in the loudspeaker from the instant of switch-on whether an input source is connected or not. While the level is too low to be noticeable when programme is being played, it is considerably higher than I would expect and is certainly higher than say, my own hi-fi system at

The RED Professional Loudspeaker is certainly a fascinating animal. To listen to, to look at aesthetically, or to consider from an engineering point of view, it seems very good indeed, and the concept of a fully self contained, unblowupable, full range, high self-amplified power. loudspeaker system in a cabinet so small as this, which

can be driven from practically any form of pre-amplifier or mixer certainly makes a lot of sense

However, it has been seen that under test we were not able to agree to many of the manufacturer's published specifications and that the effects of phase cancellation seem to be having a detrimental effect upon both frequency and polar response characteristics under laboratory conditions. Also of course, we cannot forget the price, and although I rather liked listening to these loudspeakers and very much approve of the cosmetics and concept I would have to be very short of space indeed before I would pay £1725 for the REDs when better overall performance can be obtained using more conventional amplifiers and loudspeakers.

Ken Dibble

Ken Dibble MIOA is a musician with a background in engineering and manufacturing sound equipment. He now works as an electro-acoustic consultant,

New Percussion Services

This month sees the opening of a new percussion shop in south London, Percussion Services of 289/299 Borough High St, London SE1 is the kind of store that most drummers dream about.

Apart from an incredible range of drum kits and accessories, the shop specialises in imported percussion from as far afield as Brazil, USA, Italy and Germany and they carry virtually any item you care to mention.

The owner of the shop, Roy Webster, is himself a famous percussionist, and previously had his shop near London's Kings Cross station. At the new premises there will be extensive workshop facilities, and there are plans for a special rehearsal studio.

It would be wrong to think that Percussion Services cater merely for the professional market, they also run tuition courses and both deal in new and secondhand equipment. Shop manager Alan Crozier is a drummer, as are all the staff, and for the opening of the shop you can expect to see the likes of Bill Bruford and Simon Phillips wandering around the place.

New Lighting Controllers from Eurotronic

Eurotronic, the sound and lighting equipment specialists of Harrow in Middlesex, have two new lighting control units on the market. The first is the Quadriphaser which is a four channel multiple effected unit with a power handling of 2Kw per channel of resistive or inductive load.

Each channel is provided with a slider dimmer level control and separate manual flash control with output indicator, Selection controls are provided for Audio, Chase, Flow, Fade and Direction Reverse by lockin, lock-out buttons. The rack mounting unit comes complete with satin finish aluminium handles in three unit height,

The second unit is the Deca Chaser which is a highly sophisticated multiple effect light controller. It is a complete matrix system incorporated on a single master PCB, and is capable of an output of 1kw

per channel. The unit is designed to control 10 channels separately and combined with illuminated colour coded control key switches.



Seville David pointed At Chapppell

David Seville has been appointed the Retail Director of Chappell of Bond Street:

For the last seven years he was with the Norlin organisation, latterly in the position of Marketing (Europe).

Mr Seville will be responsible for the retail sales or organs. pianos, sheet music, musical instruments and he will oversee the operation of the theatre ticket agency at Bond Street. He appointment takes effect from May of this year.

Since we published our last roundup of 18 inch speakers it has come to our attention that Peavey have an 18 inch unit which we omitted to test. The Peavey 1801 is part of the Black Widow series and is specially designed for bass guitar but is also applicable to keyboards and synthesizers.

Made with the usual high quality components as the rest of the Black Widow range, the 1801 has a considerable tonal range. Watch out for a full test on the unit when we do another Speakercheck on 18 inch bass drivers, but to give you some diea of the unit's performance we include here some of the manufacturer's specifications

1

Peavey Black Widow 180			
Parameter	Manufacturer's		
	Rating		
Nominal	Available in 4		
impedance	and 8 ohms		
Power capacity			
Continuous	150 watts		
Program	300 watts		
Sensitivity	99dB		
Voice Coil	10.16cm		
Diameter	(4 inches)		
Weight	7,2kg (16 lb)		
Depth	14.3cm		
	(5% inches)		

PRUBULL 80 Exhibition

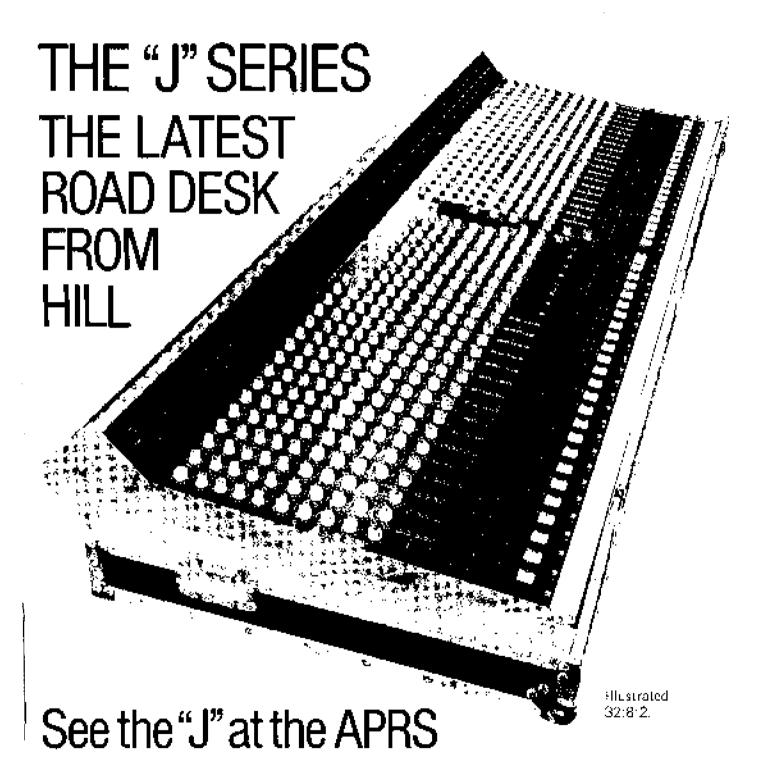
The Exhibition covering all aspects of Audio Equipment and Services



Prosound '80 will provide a meeting place for manufacturers and visitors to exchange ideas and information on the many aspects of the audio industry. For further details on the Exhibition and Conference please use the coupon.

PROSOUND '80	Renvoyez s'il vous p	ion on the following: lait les particularités suivante folgenden Einzelheiten:	s:	
Batiste Exhibitions & Promotions, Pembroke House, Campsbourne Road, Hornsey, London N8 (01-340-3291)	□ Exhibition Stand Space □ Emplacement pour stand de l'exposition □ Ausstellungsstandfläche Name, Nom, Name Company, Société, C Address, Adresse, A	☐ Conference ☐ Organised Visits		
	Telephone Téléphone Telephon Please print clearly – Écr	Date Date Datum ivez en lettres moulées s'il vous plaî	Signature Signature Unterkunft t – Bitte schreiben sie im 1	Oruckschrift

THE ULTIMATE IN SOUND EQUIPMENT





BUY HIRE AND LEASE FROM MALCOLM HILL ASSOCIATES

Sales Office: Ron Blechner/David Poxon, 6 Lillie Yard, 19 Lillie Road, London SW6. Telephone: 01 381 3446. Telex: 263904.

Head Office: Hollingbourne House, Hollingbourne, Kent.

10 inch Drivers Continued

Having set our stall for testing 10-inch loudspeakers and published reviews of six units in last month's issue, we now complete our 10-inch feature with six more reviews and a summary of the results obtained. This month we have two of the HH Acoustics 10-inch units, the Richard Allan HD10 and Atlas 10, the JBL E110 and the Fane Crescendo 10/60E.

With the sole exception of the Richard Allan HD10, which has been appearing in the catalogue for more years than I can remember, all the other units are brand new and have only appeared in the market place over the last two or three months. We should also have included two brand new units from RCF, but these did not arrive from Italy in time for our tests and in fact, the JBL E110 only just made it having been airfreighted over from the States for the purpose.

The manufacturers have not even published the specification sheets and we had to take the specs from individually typewritten sheets! The six individual test reports largely speak for themselves and do not require any further comment here, and therefore, I shall move on to a summary comparison between the 12 units tested.

It will have been noticed that we have lumped together both "standard" and "professional" units in each feature and so the first excercise must be to separate the two groups. Further, it has become apparent from our results that we have two distinct types of response characteristic, where one type of loudspeaker is giving a smoother, more uniform frequency response - generally at lower levels of sensitivity, while the other type is giving a response that appears to have been tailored towards high mid-band energy levels such as might be required for bright, sharp guitar sounds or for use as mid-range drivers in threeway PA systems etc. This then gives us four groups of product which, due to their different market applications, must be compared separately.

For convenience, we will refer to the former type with the better low frequency performance and smoother response as extended range units, and the latter type, with the high mid-band energy levels as general purpose units, as the characteristics of these are more akin to those of most general purpose 12-inch instrument loudspeakers as fitted to most standard 4 × 12 cabinets and combos.

Ken Dibble

Group 1 — Standard General Purpose

Model	Sens (dB)	SPL (dB(A)	Power (Watts)	Price (£)	Price/dB (£/dB)
Celestion G10/60	99	113	60	18	0.18
HH Acoustics 10G	95	110	50	23	0.24

I really think that selection between these two must depend upon the sound that you want, as the Celestion will give more brightness, while the HH will give more guts. The Celestion is not only less expensive, but also 4dB more sensitive, but we did find problems with our sample unit and you must study the individual reviews and response curves before making a choice.

Group 2 — Standard Extended Range

Model	Sens (dB)	SPL (dB)(A)	Power (Watts)	Price (£)	Price/dB (£/dB)
Celestion G10/50	95	110	50	14,50	0.15
HH Acoustics 10PA	94	110	50	24	0.26
Richard Allan HD10	92	106	50	25	0.27

Again, the choice here is marginal. The Celestion and HH units both have presence peaks over the upper mid band, while the Richard Allan unit does not. The Richard Allan, while offering the lowest sensitivity and the highest cost

per decibel, has the most uniform frequency response and the highest relative low frequency energy levels. I really think that the Gelestion must come out favourite with best sensitivity at an incredibly low price.

Group 3 — Professional General Purpose					
Model	Sens (dB)	SPL (dB)(A)	Power (Watts)	Price (£)	Price/dB (£/dB)
Richard Allan Atlas 10	96	114	100	52	0.54
Fane Crescendo 10/60E	100	116	60	32	32
ATC PA75-234 Std (9 inc	ch) 98	113	75	92	0.93
JBL E110	98	113	75	112	1.14
Mega 2538M	94	108	60	49	0.52

The JBL and ATC units have identical figures and very similar response curves, except that the ATC has a pronounced dip in its response curve whereas the JBL is nicely uniform, and I think that if I were contemplating spending that sort of money on a 10-inch loudspeaker, I would go for the JBL. However, the Fane has a very similar response, but of-

fers higher sensitivity at a considerably lower price, while Richard Allan's 100 watt confirmed power rating is to some extent counteracted by the lower sensitivity. Also, it is £20 more expensive than the Fane. The Mega unit is primarily intended as a mid-range driver, but is particularly low on sensitivity for a professional category unit.

Group 4 — Professional Extended Range					
Model	Sens (dB)	SPL	Power (Watts)	Price (£)	Price/dB (£/dB)
Mega 2538B	91	106	60	49	0.53
ATC PA75-234 Std-LS (9 inch)	93	109	75	92	0.98

Of these two units, the Mega has by far the smoother frequency response and better low frequency performance, but is also the least sensitive unit tested in either category, and quite honestly, I cannot see what extra performance is available from either of these but the Richard Allan HD10 cannot match if not better at £25 or 27p per decibel apart from its lower power rating.

By way of an overall comment, I think that as far as 10-inch units are concerned, and on the basis of our results, I would give some very serious consideration before I spent the sort of money being asked for the JBL and ATC units when units from Celestion, HH Acoustics, Fane and Richard Allan are so close, and in some instances, apparently better, at a fraction of the price.

Of course, we cannot vouch for long term reliability nor for

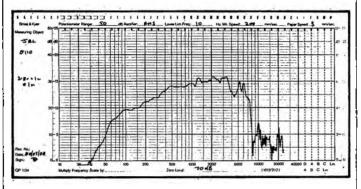
any improvement in performance that might result if the more expensive units were housed in properly tuned enclosures, and of course, the JBL and ATC units are superbly made and presented, but once the back is screwed on the cabinet, you have only the sound and the hole in your pocket by which to judge the end result!

Besides cone loudspeakers, there has been a lot of activity recently on the compression driver front, with new units corning onto the market from JBL, Electro-Voice, Emilar, RCF, Mega, Renkus Heinz, Gohlion, Peavey — and word has it that ATC have got something up their sleeves as well. So, for the next couple of months we shall be taking a third look at compression drivers to see what has been happening over the last 12 months.

JBL E110 Ser. No. 11518 (USA) Price around £112

Parameter	Manufacturers' Rating	Test Result
Frequency Response	60Hz-8kHz	Useful to 8kHz (-12dB)
Sensitivity	98dB@1w@1m av, 500Hz-2,5kHz	98dB@1w@1m av. 400Hz-6kHz
SPL	Not stated	113dB(A)@75w@1m pink noise
Power	75w cont. sine wave 150w cont. programme	Confirmed@75w RMS sine wave
THD	Not stated	6 per cent@75w RMS sine wave
Impedance	8 ohm*	6.5-20 ohm
Resonance	Not stated	75Hz in std. 50itr enclosure

^{*} Also available in 16 ohm impedance



Due to the fact that JBL's UK launch of the new 'E' series loudspeakers just missed our testing schedules for 12-, 15-and 18-inch units, this is the first time that we have been able to include one of these new ceramic magnet drivers. The four spoked cast aluminium chassis is of particularly rugged construction, employing generous material thickness as well as additional bracing to ensure absolute rigidity.

When testing their "Strongbox" column system for strength, JBL found that while the cabinet stood up to being dropped six feet onto a concrete floor, the K110 chassis did not, and so the E110 has an uprated and very nicely made chassis! It retains the familiar cropped, machined aluminium front rim of its predecessor and is still finished in black stove enamel.

The ceramic magnet is fairly large and is fitted with a black crackle finish rear cover and a

black rubber tyre encloses the ceramic ring. The heavy-duty spring-loaded terminals are retained as is the system of venting through the rear of the magnet. A particularly lightweight, slightly curved cone is carried by a doped concertina type linen suspension system of fairly high compliance and an alloy centre dome is fitted over the 76 mm voice coil.

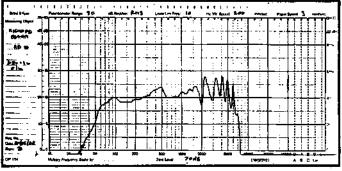
Performancewise, no problems at all, with the maker's specifications confirmed to the letter. Sensitivity is high and the sine wave power rating is confirmed at six per cent THD. Although the frequency response is exceptionally wide, note that in common with other units tested, the E110 falls off rapidly at the lower frequencies and is 10dB down at 80Hz in our enclosure.

This is certainly a very nice loudspeaker indeed, but I would not like to pay for fitting out a 4×10 cabinet with E110's on this side of the Atlantic!

RICHARD ALLAN HD10 (UK) Price around £25 incl. VAT

Parameter	Manufacturers' Rating	Test Result
Frequency Response	Graph given	Useful to 7kHz (- 12dB)
Sensitivity	94dB@1w@1m@1kHz	92dB@1w@1m av. 300Hz-6kHz
SPL	Not stated	105dB@50w@1m pink noise
Power	50w RMS	Confirmed@50w RMS sine wave
THD	Not stated	3 per cent@50w RMS sine wave
Impedance	8 ohm*	8.5-30 ahm
Resonance	45Hz free air	64Hz in std. 50ltr enclosure

^{*}Also available in 15 ohm impedance (HD10 only)

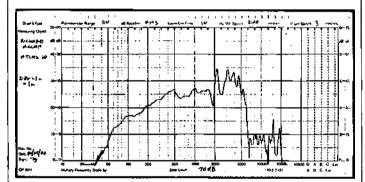




Speakercheck

RICHARD ALLAN Atlas 10 (UK) Price around £52 incl. VAT

Parameter	Manufacturers' Rating	Test Result
Frequency Response	80Hz-8kHz@ – 10dB	Useful to 6kHz
Sensitivity	106dB@1w@1m @1.5kHz	96dB@1w@1m av. 400Hz-6kHz
SPL	118dB@100w@1m pink noise	114dB(A)@100w@1m pink noise
Power	100w RMS	Confirmed@100w RMS sine wave
THD	Less than 5 per cent @100w above 100Hz	4 per cent@100w RMS sine wave
Impedance	8 ohm	8.5-20 ohm
Resonance	58Hz ± 2Hz free air	85Hz in std. 50tr enclosure



These two loudspeakers are built on identical cast alloy chassis, which are of a particularly open four-spoked design. The front rim has the usual Richard Allan identifying features of protruding mounting lugs and a bright red felt gasket, and to facilitate front loading, a strip of adhesive gasket material is included in the packing.

While the chassis is of more than adequate strength to carry the comparatively modest magnet fitted to the HD10, I am not at all happy when it comes to support the massive magnetic assembly used for the Atlas 10. The chassis thickness is not overgenerous and there are no bracing struts or re-enforcing ribs at all, and I would not expect the four spokes to remain intact after a cabinet had been dropped a couple of times.

Massive is not an overstatement for this magnet — it is 180 mm (7") in diameter, 40 mm (1.6") deep and weighs about 8 kg (17 lb). The cones are surprisingly heavy and of a curvilinear profile, and both have treated cambric "concertina" type front suspensions. The HD10 has a 38 mm voice coil and is fitted with a chrom-

ed plastic centre dome while the Atlas 10 has a 51 mm coil and an unpretentious linen dust cover. Both units are very nicely made to the usual high standard I have come to expect from Richard Allan, but 1 do wish that they would think of an alternative method of termination. The large plastic laboratory type screw terminals they have used for years really are cumbersome and are not at all suited to their purpose.

The Atlas 10 is the only unit submitted for testing with a full 100 watt RMS power rating and it complied with this at just 4 per cent distortion and no signs of stress. While the other parameters do not agree with the manufacturer's figures, they nevertheless represent a creditable set of figures, with adequate sensitivity, and a wide frequency usefully response characteristic that is not unlike that of the Fane Crescendo 10/60E and will probably have similar operating characteristics.

The Atlas 10 is at present being fitted to the Turbosound 2×10 midrange unit, so I presume that Turbosound are crossing over to take advantage of the "plateau" of flattish

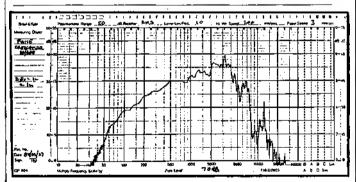
response between 400Hz and 1.6kHz which can be seen on the response curve — a feature not shared by the Fane unit. The HD10 also fully confirmed the maker's power rating, this time at just 3 per cent distortion at 50 watts, and although the sensitivity at 92dB is on the low side, this unit has one of the smoothest frequency response characteristics of any unit tested, and its output energy level is only 5dB below the mean at 70Hz.

This unit is obviously going to find application as a low/mid frequency unit, but care will be necessary in designing the enclosure as it is quite possible to "bottom" the voice coil on the back plate of the magnet under heavy transients of low frequency programme material and the cabinet must dampen excessive cone travel by careful tuning.

These are both nicely made units with quite different performance characteristics. Both performed very well indeed, but the HD10 could usefully use a little more sensitivity if this could be achieved without sacrificing its superb response characteristics. The Atlas 10 is in urgent need of a much more substantial chassis before I would want to throw it about on the road for very long.

FANE Crescendo 10/60E Price around £32.03 incl. VAT

Parameter	Manufacturers' Rating	Test Result
Frequency Response	80Hz-7.5kHz	Useful to 8kHz (- 12dB)
Sensitivity	103dB@1w@1m	100dB@1w@1m av. 500Hz-5kHz
SPL	Not stated	116dB(A)@60w@1m pink noise
Power	60w RMS	Confirmed@60w RMS sine wave
THD	Not stated	6 per cent@60w RMS sine wave
Impedance	8 ohm	7-15 ohm
Resonance	90Hz free air	110Hz in std. 50ltr enclosure



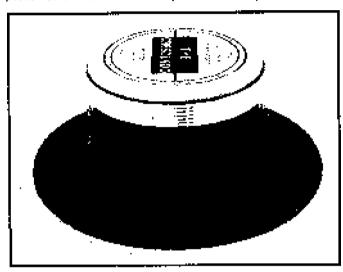
This latest addition to the Crescendo 'E' series loudspeakers is built on an adequately ribbed and braced heavy gauge pressed steel chassis and is fitted with a very ceramic magnet assembly. Gaskets are fitted for front or rear mounting and a business-like finish is provided by a sand textured black stove enamel treatment to the chassis and a chrome plated rear cover to the magnet. Termination is by a pair of colour coded plastic spring-retaining terminals. A straight, very lightweight, ribbed cone is carried by a stiff, treated paper front suspension and is fitted with a vented alloy centre dome. It is altogether a very nicely made and presented loudspeaker and has a look of substance about it.

As might be expected with a free air resonance of 90Hz, the 10/60E does not produce a great deal of low frequency energy, and its frequency response characteristic, with its present peak, indicates to me an application for lead guitar and the like rather than for PA or other wide band uses. It is easily the most sen-

sitive 10-inch unit we tested and has a good sharp response right into the treble regions and should produce a very bright, brittle guitar sound with plenty of bite at high volume levels

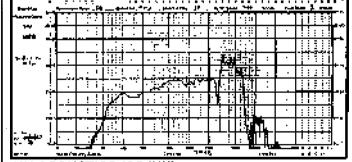
The 60 watt power rating is confirmed at 6 per cent THD — which is mainly due to odd peaks rather than to a con-

tinuous presence of harmonics. The unit seemed particularly happy in our enclosure and THD below 150Hz — usually the problem area, is unusually low. This is without doubt a very useful unit, very well made and presented, and at an incredibly low price for this level of performance and standard of presentation.



HH ACOUSTICS 10PA (UK) Price around £24 incl. VAT

Parameter	Manufacturers' Ratings Test Result		
Frequency Response	50Hz-8kHz	Useful to 7kHz (- 12dB)	
Sensitivity	94db@1w@1m	94dB@1w@1m av, 400Hz-7kHz	
\$PL	Not stated	110dB(A)@50w@1m pink noise	
Power	50w unqualified	Confirmed@50w RMS sine wave	
THD	Not stated	4 per cent@50w RMS sine wave	
Impédance	₿ ohm*	7.5-22.5 ohm	
Respirance - App position in 4 and 6 6% Ballie hole demand for from		80Hz (A etd 50Hr endlosure	



HH ACOUSTICS 10G (UK)
Price around £23 incl. VAT

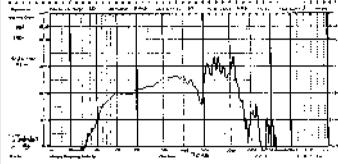
Parameter I	Manufacturers'	Rating	Test Result
-------------	----------------	--------	-------------

Frequency Response 50Hz-6kHz

Sensitivity 95dB@1w@1m

Useful to 8kHz (- 12dB) 95dB@1w@1m av. 400Hz-6kHz

SPL	Not stated	110dB(A)@50w@1m pink noise
Power	50w unqualified	See text
THD	Not stated	Generally 6 per cent
	•	but rising to 100 per cent@7Hz
Impedance	8 ohm*	7.5-20.5 ohm
Resonance	80Hz free air	85Hz in std.
		50ltr. enclosure



These brand new loudspeaker units were developed specifically for use in the new HH Electronics Performer range of amplifiers and loudspeaker cabinets and are now available as separate components. The fact that they were intended for incorporation into a manufactured product rather than specifically as a component loudspeaker for over-the-counter resale is somewhat confirmed by the very utilitarian finish and by the very basic, pressed steel chassis, but as large magnets are not used, the strength and rigidity is adequate for the purpose.

Soft foam plastic gaskets are fitted for front or rear cabinet loading and termination is by a pair of solder tags on a paxoline panel. Both models have a fairly lightweight, ribbed cone, but the 10G has a doped paper surround and is fitted with a silver sprayed linen dust cover while the 10PA has a linen concertina type of front suspension and an alloy centre dome. The baffle hole required for front loading is particularly small for a nominal 10-inch chassis, and is in fact only 3 mm larger than that required for the ATC nine-inch chassis,

From a performance aspect, the 10PA presented no problems at all, with good sensitivity for a general purpose 10-inch unit, a usefully smooth frequency response and low distortion at full rated power — all in exact agreement with the manufacturer's published specifications in fact and quite suited to its intended applica-

tion. Generally, the same can be said of the 10G with the exception of the presence of an alarmingly high level of third harmonic distortion below about 150Hz which reaches 100 per cent at 70Hz and 130 per cent at 50Hz!

Above 150Hz, the THD is generally lower with an average value of about 6 per cent, but even this includes an odd peak of 10 per cent which coincides with the dip in frequency response shown on the published curve at just below 2kHz. This problem could either be due to our sample being faulty in some areas although in all other respects it seems to be fine, or to the unit not being happy in our test enclosure, but even this would not normally produce the effect shown here, Another peculiarity is that our in-cabinet resonance is only 5Hz higher than the published free air figure. There is without doubt something odd about this particular unit, but I would not want to go any further without making further tests.

Although the presentation is in basic OEM form, these units are nicely made and generally have performance characteristics that are in exact agreement with the maker's figures and well suited to the intended application. There is however the question mark hanging over the 10G as to whether the high levels of third harmonic distortion are inherent due to a design shortcoming or to a problem with our specific sample, and this we cannot answer at this stage.

COUNT ELECTRONIC ORGANS



SC110P £1092.50 inc VAT

Godwin portable organs feature the harmonic drawbar system with key click giving the everpopular authentic tone-wheel sound. There is a piano section, percussion, an amazing string concert section, brass, reverb, vibrato, stereo outputs plus many more exciting features. Write or phone for full details and colour brochures of the Godwin Professional Range.



Spacemaster SM100 £552 inc VAT





WEMBLEY COMMERCIAL CENTRE

UNIT 3-8 EAST LANE WEMBLEY, MIDDLESEX. TEL: 01-908 2323/4



We think you'll be surprised by the specification of our SA30 Electronic Crossover. The 3 way design uses industry standard 18 dB per octave Butterworth filters, is switchable to 2 way working and generally outperforms even its most expensive

competitors.

With four selectable turnover frequencies citieach crossover point, the SA30 is

compatable with almost any driver configuration.

We've provided mute switches plus delayed turn-on for all outputs, and included a unique 30 dB per octave subsonic filter to eliminate bass-driver imodulation.

We believe you'll find the price equally surprising.



Please send information on Statik Acoustics, and the name of my nearest retailer. To: Statik Acoustics (Dept. 2), Coppice Trading Estate, Kidderminster, Words. Tel: (0562) 741515, Telex: 339821,

IM/30

Address

Guitar Workshop = Tools of the Trade

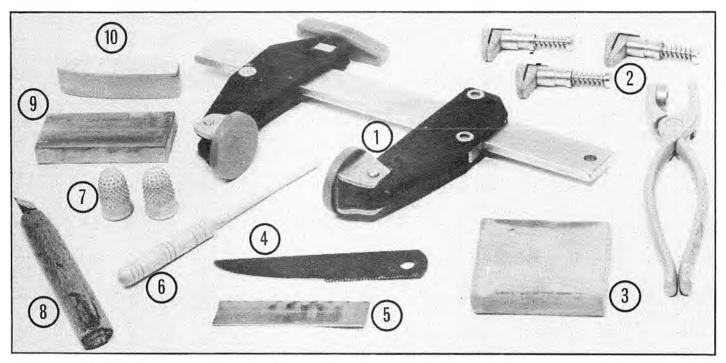


Diagram of Item 4. Profile of a Screping tool.

Diagram of Item 10. Profile of a little sanding block.

Last month I said that the next workshop would be completely different for a change. True to my word, this month's contribution is completely different: there is no 'Workshop'! This is because I am making a carved-top mandoline at the moment and I don't yet have pictures of all the stages of construction. More of this later on in the year. Also, this month's Small Things is all about tools and gadgets for use in a maker's or repairman's workshop, so the two headings really overlap.

Some of these tools are home made and some are not available in England, but instrument makers are a determined lot and that is not going to stop them.

Item one is a Jet Clamp. It can apply great pressure without buckling your fingers in the process. Also the sliding jaws can be fitted to any length of "bright steel flat" to make special clamps for pushing apart or squeezing together. I have recently bought 10 of them, and although they are expensive, I think they are worth it. Have you looked at the price of a good six-inch G-clamp recently? Jet Clamps, TMT Design Ltd, Warwick.

Item two is a handful of Genasco spring clamps and applicator tool. (Short jaw/gold spring). One of these is worth five clothes-pegs in holding power; they are ideal for gluing kerfed linings onto guitar sides. Again, they are not cheap, but I find them really good and easy to use when you have your hands full of sticky pieces of wood. Genasco, 1 to 7 Forest Lane, Stratford, London E15, (Opposite Maryland Station.)

Item three is a piece of hard piano felt about half an inch thick. This makes a sandpaper backing block which can be bent to suit the shape of the work. Mine came from Fletcher and Newman, who are now at 134 New North Road, London, N1.

Items four and five are scraping tools made from thick industrial machine hacksaw blade. The shorter one has smoothed sides and sharp ends; one straight and one quality instrument-maker's

slightly concave, with about a three-inch or 75 mm radius. These edges and the long curved edge of number four are burnished and burred over like a standard cabinet scraper. You can't make much of a burr, but it is enough.

Item six is a ceramic stick knife sharpener which I bought in a tourist shop in Atlanta, In the USA they are sometimes called "moon sticks". Some of the larger and fancier ones will break. This one is cheaper and toughter. I paid about five dollars.

It is really a superfine, superhard sharpening stone, ideal for the inside of gouges, for curved knives and for hurnishing and burring items four and five. It is possible that National Camera may be able to help with the supply of these. See below.

Items seven ordinary office rubber fingertips, which is how I manage to work on guitars without chipping guitar-playing fingernails.

Item eight is the most useful tool I possess. A top knife in a wooden handle (try Stentor Music), the really good ones have gold paint on the blades.

Item nine is for sharpening item eight. This is a pale coloured sharpening block, probably a synthetic version of a "Belgian" stone. It is stamped with the name "Lapporte" or something similar. It is used with water, not oil. Mine was bought several years ago from Rodriguez, in Rokin in the centre of Amsterdam, It was not expensive, and with a good knife gives particularly keen edges without any trouble.

Item 10 is a little sanding block which I have found very useful, It is about 20mm wide and the profile is shown in the (full size) diagram.

Item 11 is what I have come to consider as the basic source book for hard to find precision hand tools, the catalogue of National Camera Inc., 2000 West Union Avenue, Englewood, Colorado 80110 USA. That's all for this month.

Stephen Delft

PROFESSIONAL



<19" ~ ACTIVE ~ 120db>

RED PROFESSIONAL is a 2-way selfpowered loudspeaker system incorporating four drive units and a modular electronic assembly, housed in a 19in cabinet. The unit is mains powered with active electronic overload-proof input signal processing and filtering circuits, two independent 150W power supplies, and separate output amplifiers (two 100W for 1f units and one 50W for the hf units) directly driving two indepedently baffled 8in 1f drivers and two specially positioned 1in hf radiators. Typical frequency response is 40-18.000Hz +3dB (in-situ 1/3 pink noise front sound-pulse measured) and the maximum undistorted peak programme level is 120dBSPL/1m (in-situ measured). Input facilities include sockets for all internationally used audio plugs and adjustable sensitivity for input signal range 300mV-30V from balanced or unbalanced sources.

Size of unit is 345x480x335mm (hwd). Overall volume 32Ltr. Weight 32kg.



RED ACOUSTICS LTD CHELSEA WHARP

In Brief

One of the many new additions to the range of small bass combos is this Ohm Graphic Bass. The combo is based around a 60 watt transistorised amplifier driving into a single 15 inch loudspeaker in a ported enclosure. The dimensions are modest, 20.5 x 11.5 x 23, bit it is quite heavy, being constructed from 34 inch chipboard. The combo looks quite attractive with a rough black vinyl finish and rubbing strips round both sides. The front mounted speaker is protected by an open mesh black plastic grille.

The electronics are mounted directly onto an aluminium extrusion which forms both the front panel and heat sink for the power amp. It does mean that under hard use the front panel warms up.

The controls on the amp comprise of pre-amp gain, master gain and a five-way graphic equaliser (100Hz, 300Hz, 1kHz, 3kHz, 10kHz) with an extra contour switch

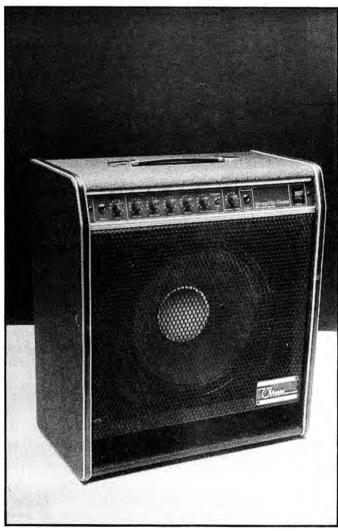
for preset equalisation. Additionally a pre-amp out jack is provided on the front panel.

With an output power of 66 watts rms into 4 ohms this amp sounds good. The range of control on the graphic is excellent with between 20-40dB variation on each control. In particular I liked the contour switch which when activated superimposes a preset EQ onto the signal (peaks at about 6kHz).

With an input sensitivity of 28mV and a maximum input level of 1.5 volts. This amp will handle any guitar without any problems.

The combo is very loud when pushed very hard but still maintains an excellent sound right up to clipping, presumably through good design of the bass port. In short I think that this must be one of the nicest bass amps around and I will be very interested to see what else Ohm have up their sleeves.

Dave Mann



All night sessions. A Bishop confesses.

Johnny Guitar, whose face and name-sake you see over there to the right, is the guy on lead with the Bishops.

Behind him, if you look closely, you'll see the three friendly, familiar letters that spell out Vox.

(Vox, having paid for this advertisement, quite like to see their name mentioned. This is perfectly understandable. If you were Vox and you were paying, you would, too.)

Anyway, the Bishops are just back from seven weeks in sun-soaked Australia so we kicked off by asking about that and then drifted around to various other topics.

(Like Vox amps.) We're the italics by the way.

...Australia was great...there's a whole scene going on down there that nobody knows about...most people think Australia is just AC/DC and leave it at that ...we had a great time ...it got a bit dodgy towards the end...the crew quit on us and we got this other guy in who managed to blow up half our equipment...compared with Britain it's all very different...

How did you find recording when you were starting?
... a studio, any studio is fine as long as you have an engineer who's got a bit of sympatico... you want an engineer who listens... there's a guy called Alan Winstanley down at TW who's really good for that... you all feel as tho' you're working towards the same end... I hate being rushed in a studio... you know, all that looking at the door and thinking we've gotta be out of here in another three hours and we haven't even got the rhythm track down right...

Do you use many toys?

...you mean foot pedals and such?...no, that stuff isn't really part of our sound...! think the most important thing is to get the sound you're after and just play...! always record with an AC30...!'ve got an old white one that's really settled down now...a new AC30 needs a couple of months to break in and after that it's fine...! suppose in all i've had about six or seven Vox's — one got nicked in Spain...the others have all gone to good homes...

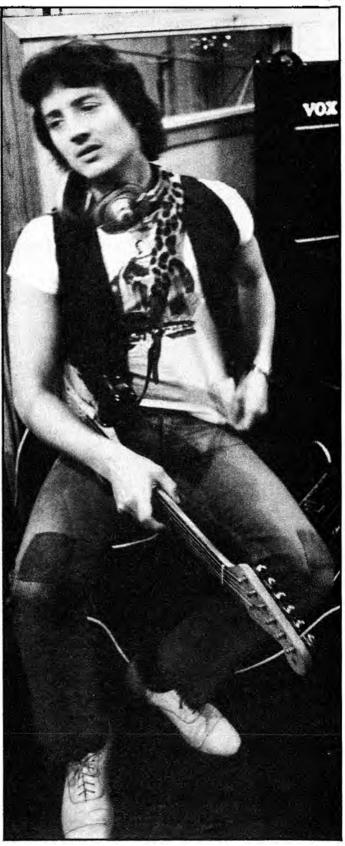
What was the worst experience you ever had in a recording studio?

...ah, a few years ago we had a bash at this direct to disc bit...the theory of it's fine...you know, no tape stage so you can get all the transients and a really open sound...didn't work out like that tho'...the sound they were getting in the cutting room was totally different to the sound coming off the monitors...and the cutting room was four floors up and there wasn't an intercom...nightmares, nightmares...the best way to record tho' is when you're not rushed...it's funny but if you're not panicking you get everything down really fast...all you need to get a decent track together is enough time and an engineer who's interested enough to do it into the small hours...once you got those you're flying...

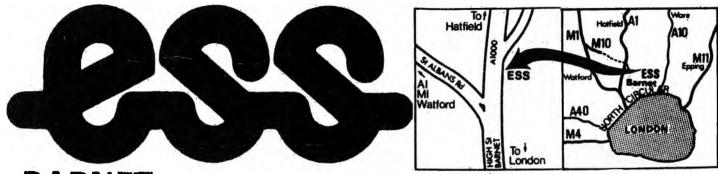
<u></u>
vox Limited, 32-34 Gordon House Road, London NW5 1NE. Tel: 01-485 4553.
Dear Vox, my name is
and Hive at

For the vinyl results of the Bishops' all nighters give the following Chiswick platters a spin: The Count Bishops, The Bishops Live and Crosscuts.





IMO2B



BARNET

01-440-3440

H/H PERFORMER SERIES SUPER P/X DEALS

SUPER PIX DEALS

Much more than you'd think allowed on your old amp head, combo, cab, etc.
e.g. £160 H/H Combo
£105 H/H Head
£225 Fender twin
£130 Marshall 100w head
£150 Acoustic 301 head

When you BUY an H/H PERFORMER head, combo, stack, Bass combo, or Bass Machine, and trade in your equivalent unit i.e. PERFORMER 212 Combo
P/X H/H V.S. Musician

Your pay ONI Y

£392

£180 £232 Your pay ONLY

AMPLIFICATION

Marshall M.V. 100 Head Marshall super bass 100 head Marshall 120W 4x12 cab E210.00 £189.00 £179.00 Mersholl 120W 4x12 cab H/H V.S. musician combo new S/S H/H performer 212 combo 250w bass machine head Bass Baby combo Performer 150w head 8x10 Bass Cab 4x12 Speaker Unit 21st Century Module

SEE OUR SUPER P/X DEAL

Boxer 50w lead boogie combo	£98.50
50w bass combo	£115.00
Ohmm 50w bass combo	£169.00
45H micro P.A. cabs	£159.00PA
Micromonitor 1×10	€48.30
Vox AC30 comboinew .	£259.00
Escort 30 1x12 combo new	£115.00
Escort mains/battery practise amp	€55.00
Roland Rack pre amp SIP300	£145.00
Guitar Synth SPV355	£395.00
2x60w amplifier SPA120	£169.00
Music Man 112-65RP 65w combo (special)	£299.00
—	Λ
	5.0

WEEE! ZAP! POW! ZUB

The ELECTRO-HARMONIX Space Drum probably one of the best drum synths — CERTAINLY THE BEST VALUEI especially at our price £43,95



PA EQUIPMENT
Wide range of new and secondhand gear available
Turbosound — we urge you to check-our TURBOSOUND
Composite and Modular systems before you choose your next P.A. TR3020 full range

£550.00 £356.00 £316.00 £271.25 from £145.00 TB1510 full range TB216 Bass Bin TB210 Mid/High dhand 4560/K140 etc.

Mid Range Cabs ATC 2x12", 1x12 G.P. Flares, R.C.F., H/H, E.V. boxed with leads

with leads
H/H Bullet Boxes
Wedges 1x12" + bullit, 1x10", 1x15"
XLR\$ Switcraft A3F A3M D3F D3M
Gaffer tape
M.M. AP360 S/H from £149
New and secondhand M.M. mixers
R.S.D. 12:2 mixers
R.S.D. 800c Poweramps
R.S.D. 400c Poweramps
Bayer 210/2 boomstands £22.95 each
51or

Flightcases made to order e.g. RSD 12:2



from £85.00

from £95.00 from £79.00 from £49.00

£3.25 E3.25 New £195 from £195.00 new £525.00 £425.00 £275.00

£100.00 £69.00





MULTICORE MADNESS

Everyone tries to save money with cheap cable BUT YOU can save money by buying the best — BELDONI E239 gets you a complete 100ft Multicore system with XLR connectors suitable for ANY mixer with XLR inputs up to 16 input channels and 3 returns. YES ONLY £2391 ₹.

ACCESSORIES

Plantage Atlantage and Address and Address and Address and	000 000
Electro-Harmonix Memory Man with chorus	00.693
Electrić Mistress flanger	€43.95
Şmall Stone phase	€27.50
Big Muff distortion	€19.50
Mini Synth — a real buzz on this one	€79.00
Wasp Synth	£195.00
DiMarzio dual sound	£17.50
Super distortion	£16.50
Super II	£14,50
SDS1	€16.50
P-Bass	€20.50
J-Bess	€28.50
Quickfit Acoustic	€15.00
Beldon Leads 1ft switchcraft jacks	£2.99
6ft switchcraft jacks	£3.99
15ft switchcraft jacks	£6.50
25ft switchcraft jacks	£7.50
18ft6in whirlwind tip jacks	£7.50
25/1 whirlwind tip jacks	£8.95
18f16in viper metal tips	£10.50
100ft 19pr multicore	£165.00
100ft 15pr multicore	£145.00
Badass bass bridges	£23.95
Schaller straplock system	£2.99



£65.00 £37.95 £39.50

£59.00

WE SELL OUR BODIES...CHEAP!
DI MARZIO custom bodies at amezing
prices. While stocks last!
Precision bass beautiful custom

striped wood
Stock Stratts std, ash L/T
Strats rouled for 2 H/Bs and Trem
Custom Strats as above but custom
striped wood
Plus Brass bits in stock — check with usl

GUITARS
FREE ELECTRONIC TUNER WITH EVERY
GUITAR PURCHASED IN JUNE
Lincoln Bass — the best value in Basses we've
ever seen, through the body neck —
amazing price Regular
Lincoln Bass with DiMarzio P-Bass P/U
Fender Strat R/W L/T Wine Red
Fender Precision R/W Black
Fender Telecaster Bass shop-soiled
Gibson The Paul with case
Rickenbacker 4001 Fireglow
Banez Roadstar Strat S/Burst
Ibanez Aw 20 sold spruce lop acoustic
Aria Pro II SB1000 the bass
Aria Pro II SB1000 the bass
Aria Pro II PE600 antique violin £159.00 £179.00 £259.00 £265.00 £229.00 £259.00 £359.00 £179.00 £130.00 £360.00 £239.00 Aria Pro II SB1000 the bass
Aria Pro II PEG00 antique violin
Aria NK700 S/H through neck guitar version
of SB100
Aria TS500 natural active e.g. special
Aria TS500 wine 21/18 shice special
Vantage 1 PJU Bass, super value
Vantage Paul Copy "glue in neck" — incredible
Ovation Electric Matrix 6 string
Kramer 350G Guitar £269.00 £199.00 £205.00 £159.00 £135.00 £159.00



KEYBOARD KOST KUTS

OUR PRICE £695 OUR PRICE £495 OUR PRICE £379 ONLY £325 Ems Polysynth 1 only Ems Vocorder 1 only Roland RS09 strings 1 only Roland SH3A S/H (like new):

Circle 771 on Reader Service Card

Extra Discount! on sales over £150 when you bring along this page

Open weekdays 10 am until 7 pm Saturdays, 9~5:30 CREDIT FACRITIES



Mail Order Just give your credit card number for

payment

Steve Hillage is closed. Temporarily, at least. For many years one of the driving forces within the British rock avantgarde camp he has decided to take a rest. Hillage's "hippie" image became one of his trademarks early in his career. Signing with the "progressive" Virgin label early on, he was convinced that he'd found his niche as Virgin was "prepared to take a gamble". Steve elaborates, "the Sixties so-called underground bands like Jefferson Airplane were becoming the 'Hunt Balls of rock' and the attitudes were too self centered - "never mind the bollocks the label expenses will pay." Hillage rejected this mindless aggrandizement, jokingly calling it "sucking at the tit of capitalism". Having toured as a professional musician for 10 years he has taken in many bands from Khan and the leftist band Henry Cow to his latest solo efforts and he is currently engaging in some creative stocktaking.

"This isn't the first time. After I left Gong I had a period of total rest. It gave me a chance to reassess my direction and creativity. Something I find necessary at critical periods."

This shutting down isn't totally hibernatory in nature and Hillage has many ideas. "I don't wish to give the impression that I am at a loss, but in order to put out more stuff I have to open myself out, cut off my creative channels for a short period so that I can observe and take in more...it's a cycle. Previously, after Gong, I did nothing for a couple of months and all of a sudden Todd Rundgren came up to me and Whey-hey! We're off!"

Hillage music is basically electronic by nature. That is, it makes use of many effects, synth and sequenced sounds. But there is a twofold nature to it, it's part straight heavy rock and part "head music" - for want of a better phrase. A curious blend of avant garde and head banger material — you just have to look around you at a gig to see this strange marrying of styles reflected in the audience. Hillage attracts fans of varied ages and contains elements from the punkish and heavy metal to the older 'woolly hat brigade", complete with stars on foreheads and Gong badges. I tackled him on this seemingly contradictory style of musical direction.

"Well, I find it particularly oppressive that in England people tend to identify with one particular style of music, you know like Heavy Metal. In the UK there are various sorts of types to choose from. Such as 'roots punk' like the UK Subs, 'sophisto-punk' like The Tubes, and there's 'robo-punk' such as Kraftwerk. Well, that's three sorts for a start, David Bowie - that's a whole different style...and reggae is a world in itself. Again there's roots reggae, sophisto reggae like Third World...there's a hundred million different types to tie in.

'But there's this incredible social malaise that makes people feel like they have to have a fixed identity like a gang, rather than feeling a certain oneness in themselves that doesn't have to be clearly defined. People have to say 'I'm this...or that...' and the music seems

to be more and more aggressive fitting into this. A group of musicians like Police do seem to transcend certain styles and for my music that's a sort of dream at the present, I'd like to make music that - while keeping a certain integrity, to a certain rather loose set of principles - does succeed in touching all different sorts of people."

Actively shying away from the Press has kept him free from categorization to a certain extent, although he has left a somewhat "heavy metal" image due to the fact that along the way he does play loud, distorted, soaring free-form guitar solos.

"I think that the music papers are to a certain extent at fault for this. Because this categorization is a disease, it's something fucked-up along the line. This is another area where Europe is more 'advanced' than England. Although every style of music obviously has it's own bunch of fans, in Europe there's more tolerance. Like in all the old hippie clubs in Holland, two nights a week now they have a punk band on, and half the people in the crowd will be the regular crowd...they're really into it...that's what I'm into myself...all different types of music.'

Steering Steve back to this strange anomaly in his own work I enquired whether he was conscious of the two areas of his influence, the funky style on

A curious blend of avant garde and head banger

one hand and the "split" with the electronic on the other.

"Yeah, at one stage I had a whole number going on about this. Tantric music. Very generally, you have a rhythmic aspect and a non-rhythmic aspect to the music. It's like Yin and Yang in that you can break down rhythms into what they are . . . very tightly shaped envelopes...drum beats being basically 'click, click, click, transients. Echoey sounds like glissando guitar and similar sounds are like a completely-open envelope...a big gate...so the two are diametrically opposite, like male and female. So I really concentrate on keeping these two halves married together - because there are a lot of 'spacey'-sounding bands such as many German synthesizer ones, and quite a lot of rhythmic, funky, rock'n'roll bands but there aren't many people that try to bring the two together.

In talking of the audience reactions the subject of his latest album Open came up. Hillage seems, with Open, to have incorporated some of the ethos from that hippie era gaining neither new younger fans with his preoccupation for spatial elements nor older stalwarts of brainstem entertainment with his predilection for driving punkish rhythms.

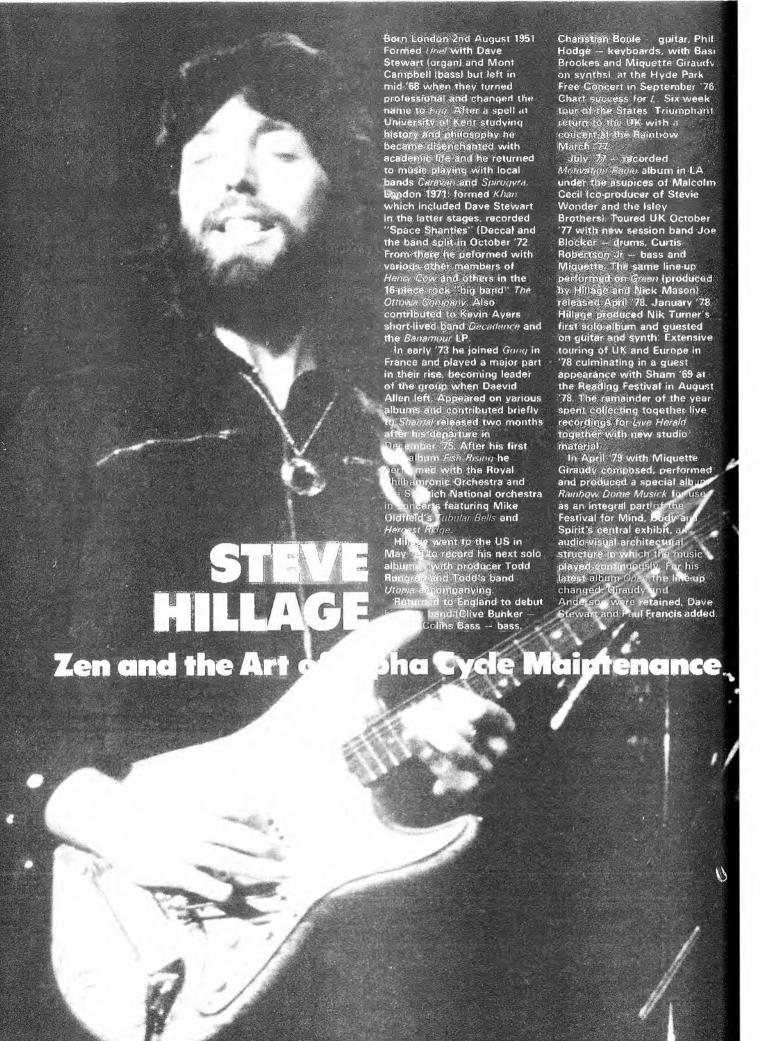
Could it be that his admirable reasons for crossing over styles results in an unfortunate dilution of the end result?

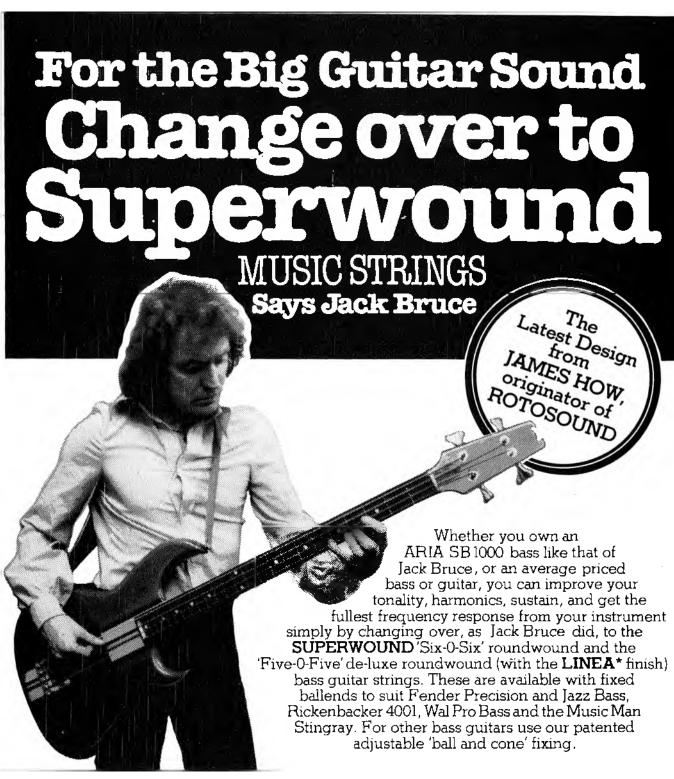
The big danger of trying to marry differents together is that, as you say, you might end up satisfying nobody. I'm aware of this but I don't want to be scared to keep carrying on doing it. But in the future I might completely give up rhythmic music and the use of drums and bass. On an economic level they are expensive - you are doubling your studio bill for a start and I now know enough about how synthesizers and sequencers work to do an electronic album, it would lack the 'pep' you get from drums and bass, it would be more like Rainbow Dome Musick. So that's one option. I have to keep this certain openness at the moment...or I could do far less on synthesizers and concentrate more on guitar and play much 'harder' music...that's another thing I wouldn't mind doing. It would still sound like me, like Steve Hillage. Or I could carry on marrying the two styles and just try to do it better. These are the broad possibilities, but at present I'm going to sit around and see which way the wind blows."

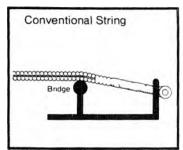
The Steve Hillage band have an impressive live sound and make extensive use of a Turbo-type PA system - at a recent gig I was almost blasted out of the press pit, traditionally one of the worst areas for balanced listening, being too far forward to catch the PA going overhead and too far back to get any overspill from the stage monitors. Who should I sue for a new frontal lobe?

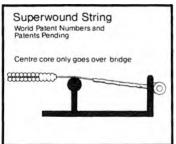
Hillage laughs "Yeah, our sidefills...that's one of our specialities. Actually, the cabinets for that gig were built by a friend of mine, Tony Andrews, who runs the Turbosound company." Sigma Sound, the Nottingham based PA company do hire out their own-built Turbo cabs with most of the technical engineering wizardry for Hillage being handled by John Newsham, the semipermanent "fifth" member of the band, on loan from the company. According to John, the definitive sound for the Hillage PA was fast approaching "spot on" and the maestro seemed pretty enthusiastic about it too. After all when you have a reputation for amazing live sound to live up to - such as Genesis, Floyd and Yes - you have to keep up the level of quality. Hillage had some novel ideas too.

'Yeah, it was pretty good. We started using front fills because the conclusion was that the best, most profitable way of using our PA was to turn all the stage amps around the other way and use them like wedge manitors, so very little stage sound is coming off the stage and you can get the complete 'spread' of the PA...you're not 'fighting' the stage sound, in order to ensure that the people at the front, who in many ways are the most enthusiastic the most enthusiastic members of the audience, have a complete mix and don't have it all going over their heads à out of a massive PA aimed at the back of § the half. I think, actually, that it's very successful.









The difference between SUPERWOUND and a conventional string is shown in these diagrams, thus giving you the above qualities. *LINEA. This special finish makes a roundwound string feel smoother It is not 'ground'. Therefore keeps its original sound.



I asked Steve about sound levels. Does he rely on audience reaction?

"Well, it all depends. Most importantly, I try not to flip-out about monitoring. A lot of musicians get hung up about not being able to hear themselves so I try my best to make sure it's not a problem. You've got to remember that when I started playing I didn't have any of these fancy monitors, just a couple of WEM columns, a vocal and that was it! Some part of me sees elaborate monitors as a bit of an indulgence. As they are there I use them to get a good vocal sound...I can use them to put a bit more subtlety into my voice...to hear all the dynamics while I'm singing.

On stage, the Hillage entourage use most of the equipment utilised in the studio with the exception of vocoder gear. Steve considers this too much hassle for a live gig, as Miquette, the keyboard player would have to have two lots of keyboards, one for the straight sound and one for the vocoded sound.

Steve qualifies this view: "I think that Herbie Hancock does live vocoder quite well, but because of the hassle, I thought it would be a challenge to make songs that sounded good with vocoder on record, but sound good with normal voice live. I don't think live work should be just a reproduction of what you do on the record...it should have it's own thing."

The mainstay of Mr Hillage's playing is a Fender Strat, which has all the paint scraped off. This is backed up by two AC30s with a whole bunch of pedals — fuzz, Echoplex and the almost obligatory Roland Chorus.

Steve explains: "We discovered the Roland Chorus and the Roland Chorus Echo, but I must confess the Boss Chorus pedal doesn't sound quite as good as the chorus on the Roland Chorus Echo and no matter how hard we tried we couldn't get the circuit out of them. So we ended up getting the Boss Chrous, which is OK but doesn't have the fidelity of the Roland, it's a fairly standard bunch of effects operated by relays."

Live, Hillage uses the Echoplex (in the studio he uses a Revox tape recorder), a Korg Echo 500 which he reports is very good and various DDLs (if he can get his hands on them!). But for the majority of his work he finds the Echoplex very convenient due to the rapid speed change time with delays marked out in milliseconds.

For preset combinations he uses a slider marked off in milliseconds and knowing the tempo of a song switches it in, just like operating an Eventide digital delay. Also, he has fixed some sliders on the output of his guitar, a little pre-amp output line driver which helps the inputs to his AC30s give the sound a bit of "raunch". Not that he plays all the time through a mass of distortion circuitry — one of the reasons he devised his pedal board is that he can switch rapidly from distortion to virtually unadulterated guitar using the relays to put in various combinations of effects.

"One of the things I have on there that I think would be of interest to IM



RW guitarists is two small equalisers with different tone curves. When I go to drive-ridden or unadulterated sound I go to one which has a lot of treble boost on it. They're called S-Hawk, several years old now and when I change from a lead sound of fuzz, a noise gate comes on automatically and I go instantly to another equaliser with a more mellow sound so there's no fiddling around - 1 just have certain sounds set up and I just press the buttons to go straight from one sound to the other. The only fiddling I do, is for some subtle-mixing between the echo and the straight. I swell it up for a couple of phrases and then put it down again - it's one of my little indulaences.

If you're interested in the S-Hawk unit, don't rush out to get one, they're not on general sale anymore. They were originally made by Larry DiMarzio and were noted for their radical boost on the treble range. But if you spot one in a second-hand store, well, it may be worth a try!

Steve uses an ovation for acoustic work and it is usually the *only* "pure acoustic" sound he uses! The only effect he allows with this being a harmoniser with the straight sound on the left and the harmoniser set at 99 on the right so it sounds a little like a 12-string.) And in his words: "It don't half make a racket!"

The synthesizer stuff he uses is kept separate from the guitar equipment. It's basically a Minimoog which has been chopped about with some bits hacked out and a few extras added. The customizing for Steve being done by Graham Wood, who also did the honours on the pedal board construction.

The synth inputs pass into a rack with various compressors available if it's too peaky; a Revox tape stereo echo and a Turner amp which runs the monitors.

The next obvious area that Hillage can move into is some sort of audio visual show. The logical progression for him would be the video disc — an area where he could really score "It kills two birds with one stone. The disc will be able to record in stereo and it should sound fucking great — much better than the plastic discs we've got now for sound. Mr Rundgren was into that area in '76 when we did a record with him and he's got a deal now with RCA to produce their first ever video disc, which I believe will be his images with the music of Tomita, an RCA artist."

Is it an area that he would like to get into?

"Yes, providing it's not too controversial from an economic point of view. I mean if we are going into a big recession with millions of unemployed and the playback machines cost over £600 with the discs at £15 a throw I would think twice about doing it."

Steve's tastes in listening are varied — from Debussy and Messian, Vaughan Williams and Bartok to Ashra and John Coltrane. In fact Coltrane is one of his major influences. Some of the phrasing was apparently quite a source of inspiration as well as the French sax player, Didier Malherbe with whom he used to play. Weather Report seem to find favour too: "I like Weather Report. They're another group that seem to go beyond the mere description of jazz."

But not all American music meets approval.

"I have a lot of American friends but I still feel alienated from America. I think that black American music in general has lost its way. It's got so bogged down in disco, some of which is good, some pulp, and the rest absolute rubbish. It seems to be where all the dollars are for black musicians at the moment, They're having to chase this illusory butterfly of disco which leads them into a kind of musical vortex. What comes beyond disco may be an incredibly exciting new kind of music. At present, though I must say I find it rather boring...I like fooling around with those rhythms but I couldn't play a whole set like that, it would be like Auschwitz for me.'

Rhythms certainly aren't alien to the Hillage way of thinking, indeed they are an integral part. His bass players are chosen for their funky style of playing, notably Steve's favour for a bassist who uses the bass "thumb-hammering" style — thumbing on the downstroke and plucking on the up. These mostly occur in the funk band world and Steve quotes Parliament and Reggie Macbride from Steve Wonder's band as premier examples of the genre.

That's on the macro level. On the micro-level other rhythms are brought into play. On the *Green* album, which he intended as a "celebration of travel through space and nature" he utilised a sweep pulse of 10.24 Hz on the backing track. Alpha waves are known to resonate in the human brain at this frequency.

As one of the few musicians who are trying to get into that mind/body interface through music does he have a definite overview of his future?

"I'm dedicated as was my L album to optimistic visions of the future. But I like to use a non-dualistic approach...don't dither, do it! Basically, by avoiding a leader/follower situation and trying hard not to be labeled. If I was more aggressive about concepts I was committed to, the music would undoubtedly work better. But it's fun to dither...that is my Zen-ness. But if I define too clearly what and why I do things, the music itself might lose its magic.

Mike Feasey

79



celestion international



For further information, contact:

Rola Celestion Limited, Ditton Works, Foxhall Road, Ipswich, Suffolk (P3 8JP England, Telephone: Ipswich (0473) 73131 Cables: Voicecoil Ipswich, Telex: 98365

Dealer of the Month

About 10 years ago, when a band used a synthesizer was a major event — something you went around at school telling everybody about. Those early models, pioneered by Robert Moog, looked more like computers than musical instruments, complete with banks of dials, knobs and flashing lights. Just the sound of a synth was enough to send an audience into a frenzy — witness Keith Emerson and his antics with a ribbon controller.

Nowadays it is difficult to turn on the radio without hearing a synth of some description, regardless of whether the music is New Wave, Heavy Metal, pomp rock, soul or mainstream pop. And there are scores of synthesizers on the market, ranging from cheaper models for doodling in the bedroom through to sophisticated monsters that do everything but weed the garden and put the cat out.

But whatever price range aspiring keyboard players decide to plump for they are going to need a shop where they can try out the various alternatives, receive expert advice and after sales service.

One dealer well worth visiting is Rod Argent's Keyboards in London's Denmark Street, just off Charing Cross Road. The shop was set up by ex-Argent keyboards player Rod Argent just over two years ago "to provide a professional keyboards shop that would also give a service for semi-pros and amateurs not to be found anywhere else."

Manager Howard Brain explained: "We find some customers come in after they have been to other shops and the staff there have tried to force a particular product on them. Our aim is to provide the best of all ranges of products and advise on the various alternatives.

"We always try to approach things from the service angle, as opposed to the hi-fi market mentality, because the instruments we are selling are very complicated electronically."

To provide this service Argent's has three full-time

Rod Argent's Keyboards



engineers on the premises who are normally available for service and repair work between 10am and 6pm Monday and Friday, although Howard says that if you ask them nicely they will go out to gigs. On one occasion their engineers even went over to France to programme synths for Pink Floyd. Other bands that have had instruments serviced by Argents include the Average White Band, Abba, Genesis, Peter Gabriel, Jethro Tull and Hall and Oates. The shop will try and fix your instrument while you are on the premises, but if this is not possible the work can normally be done within 48

hours

They offer a wide range of synths by all the major manufacturers, including Roland-which is particularly popular among semi-pro and amateur players-Moog, Tamaha, Hohner, Pearl Studio Systems, MC8 Microcomposer, the Korg. It is the sole UK distributor and European service centre for Sequential Circuits products, including the Prophet Five programmable polyphonic which has dominated the top end of the market for the last two years and, according to Howard, "still has no rivals." But what about those unable to afford one of these machines?

Howard says: "We have tried to provide the first-time buyer with the best possible choice of alternatives at the best possible prices. After two years we find ourselves in the position where we can quote cheaper prices, which are at least as competitive as anywhere else in the UK."

A lot of synths started being sold to amateur and semi-promusicians when Wasp brought out their compact touch sensitive keyboard. The shop sold quite a few to people who weren't necessarily keyboard players but who wanted a second instrument. Now there are other cheaper synths on the market those first time buyers are going on to because of their interface and expandable capacities.

Argent's keeps a constant eve on world markets to find out what new products are available, and they have recently latched on to the Dyno-my-piano, an American instrument which is basically a souped up Rhodes that has been used by people like Stevie Wonder, and besides synthesizers the shop also has a big selection of electric pianos by all the major firms in the field, and usually has a few second hand Hammonds in stock.

It has also been doing good business in programmable drum machines used in conjunction with sequencers. On the guitar synth side, Argent's imports the 360 Systems model, which is triggered by a special pick-up which can be fitted to any electric guitar, and others by Roland and Korg.

A number of guitar and keyboard effects by Boss and MXR are available, and staff at the shop are currently working on a new drum synthesiser which will sell for about £50 because they feel all the others on the market are overpriced, despite price reductions.

Oh yes...there is yet another good reason for visiting the shop, especially if you're an aspiring Chick Corea or Gary Numan — the Forbidden Planet science fiction shop is just a few doors along...

THE CUSTOMERIS ALWAYS RIGHT

All these Groups and Artists have used FANE Speakers:

ROLLING STONES FLEETWOOD MAC HAWKWIND RICK WAKEMAN PINK FLOYD MOODY BLUES BOOMTOWN RATS SLADE MANFRED MAN THE WHO LIEUTENANT PIGEON MAX BOYCE MOTORS PINK FAIRIES RUSH FRANK IFIELD BROTHERHOOD OF MAN BLODWIN PIG MUSKRATS BACHELORS MARMALADE JASPER CARROT PHOENIX



For details of the new Classic, Specialist and Crescendo series, please write for information to:-



BATLEY, WEST YORKSHIRE, ENGLAND. TELEPHONE: BATLEY 476431 TELEGRAMS: 'FANE BATLEY' TELEX: 556498 FANE G

sound systems out of this world

DN34 Analogue Time Processor

The Klark-Teknik DN34 analogue time processor is an exceptionally versatile signal processing and special effects unit, designed around two discrete, independently controllable delay sections.

Like other Klark-Teknik products, the DN34 is the result of intensive research and developmentthe best there is in state-of-the-art analogue delay technology.

With a product of this stature you can achieve an incredible range of delay-based effects; cleanly and noiselessly.

The Klark - Teknik DN34 analogue time processor also offers you:-

- A dynamic range better than 90dB.
 - A time sweep range of 70:1.
 - T.H.D. at less than 0.3%.
 - Numerous exclusive
 - features including full on board' mixing and phase reversal facilities.
 - Amazing performance

and value for money. The DN34 is unequalled in the signal processing field today.

And we're not just saying that for effect.

WORLD WIDE

sound

is our science



Circle 858 on Re

THE FOLLOWING GOODS ARE CURRENTLY IN STOCK AND CAN BE SUPPLIED







MAILORDER OR COD

SUPER FENDER SALE!!

LIMITED PERIOD ONLY

Fender :	Strat	£227
Fender :	Strat + Trem	.£250
	Strat + M/N	
	Strat M/N + Trem	
	Tele + M/N	
	Mustang + S/H	
	Mustang Bass	
	Predision Bass	
Fender I	Precision Bass + M/N	. £236
	Jäzzbass	
	Jazzbass M/N	
	Musicmaster Bass	
	Les Paul Standard	
	Les Paul Custom.	
	Les paul Deluxe	
	'The Paul'	
	Explorer	
Gibson	325 ,	. £299
	EB3 Bass S/H,	
Gibson	Flying V	.£399
Yamaha	s.G. 2000	.£497
	S.G. 1000	
	s.\$.G. 500,	
	\$.F, 1000	
Yamaha	a \$.F. 500	. £195
	Witch,	
	Spirit,	
	Phantom	
	Mystic	
	•	
	Viper	
	Bass.	
	Id Marathon Bass	
	ry Track 4 Bass	
	ctron Guitar	.£150
Cases a	vailable for almost any guitar.	
ACOI	USTICS	
7000	731103	
Martin	D18	. £369
Martin	D28	£429
	D35	
	D41	
	Electric Artist S/H	
	Poeron S/H	
	F35,	
	F65.12.	
Fender	F65,	. £109
	a FG 335	
	a FG 340	
	e FG 331	
	a G 230	
	ne Nova	
	y Sovereign	

MONTH'S **SPECIAL**

Fender M.A.6 200 watt P.A. with Graphic and Reverb. Plus 2 superb Fender P.A. Cabinets Total Value £1095. Only £595.

Hohner Pig	net \$/H,	£19
Wasp Syn	th, ,	
Electro Har	monix Mini Synth	£9
Shythm A	c é	£4
Electro Har	monix Big Muff	£19.7
Electro Har	monix DAM16 Shythm Box	£99.0
#	Crone Theory,	£49.0
	Hot Tubes	
**	Muff Füzz	£11.7
,,	Full Double Track,	
**	Power Boost	.,,,,,£9.5
**	Deluxe Memory Man	£125.0
"	Switchblade	
"	Electric Mistress	£47.0
"	Dr Q	£19.5
**	Space Drum	£49.0
**	Small Stone	
24	Big Muff Deluxe	

	_		
AMPLIFICATION			
Acoustic 220 Bass Amp		£312	
Acoustic 230 Guitar Amp.			
Acoustic 126 Bass Combo			
Acoustic 118 Bass Combo			
Acoustic 124 Guitar Combo			
Acoustic 117 Guitar Combo			
Acoustic 165 Guitar Combo		£599	
Acoustic 406 Bass Bin		£356	
Acoustic 806 P.A. Cabs		£208	
Acoustic 4x12 Cab		£292	
Traynor Mixer Amp (6 Channel)			
Traynor Mixer (6 Channel)			
Traynor Mixer (8 Channel)			
Traynor 100 Watt Slave			
Traynor 300 Watt Slave			
Traynor 80 Watt Bins (P.A.)		£106	
Traynor 100 Watt Bins (P.A.)		£186	
Traynor 200 Watt Bins (P.A.)		£231	
Traynor 100 Watt Guitar Combo			
Traynor 50 Watt Bass Amp			
Traynor 1x15 Cab			
Traynor 2x12 Cab			
Traynor 9x8 Cab			
Traynor 25 Watt Bass Combo,	,	r.158	
Maine Bass Combo		£279	
Maine P.A. (200 watts)		£265	
Maine Lead/Bass Top (200 watts)		£209	
Maine 80 Watts Stage Combo		£245	
Maine 150 Watt Musician Combo			
Custom Sound Graphic Bass Amp (150 wat			
Custom Sound 100 watt Combo.,,,,,,		£199	
Custom Sound 100 watt Bass Combo		2760	
Custom Trucker P.A. (100 watts)			
Custom Trucker P.A. + Reverb		£135	
Custom Trucker P.A, Cabs,	,eac	h £79	
Custom Trucker Combo		£105	
Custom Trucker Bass Combo		£125	
Custom Trucker 25 watt Combo,		. £85	
Fender Twin Reverb			
Fender Pro Reverb.			
Fender Deluxe Reverb			
Fender Champ			
Yamaha G100 212			
Leech G120 Amp Top			
Vox AC30 + Reverb.			
Vox AC30 Solid State,			
Vox AC50			
Vox 2x12			
Vox 2x15			
Ampeg V2 Amp Top			
Carlsbro Mini Bins S/H	eacl	h £99	
Marshall 100 Top (Value),		£249	
Simms Watts 100 Top S/H		. £45	
Sola 50 Top S/H			
Hiwatt 4×12		£160	
M.M. A.P.360 Stereo Power Amps S/H			
M.M. EP 130 Bass Bin Filter S/H.,,,,,			
Park 8 Watt Combo			
Park 8 Watt Combo			
Park Vintage Combo		1 120	1

A must for all Guitarists Korg Guitar Tuners Justina Guitar Tuners

To: AXE MUSIC 16, Mersea Rd., Colchester, Essex.	
Please send me I enclose cheque/P.O. for£	
OR: Please debit my Barclaycard/Access	
No:	. Ц
Signature:	П
Name:	
Address:,	
	. [
Barclevcard/Access, Prices include VAT. H.P. Part Ex.	





Crank it up without problems!

No, we're not talking about your car. Not when the Maine Bassman just has to be the best value for money. For the bass player who must have an easily transportable amp. For under £300.

A solid foundation, of 100 Watts RMS power, drives the heavy-duty 15" speaker. Maine's new folded-horn design delivers

the richest sound around, with full bass response and no break-up.

You get unlimited overdrive from cascaded inputs coupled with Master Volume. And a super-wide range of tone swings from 3-way equalisation. Besides all of which, as we said at the start, with Maine's superior technology you really can crank it up without problems. Try it soon.

STOCKISTS INCLUDE AXE MUSIC OF COLCHESTER

State State of the Company of the Co



60 TUBE AMPLIFIER

'Reliability and dependable performance'

the philosophy behind the Acoustic range of amplification. And now the very latest in Tube Amplification...the Model 160...

Features: Switchable FET or tube front end, sixty or one hundred watt RMS power output, dual master volume controls, five band graphic EQ, built-in reverb. In addition, an impedance switch allows you to match compatible extension cabinets ohm for ohm at full power without distortion.

60/100 Watts RMS at 5% THD into 4 or 8 Ohms Dimensions: $9\,\%''$ H x 22" W x 10" D

But words don't do it justice, it simply sounds like the best you can buy!

QUITAR ENCLOSURES	Model 484	Model 486	Model 488
Power Handling Capacity/Watts (Maximum Amplifier Output)	125	125	200
Nominal Impedance/Ohms	0	0	a
Enclosure Type	Open Back	Seeled System	Sealed System
Speaker Complement	1—12" Electrovoice EVM 12L Spkr	2—12" Spkre	4—12" Spkre
Overall Size/inches (HxWxD)	18x22x101/2	16x2614x131/2	2614x2614x1314
Shipping Weight/Pounds	45	65	90



LOOK UP YOUR NEAREST DEALER.

ABERDEEN:

C. Bruce Miller & Co. Ltd., 22 Loch Street.

Tel: 0224 55924 BARNSLEY:

Kitchens of Barnsley, 33 Peel Street. Tel: 0226 5867

BEDFORD: BELFAST: BRADFORD: Mr Music, Bromham Road. Tel: 0234 50861 Mr. Crymble Ltd., Dublin Road. Tel: 0232 26818 Kitchens of Bradford, 26 North Parade. Tel: 0274 23577

Sound Centre, 9 St. John's Square. CARDIFF:

COLCHESTER: EDINBURGH:

Tel: 0222 34018 Axe Music, 16 Mersea Road. Tel: 0206 65652 Grant Music, 53-53a Home Street. Tel: 031 228 1704

HEMEL HEMPSTEAD:

Mr Music, 24 Bridge Street. Tel: 0442 61812

Kitchens of Huddersfield, 5-7 Market Avenue. Tel: 0484 26508 Unisound, 48 High Street, Chatham. Tel: 0634 44068 HUDDERSFIELD: KENT:

Circle 753 on Reader Service Card

NEWCASTLE UPON TYNE: NEWPORT:

LEEDS: Kitchens of Leeds, 26 Queen Victoria Street, Tel: 0532 446341

LIVERPOOL: Hessey's, 62 Stanley Street. Tel: 051 2361 418

LONDON NW6: Unisound, 213 Kilburn High Road. Tel: 01 624 3900

LOUGHBOROUGH: Groops Music Centre, 18 The Rushes, Tel: 0509 30398 or 218020

W. MIDLANDS: Modern Music, 30 Castle Hill, Dudley. Tel: 0384 55293

NEWCASTIE

ret: 0384 55293 Kitchens of Newcastle, Higham House, New Bridge St. Tel: 0632 22965 Sound Centre, 107 Commercial Street. Tel: 0633 66814

nobody was ever sorry they bought the best A

Access, Barclaycard, American Express, Diners Club.

LONDON MICROPHONE CENTRE

SHURE

515SA Unidyne B (PA) Hi	£20.99
515SB Unidyne B (PA) Lo	£20.99
588SA Unisphere B (PA) Hi	
588SB Unisphere B (PA) Lo	
545D Unidyne III (PA) Hi/Lo	
565D Unisphere I (PA) Hi/Lo	£50.75
SM57 Professional (ST+PA) Lo.,	£55.90
SM58 Professional (ST+PA) Lo.,	

AKG

7111VA	
D12E Bass Mic (ST/PA)	.£82.29
D330 EBT Stage Vocal	
D320 EB PA/Vocal	
D310E PA	
D190E PA/Gen Purpose	
D1200E (ST/PA)	
D202ES (ST/PA)	
D170E PA/Vocal/Gen Purpose	
D2000E Stage Vocal	

BEYER

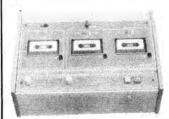
M160 Double Ribbon	£165.00
M201 (PA/ST)	£75.00
M260 Hypercardioid (PA/ST)	£76.59
M400C Stage Vocal	
M101	£85.00

EQUALIZERS



Soundcraftsmen. Full range MXR (2×10) (2×15). 1×31 Technics SH8010 (2×5). Pace SR271×27 Band. Trident Parametric.

WOLLENSAK



High quality, high speed Cassette Duplicators. Mono and Stereo versions. Pop in for a demo Sony also stocked.

Amcron Range Stocked

Come in anytime for a Demo. Off the Shelf.

TEAC



Teac A-3440. Symul Sync 71/2+15 ips. Phone for details.

MIXERS



Largest Selection in Europe. A+H. Tascam, Alice, HH. Canary, Soundcraft, September Sound. Studiomaster. Come in and browse.

REVOX



The Leader — in stock now. Phone for a quote. We keep every accessory.

LONDON **CHASSIS** SPE4KER CENTRE

CELESTION

CELESTION	
G10/60 10in Lead Guitar£15.37	
G12/65 12in Lead Guitar £18.40	
G12/65 12in Twin Cone PA£17.74	
G12/100 12in Lead+Bass	
Guiter£23.00	
G15/100 15in Guitar-Organ PA. £31.99	
G18/200 18in Bass Organ£56.20	
P'Cell 12in Guitar PA£55.00	
P'Cell 15in Bass Organ PA£64.30	
MH500 Horn 50 Watt£65.50	
MH500 Horn 100 Watt £107.00	

H/H	
PL50 12in Guitar	£21.83
PL65 12in Guitar	£23.43
PL80 12in Guitar	£26.10
1200 12in Guitar/PA	£63.78
1500 15in Guitar Bass/PA	£74.43
DC80 12in Twin Cone	£27.47
B15 15in Bass	£39.93
HF200 Bullit Tweeter	
RH450 Radial Horn	£48.45
CD400 Driver 50 Watt	£43.60

FANE	
Classic 55 12in Guitar	£17.80
Classic 150 15in Bass/PA	£39.00
Disco 100/2 Disco/PA	£29.60
Guitar 80L Guitar	
J104 Hi Horns	
X/0 Units	

JBL

E Series	
E 110 10in Lead	£87.00
E 120 12in Lead/PA	£100.00
E 130 15in Guitar-Full	Range £100.00
E 140 PA Bass Guitar.	£115.00
E 145 Bass Guitar	

DIE70

FIELU	
Horn Tweeters	£6.50
Also Stocked: Gauss EV, A	C. Goodmans
BOSE PAIN STOCK	ON DEMO
UHER PORTAE	21 6
OHER LOKIVE	7 h. L.

RECORDERS



4200 Monitor Stereo 1/2 Track 4400 Monitor Stereo ¼ Track. CR240 Portable Cassette. CR240AV Audio Visual Version Available. Ampex Tape at silly prices Full Range of accessories always in stock.

WEST END

CENTRE



8 TRACKS ½in. or 1in.

Tascam 80/8 ¼in, 8 Track, Brenell 1in, 8 Track, Full AHB Package Available from

Stock. STOP PRESS: 16 Track Tascam Now

NELITRIK Plugs and Sockets

TIES OF THE STREET STREET OF THE	ils.
NC3 MC	£1.20
NC3 FC	
NC3 M.P	£0.90
NC3 FP	£1.70
NC3 MC Gold End	£1.40
NC3 FC Gold End	£1.60
Quantity discounts	

Amplifiers

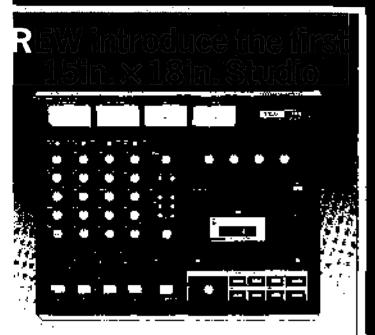
HH3500D. Quad 303 & 405. JPS High Power Amps. Soundcraftsmen MA5002 & PA5001. Bose.

Plus Echoes, Phasers, Flangers, Limiters, Noise Reducers, Expanders, Mix-Downs, Mic Stands, Cable Drums, Disco Gear, Chassis Speakers, Studio Monitors, Headphones, Demags, Splicers etc.

PRO-AUDIO & DISCO: 114-116 Charing Cross Road, WC2. 01-836 2372/7851. Also separate floor of Hi-Fi and Video, Phone: 01-240 3386. Circle 730 on Reader Service Card

> **Europe's largest Pro Audio** store.

Tax Free Export and Express Mail Order.



Now you can have the essential functions and flexibility of multitrack recording in one compact, self contained unit. It's called the Model 144 Porta-Studio and it lets you record basic tracks, overdub in sync and remix to stereo. On standard cassette tape.

TEAC engineers created a totally unique format for Porta-Studio. Four tracks in sync on cassette tape at 3% ips. It's fast, simple, reliable and economical. Rehearse on it. Learn on it. Create on it. Just plug in a microphone or instrument and go to work on it.

Porta-Studio's versatile 4×2 mixer section gives you mic/line/tape switching, trim control, high and low EQ, fader, pan and Aux Send for each input. The failsafe group switching matrix lets you record on up to two tracks at the same time. And there's a master fader that gives you overall level control during recording and mixdown.

The full-logic cue system in Porta-Studio lets you hear everything you're

doing all the time. Input and tape cueing. monitoring for recording or mixdown are all available. And every signal can be metered. Coming

or going. Porta-Studio's drive system is built specifically for the rugged needs of multitrack recording. Transport controls are all soleniod-operated for faster, easier switching. And you get a built-in variable speed control that lets you add special effects, fix a flat note or solve timing and cueing problems.

You can work with Porta-Studio using nothing more than headphones. Or send the output through your home audio system. You'll also find the patch points and controls that let you use Porta-Studio with equipment like echo or delay units, equalizers and additional mixers.

Come in to REW for a demonstration of the very affordable Porta-Studio. Nothing else in the world outs so much multitrack function into a small package.

NEA:

for Recording and

The unique qualities of a condenser microphone are now available in this superbly designed, highly sensitive, flat response *contect* mic.

MAGNASOUND GIVES YOU =

- an exciting new option for amplifying and recording planes acoustic guitars, harps, harpsichords, string basses, banjos.
- 1 + 25db separation over open mikes, without loss of quality.
- superb stereo for acoustic keyboard instruments, using two units.
- 48 VDC Phantom Power or built-in battery power from its own specially designed D.I. Box, giving a choice of balanced mike level output direct into mixer from XLR socket, or Jack to Jack connection direct into Amps, with unbalanced outputs
- more edge, definition and punch than most open mikes can bive you.

Send for detailed brochure and Demonstration Cassette and let your ears decide.

AGNASO CONTACT CONDENSER MIC. •



D.I.Tapes Ltd. 107 Park Street. **London W1Y 3TA**

Please send me further information, technical date and demo cassette of the MAGNASOUND in action. I enclose £1.50 or \$3.00 for

ADDRESS

Post to: D.I.Tapes £td, 107 Park Street, London W1Y 3TA (Dealer & Distributor enquiries welcomed)

LENNY WHITE

by Bill Stephen

Some years ago Miles Davis was playing a date at the Village Gate in New York City. In the audience was a young drummer Miles had invited. With the quartet playing Miles walked off the bandstand and drew the young musician backstage. To retell the conversation Lenny White slipped into his best Miles Davis voice — a harsh, throaty sound squeezed from the lungs, just above a whisper.

"Can you play fast?" asked Miles.

"Yeah," Lenny replied.

"When?"

"Whenever necessary,"

And with that Lenny was asked to show up every night for instruction. Miles would talk him through the numbers as the band played saying, "Now, you hear that, and that? That's good, but don't play like that." Within the week Lenny had a sense for the band, the music and the brilliance of its leader.

With a farewell of "I'll see ya," Lenny departed not to hear from the trumpet player for nearly a month. When the phone call did come he was told to get over to Miles's house that day to rehearse for a record date. Lenny showed up at the prescribed time with snare drum and a cymbal and began rehearsing the opening tracks of Bitches Brew.

Some years later, Lenny was playing with the San Francisco band Azteca. Chick Corea and Stanley Clarke paid a visit to the Bay Area and recruited Lenny for the missing third of their trio and began an intensive week at a local club producing what Lenny calls "absolutely amazing music," Shortly after this event problems began for Flora Purim and Airto (RTF's percussion master) leaving Return to Forever in need of a drummer. Chick called to recruit Lenny, but reluctant to leave Azteca he held on until the demise of the band which freed him to take part in the reformation/redefinition of Fusion.

Placing Lenny White at the focal points of two of the most important developments in modern American music is statement enough to his ability as a musician and a visionary artist. With Miles, Lenny honed the traditional jazz style that emerged from his work with Jackie Maclean and other New York bands. But with the development of RTF Lenny had to adapt his playing to the world of electronics which meant a reassessment of his style and his role as a drummer. It is this facility, to be able to assimilate to a form of music without losing individuality, that has been in many ways the cornerstone of Lenny's professional career. "You see." he explained, "my intention has never been to be the greatest drummer in the world, although I wanted to be one of the best. My major goal has always been to be in the best band in the world. This has happened once already (RTF) but it's time for it to happen again."

The philosophy of being "part" of a band has come fully to bear with the formation of his newest group. Twennynine; an aggregation of young musicians which Lenny feels "forms the band for the Eighties." "I know it sounds pretentious, but I know it's true because these guys (Nick Moroch, lead guitar; Eddie Martinez, rhythm guitar and vocal; Barry Sojohn, bass and lead vocals; and Skip Anderson, keyboards) can play any kind of music and they do it authentically, and that's what I've wanted to do; play something with conviction. And the new album, Tweenynine, is legitimate, it has conviction; it wasn't done tongue-in-cheek."

With the album reaching well into the upper strata of the American R&B charts and a single, "Peanut Butter," that has done far more than respectable, Lenny seems to have found a groove he likes to call "power pop with an R&B base" that will take him into commercial success and deliver him from the often tenuous and difficult jazz world. But the music often lacks the spark and ingenuity that marked Lenny's earlier work. No longer the frontman or the showcasing musician, Lenny's individuality has become part of the whole and although possibly not as satisfying musically to some, he feels that he has achieved a major phase in his career: he has learned, with great difficulty, how to "suppress the ego" to allow him to play as part of a unit.

After the breakup of RTF, of which much has been said and little understood, it was difficult for Lenny to find the musicians of the same calibre to work with. It is this that is basically the crux of why he no longer plays Fusion, agreeing with comments made by Stanley Clarke in these pages (IM&RW) October, 1979) that the reason jazz-rock isn't happening anymore is because the players aren't around anymore, "You see." he explained, "when I was playing bebop I could only emulate what other people had created, they were of the era. And that's what's happening now, people are only emulating what we created."

That the creating stopped is something that still seems to gnaw at Lenny White. The end of RTF left him without a particular direction and some hard times followed, but Lenny's frustration over the breakup is manifested not in anger for its members but in the theft of a fitting creative peak, "It was like being on a mountain climbing expedition and turning back before you reached the top. And it was just messed up by nonsense, egononsense. But it's history now, and that's why I don't play it. I played the music with the guys that played it best so it's not fair to the music, to me or anybody else. I'll play the music again when I play it with those guys." A reunion of RTF? 'Sure, I'd love to do RTF again because it made a lot of people feel good. And it would be great just to get back and play again."

A reunion of RTF, however, could never yield what the creation of the band revealed, that's not to say it wouldn't produce some thoroughly amazing music. But part of the freshness and wonderment of the band evolved from the growth of each musi-





Dreaming of Returning to Forever

cian with each new album, especially its leading composer Chick Corea, Even a most cursory listen to the albums reveals a change in the feel, composition and direction of the band, each album formed a transition in the band's growth rather than a repetition of their musical abilities. They remained the freshest and most individual of all the Fusion purveyors and Lenny explains why. "The thing about the band, and the reason it sounded different from everybody else, is that Chick, Stanley and myself were players who primarily came out of a bebop-esque mode; meaning we played phrasing. This differs from the fusion players now who play licks. There would be a written phrase and then there would be space; even when improvising there would be an eight bar phrase. And that's where the difference lies."

One of the transitional factors that is obvious throughout RTF's recorded work is the growth and sophistication of the compositions and their execution. Whereas the earlier work has a raw, live feel, albums from Hymn of the Seventh

Galaxy are more polished and structural in composition.

'The first albums," Lenny explained, "were mainly comprised of music Chick had written at a particular time between what he had been playing with Miles and how it changed with the introduction of electronics. So it wasn't orchestrated like say, Romantic Warrior was." Because of the way the initial compositions took form, Lenny was called on to play high energy drums using a great deal of snare and cymbal, leaving the tom toms for minimal intrusion, but as the compositions progressed his playing had to be altered. "As the work became more orchestrated there was more room and more demand for me to play, using the full kit that is.

"Basically, there was a much more classical influence after the third record, there was no more mystery. They were classical in terms of structure. There was more interplay compositionally and improvisationally. We just all grew up. Chick took on another direction when he introduced electric to his work and if you listen to his first pieces compared to

those later on, you see he went through a lot. Whereas Wayne Shorter was the most prolific composer of the Sixties, Chick was the most prolific of the Seventies."

Lenny White obviously holds Chick Corea with some reverence, explaining: "I like his music and probably always will. And I'd like to play with him again as I like good music." From Chick, Lenny learned a great deal about composition and about playing fusion in an orchestrated manner. The effect and influence was similar to that of Miles Davis, but Lenny holds his mentor and musical hero in awe and his days with him can still be sensed as possibly the most important in his career.

Lenny followed a succession of drummers who took the same path to Miles' door. "This thing was happening. Jack DeJohnette was playing with Jackie Maclean and then he went on to Miles; Tony Williams had played with Maclean and then he went on to Miles; and of course, I went on to Miles after Jackie's band."

The link up of Miles and Lenny seem-



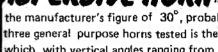
wo networks with crossover at 500Hz and 1000Hz, embodying high grade capacitors and air cored inductance coils, providing stable allocation between HF and LF units.

NETWORKS

S3 DRIVER

"This is without doubt a first class compression unit from a British manufacturer and represents excellent value at this price. It is equally suitable for use as a mid range driver or for high frequency use and can be crossed over at any frequency between 400Hz and 4KHz depending on characteristics of the horn flare with which it is used".

International Musician February 1979



SPERSIVE HORN "Although it comes nowhere near the manufacturer's figure of 30°, probably one of the most useful of the three general purpose horns tested is the Vitavox 4 cell dispersive horn, which, with vertical angles ranging from 146° at 500Hz to 46° at 8KHz, offers about the tightest control in this respect that we measured. In fact, for general purpose applications, I consider this to be a

"This brand new drive

first class unit". International Musician

(Vitavox

550/311Cl is a

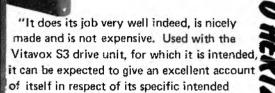
International Musician March 1979

MUSIC MOTOR DRI VER

unit has a particularly business like appearance and, as with most products we have reviewed from

International Musician July 1979

this manufacturer, is built to a high engineering standard".



International Musician May 1979

THUNDERBOLT

application".

"The band are tremendously impressed with their Vitavox set-up and their excellent live sound is one of the band's features".

International Musician, October 1978 (on Landscape).

"The best live sound I've heard in ages".

Tel: 0257 791645

Andy Gill, New Musical Express

"Their sound system, though vast, is exceptionally clear and painlessly powerful".

What's On in London, 30 June 1977 (on Landscape).

15"LOUDSPEAKEF

superbly made miniature version of a genuine multi-cell horn Put simply, the multicell seems to combine all the better points

of all the horns included in this review and suffers few, if any,

of the disadvantages associated with the more usual designs"

'Among the speaker manufacturers Vitavox are highly rated for their design and quality of materials plus their good performance".

Melody Maker, 9 July 1977

'The AK156 and 157 bass loudspeakers are highly efficient 15" bass drivers suitable for bins and bass reflex cabinets handling up to 100 watts".

International Musician, February 1978

FOR FURTHER INFORMATION REGARDING VITAVOX PRODUCTS COMPLETE THIS COUPON AND SEND IT TO THE ADDRESS BELOW:

NAME:

ADDRESS:

POST CODE:

VITAVOX LTD., WESTMORLAND ROAD, LONDON NW9 9RJ.

For the full story on all products consult a VITAVOX dealer Biggles Music, 85, West Street, Old Market, Bristol. Tel: 0272 552147 Sound Advice Installations, Regent Street, Coppull, Chorley, Lancs.

Soundwave, 66, Victoria Road, Romford, Essex. Tel: Romford 25919

White Sound, 3, Albion Place, Sunderland, Tyne and Wear, Tel: 0783 78058

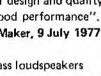
●Rock City Music, 10, Mosley Street, Newcastle upon Tyne. Tel: 0632 24175

Telephone: 01-204 4234



Limited

Circle 717 on Reader Service Card





(IM)/2 Telephane: 01-204 4234

ed almost inevitable what with the drummer's quickly spiralling reputation and the continual probing of the mutual friends of both of them. When he finally showed up for the first rehearsal it was in the company of Chick Corea, Jack De-Johnette, Dave Holland, Wayne Shorter and Miles. After the rehearsals they recorded at CBS records for three days and the result was *Bitches Brew*.

Once you had recorded with Miles Davis the word was out and the offers came in. Lenny was called soon after by Freddie Hubbard who offered him a recording date with an all-star band featuring Ron Carter, Herbie Hancock, Joe Henderson and Freddie. On his way to the studio for the sessions Miles called him for another recording gig but Lenny had to turn it down and he thinks now it was probably the sessions for 'Guinnevere'' on the Circle In The Round album or Jack Johnson. But the result of the Hubbard sessions was well worth the work although it brought up a particular problem for Lenny.

"I had this bass drum a friend had made for me using an old oil drum. It was huge. I used it on *Bitches Brew* and I took it along to the Hubbard sessions but they told me I couldn't use it and I was demoralized. So they brought out this huge bass drum, one of those marching band drums and that's what I played. People used to ask me after that how I got this great drum sound."

One thing that Lenny possesses, and always has, is an amazing cymbal sound, especially his incredibly deft touch on the hi-hat. It's something that came from long hours of practice and a little bit of influence can be attributed to Tony Williams. "I used to take Tony's Four and More and put it on. Then I'd go in the corner with just a cymbal and start practicing until I could hear every note I was playing. This helped me tremendously in my music because I listened closer and often realized that a particular part didn't need a drum but a cymbal."

Some of his friends still remember an old A. Zildjian cymbal he used that cut through everything, it was just incredibly loud. It may have had an influence on Lenny's current choice of cymbals. "Currently I use all Zildjian's. I have a 24 inch heavy, hi-buff ride, 14 inch hi-buff heavy hi-hats, an 18 inch medium crash, a 19 inch medium crash, and a 20 inch A. Zildjian rivet cymbal.

As to Lenny's kit, he merely terms it "not too outlandish. I have a Tama Superstar kit which is just right for me. It has a 14x22 bass drum, two floor toms, a 16x16 and an 16x18, four mounted toms, 8x10, 8x12, 9x13 and 10x14, and my snare is a Mastercraft Tama, 6½ inch deep, seamless metal.

"I use Remo heads throughout. All my drums are two headed. I have to feel the pressure that resonates within the drum. I put clear Remo Ambassadors on (the dots are no good for me because I don't play with a controlled sound). On the snare I use a standard coated plastic head with a Diplomat head on the bottom."



WHITE

Lenny readily admits that he's never quite liked the idea of a head giving you a controlled sound. "I'd rather be in control of the sound by the way that I hit it, rather than playing a drumhead that I have to choke. I have more options when I do it myself. You see, I may play something that warrants a particular sound at a certain point, and then I need a totally different sound for the next number. I do try to get something that's a common denominator, a sound that's more identifiable with me than the music."

This sense or feeling that Lenny tries to instill in his drum sound carried over to the way he tunes his tom toms. "I do tune them a certain way but it's difficult to explain. Once I tuned them like an augmented chord so that they would play 1,2,3,4,3,2,1. And I did tune them to the piano once. It sounded good but it didn't feel right because the tension wasn't what I was used to playing."

It all comes down to a sense of feel and what is "heard" by the drummer. In this way he explains why his kit is of modest size rather than the immense kits that are more popular today.

'I had a discussion with Billy (Cobham) about this. He has the huge octagonal kit and he asked me why I didn't use one (this was when I was playing just five toms). I told him because I didn't 'hear' them. He arqued with me saying that the reason he plays so many is because that's what he hears in his music. And in order to play those drums you've got to hear it in your music. This brings up one of the major fallacies of young drummers today. They think they have to play all these drums to be good, rather than just getting a set and adding on to it as you hear it in your music."

As to his setup, Lenny contends that it's very unorthodox. "I play primarily matchgrip. My setup is for a right handed drummer but I play left handed; except for my feet which play for a right handed setup. It's actually the most natural way to play. I don't play rudimentally but from sounds. Everything's based on doubles and singles anyway. If you can

play doubles and singles clean enough and adapt them to the set then everything's okay.

"I also play from my feet up instead of from my hands down. So I'll play rudiments between all four limbs as opposed to just my two hands. A lot of times it goes unnoticed. I pride myself on my hi-hat touch. People like Steve Gadd and Harvey Mason have picked it up."

If people are picking up things from Lenny White, as they should, they may want to think back to the way that Lenny was influenced in both technique and sound. "I always wanted to sound like Tony Williams, so I would listen to him and try and emulate it. But I took it one step further. I went back and listened to the people he listened to and things fell together easier. I listened to Max Roach, Art Blakey and Roy Haynes. But other things influenced me like certain horn players."

One thing that comes across strong in everything Lenny mentions about the influences on his music is the ingesting of one's personality into anything they do. At the time Lenny felt he sounded like Tony Williams he went along to record and the result showed that he sounded nothing like him. He had channelled Tony Williams through Lenny White and what came out was the interpretation of another person.

"Even when I write songs now I'll hear something somebody else has done and I'll say 'I gotta write something like that.' I'll take something note for note, say a particular Zawinul cliché, and put it into one of my compositions. Somebody will listen to it, say its nice, but will never be able to detect the influence. So as much as you try to sound like somebody else, what comes out is your own personality. Miles did the same thing. He wanted to sound like Clark Terry. He attempted to do that and through that came up with a totally different sound."

When discussing a comment by Tony Williams (IM&RW April, 1979) about how difficult it was to shake Miles' influence, Lenny responded: "He shouldn't have said that. Musicians don't shake influences. It's an implant, whatever you do after it comes through it. Miles is a permanent influence. He influenced so many people musically; not instrumentally because he wasn't the greatest trumpet player in the world. But he didn't have to be because the way he played was the thing that was brilliant, which makes him a genius in my eyes."

For Lenny White the musical trail has already been a long one and he feels his passage thus far has gone overlooked. "I've never been a media hero on my instrument. Not like Billy Cobham, for instance, who has been attributed with some of the things I've done. I've been an integral part of two very important periods of music but have not gotten the recognition for it. But I'm not one to jump up and down because it doesn't really matter. It will come out. And maybe in 25 years someone will read about it or hear it and think I was alright back then." Indeed.

With 39 years' experience in the design and manufacturing of several hundred thousand transformers we can supply:

AUDIO FREQUENCY TRANSFORMERS OF EVERY TYPE

YOU NAME IT! WE MAKE IT! OUR RANGE INCLUDES

Microphone transformers (all types), Microphone Splitter/Combiner, transformers. Input and Output transformers. Direct Injection transformers for Guitars, Multi-Secondary output transformers, Bridging transformers, Line transformers, Line transformers to G.P.O. Isolating Test Specification Tapped impedance matching transformers, Gramophone Pickup transformers, Audio Mixing Desk transformers (all types), Miniature transformers, Microminiature transformers for PCB mounting. Experimental transformers, Ultra low frequency transformers, Ultra linear and other transformers for Valve Amplifiers up to 500 watts. Inductive Loop Transformers, Smoothing Chokes, Filter inductors, Amplifier to 100 volt line transformers (from a few wats up to 1000 watts), 100 volt line transformers to speakers, Speaker matching transformers (all powers), Column Loudspeaker transformers up to 300 watts or more.

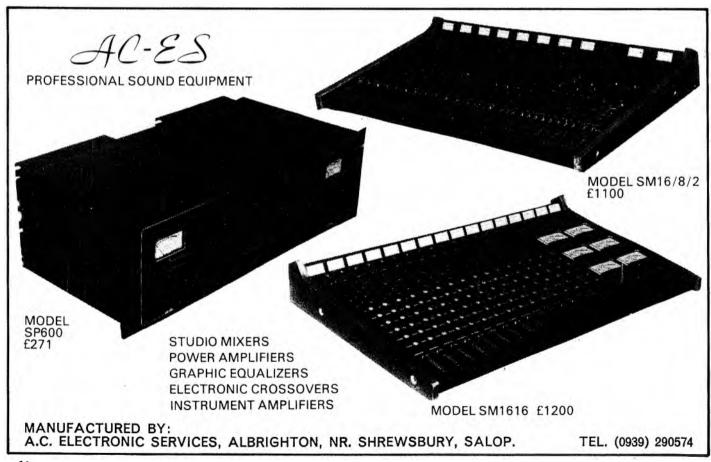
We can design for RECORDING QUALITY, STUDIO QUALITY, HI-FI QUALITY, OR P.A. QUALITY. OUR PRICES ARE HIGHLY COMPETITIVE AND WE SUPPLY LARGE OR SMALL QUANTITIES AND EVEN SINGLE TRANSFORMERS. Many standard types are in stock and normal dispatch times are short and sensible.

OUR CLIENTS COVER A LARGE NUMBER OF BROADCASTING AUTHORITIES, MIXING DESK MANUFACTURERS, RECORDING STUDIOS, HI-FI ENTHUSIASTS, BAND GROUPS, AND PUBLIC ADDRESS FIRMS. Export is a speciality and we have overseas clients in the COMMONWEALTH, E.E.C., USA, MIDDLE EAST etc.

Send for our questionnaire which, when completed, enables us to post quotation by return.

SOWTER TRANSFORMERS

Manufacturers and Designers E. A. SOWTER LTD. (Established 1941), Reg. No. England 303990 The Boat Yard, Cullingham Road, Ipswich IP1 2EG Suffolk. P.O. Box 36 Ipswich IP1 2EL, England Phone: 0473 52794 & 0473 219390





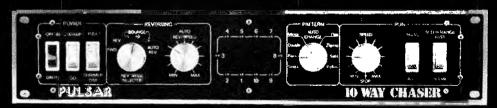
GET INTO PULSAR LIGHTING CONTROL

Professionals in more than 30 countries across the world agree that when you're talking about Pulsar, you're talking about the finest electronic lighting controls. Bands everywhere are making Pulsar their first choice, valuing Pulsar reliability as well as the artistic scope to create exciting lighting effects.

Pulsar equipment is constructed to standards which meet the gruelling demands of life 'on the road', and can adapt to all mains systems in use throughout the world.

Pulsar lighting control systems are completely versatile and are designed to be built up from a few thousand watts to systems of immense power handling simply by linking the units together.

Bands all over the world are working with Pulsar:





CONTROLS THE LIGHTING PROFESSIONALS USE

PULSAR LIGHT OF CAMBRIDGE LIMITED
HENLEY ROAD CAMBRIDGE CB1 3EA ENGLAND Tet: (0223) 66798

Circle 820 on Reader Service Card

Drumcheck

ROGERS Garibaldi X~P8 £991 inc.VAT

The history of the Rogers drum company is not particularly complicated. They are now owned by CBS and the drums are built near Los Angeles. Up until the late Sixties they were privately owned and located first in Cleveland and afterwards in Dayton, Ohio

As soon as I saw the Garibaldi set from Rogers I was anxious to try it for myself — mainly for the new XP8 shells but also because it's sizes are exactly the ones which I generally use; of course, the actual physical positioning of the drums within the set is completely different. Furthermore as you can see from the accompanying picture David Garibaldi has a completely unique way of positioning (and mounting) his four cymbals.

Dave Garibaldi is the drummer with Tower of Power who was voted US Top Drummer in 1979. He's a well-respected and schooled player who, it would appear, has thought long and hard about his set up as well as his 'chops".

This set-allows him to reach ali the sounds of his kit without excessive movement. To accomplish this tom tom-wise. he has a double row all mounted on one tripod-based floor-stand with a Memriloc holder, which has the usual triple facility to take the regular holder arms and one of Rogers' new mini dual adaptors. Which, incidentally are designed to take eight and 10-inch diameter mounted drums, but which can be persuaded to accommodate a 10 and 12. More of this handy device in the accessories section.

The floor-mounted drums are easy to play and very convenient to hit - I found rolling around the four of them from smallest to the largest a bit difficult, but I suppose given time it would come together easily. For normal tom playing though, with fills from the snare drum it was fine. (The only real problems I could see was that the more acute mounting angle of the smallest toms resulted in their heads becoming pitted). The four drums seemed agreeably stable on their stand and didn't "bounce" unduly. The set-up picture in the Rogers' catalogue seems to cheat a little because to play with the toms and ride cymbal in that

exact position would necessitate very long arms and legs!

The XP8 shells from Rogers have been in the pipeline for quite some time and were, I understand, shown at the winter NAMM show earlier this year. I first saw them at the Frankfurt trade show in March.

The main departure from the "good old" Rogers shells is their lack of glue rings and any Zolotone internal finish. Traditionally, drums could be made with much thinner shells if they had the strenghtening hoops (glue rings) "screamed" into each end. This helped to keep them round and, of course, strengthens them. (Rogers shells were made with five-ply cross-laminated maple shells and five-ply maple glue rings).

The new shells are formed from eight plies of maple, also cross-laminated, i.e. each individual piece of wood with its grain running at right angles to its neighbour, Because there's an even number of plies it's necessary to make the centre pair run the same way. This resulted in the inside and outside finish layers matching with their grains running around the shells. The bearing edges are chamfered quite sharply to give a more precise head setting, which is three plies in from the outside edge. The lamination joints are staggered around the circumference of the shell to avoid any weak points and these are at right angles to the shell edge (not like most of the newer manufacturers) at an angle to it. The interiors of the new shells are laquered very lightly just enough to seal the wood.

The sound of the XP8 shells seems to me to be a little deeper than the new ones, but I was only able to do my A-B test on a Power-Tone fitted set with Remo rough-coated Ambassador heads. The XP8 sets all have CS-type heads from Remo with a white spot with a black line pin-stripe around it. The sympathetic bottom head on all the wooden drums is a see-through Ambassador. Rogers claim the new shells give more volume which could be the case, because obviously, the less protrusions in a shell, the clearer the sound; so by taking away the glue rings, they might have added a little



extra power.

Tom toms

Garibaldi's outfit comes with five double-headed toms: 8×8 , 8×10 , 8×12 , 9×13 , and 16 × 16 floor standing. The eight-inch drum has four "beaver-tail" nut boxes per head, then ten has six - as do the other mounted drums and the floor tom has 16 in total. All drums have Rogers square-headed tension screws and triple-flange counterhoops. None of the toms are fitted with internal dampers anymore, and in my catalog don't have super X external dampers on them. These toms all have Rogers' clear sound which I have always been partial to - they do have strength and penetration but also a great deal of warmth. Incidentally, Rogers are the only company I know who have made what has become an anachronism - a six-inch tom tom. Their six was a bongo.

Bass drum

The Garibaldi set has a 14 × 22 inch bass drum with an XP8 shell and maple counterhoops sprayed black and inlaid with chromed, reeded plastic. The 16 has 10 be a vertail nut boxes per hand, pressed steel claws and timpani type cold hard built 'T' handled tension rods which don't appear to have changed over the years in which I have always lived. I immediately tried the drum single headed and found it produced a good 'thump' within just the 2" wire folt strip damper provided. Of course, packed with a pillow or a blanket the drum sounded ideal for recording or miked-up stage work. With both heads on though, its got a nice round tone providing you fit one of the strip dampers to the front head too. The drum has a tube extending on the way down its diameter in the centre of the shell. This takes the cymbal arm down tube of the Garibaldi set, and is very convenient to push padding behind to overdampen the drum for heavyduty playing. I've mentioned this before the Rogers company maintain that their felt strip damper should be fitted not as normal across dead centre of the drum but to one side. about four inches from the hoop. This way the buzz often

associated with central dampers is eliminated - try it and see if it works for you. Recently. I've been using Rogers cast hoop spancers on single-headed bass drum. These allow the player to replace his hoop and hardware subtracting several pounds from the drum to give even more weight to its sound. {| find that even a head with a very large hole in the front tends to effect the sound adversely) so, the bass drum, like the tom toms has a very clear sound.

As far as I can gather from the XP8 catalogue the bass drums are only available in diameters of 20, 22 and 24. This is three less than were originally available. I've always been particularly partial to the 18-inch Rogers bass drum.

Snare Drum

Like every bit in the catalogue (except for Headliner Four) this set has a Dynasonic snare drum. All the sets pictured have five inch deep shells but a 61/2 shell is available. This Dynasonic has a metal shell with 10 doubleended cast nut-boxes and for those of you unfamiliar with it in detail here's its history. It was introduced in 1962 and uses a specially designed and unique cast aluminium frame built completely around its snare which keeps it taut at all times even when the snare is not in the "on" position (so not touching the head). The result of this innovation is, of course, an "un-choked" snare drum sound with clear definition and next to no distortion. The brass shell is strengthened with five thin beads in the center and two deep from distorting out of shape. It has Rogers triple-flange hoops and a substantial, internal-batterhead operating damper which has just had its control knob up-dated (it looks slightly larger with a dimpled top and is also to be found with a milled edge on the snare strainer). The strainer, is Rogers version of the adjustable sideways cam-locking unit favored by several of the other manufacturers - but cast.

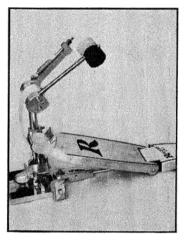
As I mentioned last time I reviewed Rogers, the **Dynasonic** doesn't have a snare bed indentation in its bottom flange to accom-

modate its snare frame, It's because of this that the drum does not convert quite so readily to ordinary cord attached type snares. Because in my experience drummers either like or hate the Dynasonic, lots of guys have fallen "out of love" with the floating snare frame and endeavoured to make it into a "Super ten" changing the unit to the unsophisticated 20-strand snappy snares. These Rogers snares are not stretched but manufactured to seven coils per inch and not soldered but glued to their butt plates. (The heat used in soldering is said to weaken the coil and make them less resistent.) The idea behind the Dynasonic is that nothing other than the snare wires touch the bottom head not the cords or the snare butt plates which tend to deaden the response. Three years ago Rogers changed the bottom rim a little to enable complete uninterrupted key turns at the four snare-guard positions. While I think of it, all Rogers drums have the normal American square-headed tension screws which have now been adopted by Premier. This now means that Sonor are the only world-famous manufacturers who fit screw-driver operated tensioners.

I personally like the Dynasonic and have had one for quite some time. I know though that it's not everybody's "cup of tea". It's a crisp powerful drum but a little more brittle than a Ludwig.

This outfit as usual features Memriloc which Rogers have been using for the past five years or so. It's a system for adjusting height, angle and position on the drum set. Instead of the Swivo-matic fixtures we have much more substantial cast aluminium ones.

Basically, the height adjustment on the all the strand is held by a cast aluminium clamp (rather like a shaped pipe clip) which is locked into position with a square type drum key. This clamp fits on to any of the extra large diameter tubes on the sets. Once set, this clamp locates into a cast aluminium black situated at the top of all the tubes on cymbal, hi-hat or snare drum stands and, of course, the stool. It also acts as the seli-mount receiver on



the tom tom and bass drum shelis. The Memriloc clamp once in its receiver block is locked with a cast using bolt. The block itself is interchangeable for bass drum mounted tom tom or tom tom receiver or spur mounting.

Accessories

The hi hat is an updated version of Rogers' Supreme model. This one has a twopiece cast aluminium foot plate and saddle with two replaceable joining straps to its adjustable spring, nylon-sleeved centre-pull mechanism. This model naturally enough has Memriloc height adjustment, and in this case, the bottom cymbal support is made 1" diameter, chrome satinfinished steel. (This sating chrome finish is applied to all tubes in the areas where locking and adjustment are needed and gives added holding power.) This top tube had an extra large and agreeable locking angle and an adjustable nylon bottom cymbal-seating unit which contributes greatly to the overall stability of the hi-

The Supreme hi-hat stand at its normal maximum wouldn't extend high enough for me, for comfortable play (with a multi tom tom set-up). But on leafing through an old catalogue I notice Rogers offer a 7" extension rod which would be the answer to that particular problem. The pedal's action is as smooth as silk and effortless.

The Supreme bass drum pedal is, in concept, the same as the old Swivornatic but like the hi hat is almost completely made from cast aluminium. It also has a two-piece footplate and a new more positive way of clamping itself to the hoop.



96

Circle 719 on Reader Service Card

Drumcheck

It's a cam-activated clamp which tightens with an "L"-shaped bar. The pedal is adjustable in every possible way; the spring tension, the stroke (for more or less powered volume), the beater height for larger or smaller bass drums (the striking arc remains the same), and the angle of the footplate to the bass drum, itself.

All these variables can be self-customized to your exact playing style requirements.

The beater is a double-sided egg-shaped affair futuristic and aerodynamic in shape, and made of synthetic material lighter than wood. A small piece of felt is stuck to the narrow end of the egg and the shaft is 5/16" in diameter and so less prone to bending and whipping than normal. The sound from the "black jack" beater is amazing it really does give pinpoint definition to the sound of any brass drum. I've been using one now for a year or two (but with a thinner %" shaft) which I was very surprised to break on a TV programme recently.

The beater can turned and used with its felt or synthetic side which most recording engineers find to be a very desirable feature. I've been the owner of an old Swivomatic bass pedal for many years now and to be honest haven't got on with it too well. It has some features about it which I don't like. The supreme though, I like - once adjusted it works well. Once before when testing a "Supreme" I managed to make the footplate swivel on its axis horizontally. The company have remedied this by fitting an extra drum key operated screw to the swivel with assembly. This cast assembly is available as a direct replacement for the old pressed steel one which used to be fitted to the old Swivomatic pedal.

The Rogers company have placed strengthening "blobs" around the pedal's base where the beater axles height adjustment is. The Memriloc cymbal stand also doubles as the base of the floor standing triple (on double) tom tom steel. As I said earlier, the single tripod base has four drums mounted on it — the largest two are suspended via Rogers' normal bass drum mounted block

which is lightly adjustable. The holder l'Il reiterate is adjustable "L"-shaped arm which in Rogers case is more from 1" gauge tubular steel which is non-slip, satin-chromed. The fitting between tom tom and holder block is moveable on a vertical axis, like its German predecessors on a time toothed, spring-loaded axis, like its German predecessors on a ratchet which is itself secured by a bass drum tensioner-type using bolt. The cast rachet arm has grooves cast into it to facilitate a more safe and positive vertical tom tom position.

The standard cast tom holder has a facility to hold up three mounted drums because of its three ratchet arm receiving holes bored into it. These holes are ingeniously engraved around their circumference with numbers like a clock. This is to (quote) "Duplicate the exact horizontal axis setting each time." It's known as Memri-Dial

To set the holder up for the four tom toms in the Garibaldi. style we replace the top arm on the ratchet with a "Mini-Dual" tom holder. This is a cast unit designed to fit on the top pair of a cymbal holder which has two unadjustable "Y" arms sticking from it. Because it's working on a ratchet, the angle of the drums is moveable but together. The drums fit to the twin arms in the normal Memriloc way and as I said before, work well. They are of course, quite adjustable in their positions on the arms although I presume most players would position them until they almost touched.

The Memriloc bass drum spurs are constructred from Rogers' normal one inch diameter tube which can be used with or without a rubber tip. These tubes have semi-circular diametric sections cut out of them at their end, which means the edges so formed work like double spurs, which definitely stop the drum from creeping. The spurs do work well but I'm not knocked out by their appearance. Their Memriloc holder block which is fixed to the shell is exactly the one used for retaining all the other tubes on the set.

I'm sure everybody must know by now that Rogers' legs are no longer held in position

by the old "knobby" type fittings - nowadays they too, use Memriloc-type fittings. The legs are no longer made from hezagonal rod but of 5/8" O.D. tube which I think is steel. The legs have rubber crutch tips instead of the plastic inserts they originally had. The actual leg holder is a cast block bolted to the shell via a metal plate which I've been assured matches exactly the holes in the old fitting. So if you have all the old type you can change to the modern one. A height clamp ring fits around the leg, locks with a drum key and then locates like a Memriloc into a female retaing indentation in the cast block. It's very sturdy.

I saw the Rogers flat base snaredrum stand last time and commented on it then, but for new readers I'll run through it one more time. The stand is unlike anything they've done before. It's not an adjustable basket-type but instead has two fixed holding arms and one diametrically moveable one. The arms no longer have rubber tips but right angled aluminium brackets which locate into the recess of the triple flange hoop on the snare side. They are coated in nonstick Teflon as are the two faces of the playing angle adjustment plates. For safety reasons the moveable retaining arm doesn't adjust too far, because it's possible to squash your drum out of tune if excessive adjusting force is used.

To accommodate different size drums Rogers have thoughtfully provided several alternative holes to locate the moveable right-angled brackets. The playing angle adjustment is adjustable on a splined ratchet tilter. The stand has a flatish tripod base but a more substantial one is available (although not as standard).

The cymbal stands on the set are unusual. To the extreme right is a double set-up which is mounted on a double tom tom stand where two ratchet arms actually locate as for the double tom toms. These "L"-shaped arms have one ratchet immediately above the holder block and another about eight inches or so above that, to send the top horizontal tube out sideways. Each "L" arm has one of Rogers' ac-

cessory clamps fixed to it and this accepts the top tiltersection part of an ordinary cymbal stand. (Rogers designate this top part of cymbal tilter rod assembly). This then is our double cymbal setup. The Garibaldi set also has a tom tom ratchet-type arm fitted to the center of the bass drum via a Memriloc block, This ratchet arm is set art right angles but can be, of course, at every angle - to this is fixed another accessory clamp and the same sort of cymbal tilterrod assembly. This is Rogers new style shell mount cymbal arm.

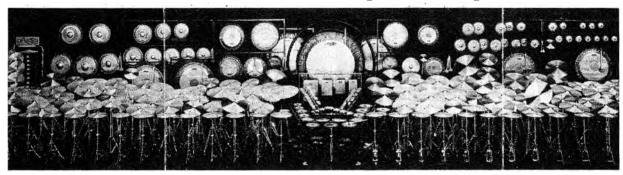
The other sort of cymbal stand is set in the left hand side and is one of Rogers boom arm stands. (I must say I don't see why it should be necessary but there it is so I'll describe it for you). It has the normal tripodtype base with Memriloc at first, second and third stages. At the top of this normal cymbal stand is the ratchet which normally holds the tilter. However, with the boom stand the half of the ratchet sandwich actually rivetted to the top tube has a clamp with a bass drum tensioner-type thumbscrew. This tube locates our old friend, the cymbal tilter-rod assembly. This one, however, has a Memriloc-type pipe clip fixed to it which located in the other half (the main part) of the unit - which is fitted to a tube with a large cast counterweight shape like a bar of soap fixed directly to it. Anyway, the Rogers boom stand is stable enough without being over the top in weight or span,

Conclusion

The Garibaldi 1910 set I saw was platic finished in Blue Mist 194 which is one of only a dozen very professionallooking finishes. All of them are highly acceptable and the wooden finishes like "Natural Maple" and "Californian Wine" are my favourites. I've said before and I don't mind saying again that the Memriloc system makes Rogers drum ideal to stand up to the rigours of heavy touring, I've always found Rogers' drums stimulating to play and these latest XP8 drums are no exception.

HONKY-TONK DRUMSTORE

Now BIGGER and BETTER at our new address: 300 to 302, London Road, Hadleigh, Essex, England



BIGGEST SELECTION... BIGGEST STOCKS... BIGGEST DISCOUNTS

LUDWIG 'A' DEALER LUDWIG "A" DEALER Ludwig 5-drum combo one audit, blue Vistalite. 445 Ludwig 5-drum combo one outsif, Black Vistalite. 465 Ludwig 5-drum combo two outfit, Blue Vistalite. 465 Ludwig 5-drum combo two outfit, Black Vistalite. 485 Ludwig 5-drum Big Beat, white. 546 Ludwig 5-drum Big Beat, chrome on wood. 556 Ludwig 5-drum Big Beat, chrome on wood. 556 Ludwig 5-drum Bock Kir, yellow cortex. 745 Ludwig 6-drum pro beat, natural maple. 555 Ludwig 6-drum promote, natural maple. 1150 Ludwig 9-drum sound projection, black cortex. 1295 Ludwig Hercules bom crymbal stands. 55 Ludwig Hercules Trailing 156 Ludwig Hercules Trailing 156 Ludwig Hercules III flast stands. 50 Ludwig Hercules III flast stands. 36 Ludwig Speed King bass drum pedals. 45 ROGERS DRUMHOUSE ROGERS DRUMHOUSE Rogers 5-drum greater londoner V outfit, ebony. 666 Rogers 5-drum Greater London V outfit, Spenish gold. 665 Rogers 5-drum Londoner V outfit, Sunburst maple. 645 Rogers 5-drum Londoner V outfit, Sunburst maple. 645 Rogers 5-drum Londoner V outfit, Sunburst maple. 645 Rogers 5-drum Londoner V outfit, Sulver. 595 Rogers 5-drum Londoner V swivomatic, mehogany red. 450 Rogers 5-drum Londoner V swivomatic, mehogany red. 450 Rogers Memiliock boom cymbal stands. 45 Rogers Memiliock supreme bass drum pedals. 45 Rogers Memiliock supreme bass drum pedals. 42 Rogers Memiliock supreme bass drum pedals. 34 Rogers Samson drum thrones. 45 TAMA SUPERSTORE PREMIER MAIN AGENTS Premier 5-drum eite kit, trilock stands. 665 Premier 5-drum eite kit, trilock stands. 669 Premier 5-drum eite kit, trilock stands. 629 Premier 6-drum soundwave kit, Lockfast stands. 625 Premier 6-drum sundwave kit, lockfast stands. 595 Premier 6-drum triple tom concert kit, secondhand. 325 Premier 6-drum kit, big süses, secondhand. 325 Premier 4-drum resonator kit, secondhand. 296 Premier Trilock borom cymbal stands. 39 Premier Trilock staright cymbal stands. 39 Premier Trilock staright cymbal stands. 32 Premier Trilock staright cymbal stands. 32 Premier Lockfast borom cymbal stands. 32 Premier Lockfast borom cymbal stands. 34 Premier Lockfast staright cymbal stands. 34 Premier Lockfast staright cymbal stands. 34 Premier Lockfast stands trylockfast stands 36 Premier Lockfast stands drum stands. 28 Premier 250 bass drum pedals. 45 Premier 250 bass drum pedals. 22 TRESTINCERD AND CENTRE THE SLINGERLAND CENTRE Singerland 7-drum blues time kit, ebony. 845 Singerland 5-drum lime machine kit, ebony. 675 Singerland 5-drum lime machine kit, ebony. 675 Singerland 5-drum kit secondinand, chrome. 128 Singerland Custom brass 6½ snare drums. 128 Singerland boom cymbal stands. 39 Singerland streight cymbal stands. 29 Singerland snare drum stands. 26 Singerland snare drum stands. 26 Singerland yellow jacket bass drum pedals. 34 Singerland yellow jacket hi-hat pedals. 44 SONOR KEY DEALER

PEARL & MAXWIN CENTRE	
Pearl 7-drum innovation kit, green.	. 565
Pearl 5-drum rock kit, wood shells, wine. Pearl 5-drum rock kit, fibreglass, yellow. Pearl 5-drum Powermate, wood, black.	.495
Pearl 5-drum Powermate, wood, black,	475
Pearl 5-drum Powermate, wood, blue. Pearl 5-drum Thunderking, wood, sliver.	. 475
Pearl 5-drum export kit, wood, deet. Pearl 6-drum export kit, wood, deet. Pearl 6-drum export kit, wood, white. Pearl 6-drum export kit, wood, red. Pearl 5-drum export kit, wood, blue.	. 325
Pearl 6-drum export kit, wood, white	. 325
Pearl 5-drum export kit, wood, fed	325
Pearl 900 hi-hat pedals. Pearl 903 cymbal stands. Pearl 903B boom cymbal stands.	35
Pearl 903 cymbal stands.	25
Pearl 9038ST short boom cymbal stands	31
Pearl 906 snare drum stand	18
Pearl 910 bass drum pedals	42
Pearl 800 hi-hat stands	18
Pearl 803 Cymbal stands. Pearl 803BS short boom cymbal stands.	25
Pearl 806 snare drum stands. Pearl 810 bass drum pedals. Maxwin 805 5-drum rock kit, targe sizes, white	18
Maxwin 805 5-drum rock kit, large sizes, white	. 285
Maxwin 805 5-drum deluxe kit. black	. 265
Maxwin 705 5-drum standard kii, red. Maxwin 705 5-drum standard kii, red. Maxwin 705 5-drum standard kii, orange. Maxwin 705 5-drum standard kii, green. Maxwin 405 5-drum concert kit, black. Maxwin 405 5-drum concert kit, white.	225
Maxwin 705 5-drum standard kit, green	. 225
Maxwin 405 5-drum concert kit, black,	. 199 199
Maxwin 405 5-drum concert kit, wine	. 199
Maxwin 8 inch x 10 inch concert tom toms,	
Maxwin 12 inch x 13 inch concert tom toms,	42
black or silver	65
black or silver. Maxwin 14 Inch x 16 Inch concert tom toms.	
black or silver	95
Maxwin 703B boom cymbal stands	17
Maxwin 703 straight cymbal stands	10
Maxwin 706 snare drum stands	13
Maxwin 805 hi-hat stands.	20
GRETSCH DRUMPAD	
Greisch 7-drum concert kit, chrome on wood,	
Annondhand	
300011011011011011111111111111111111111	. 525
secondhand	. 525
Gretsch 5-drum Broadkaster kit, chrome on wood, stands. Gretsch 5-drum black hawk kit, black.	. 525 . 696 . 595
stands. Gretsch 5-drum black hawk kit, black. Gretsch heavy duty cymbal stands.	. 595 . 595
stands. Gretsch 5-drum black hawk kit, black. Gretsch heavy duty cymbal stands.	. 595 . 595
stands. Gretsch 5-drum black hawk kit, black. Gretsch heavy duty cymbal stands. Gretsch heavy duty si-hat stands. Gretsch heavy duty snae stands.	. 595 . 595 27 35
stands. Gretsch 5-drum black hawk kit, black. Gretsch heavy duty cymbal stands. Gretsch heavy duty hi-hat stands. Gretsch heavy duty snare stands. Gretsch heavy duty base drum podals.	. 595 . 595 27 35
stands. Gretsch 5-drum black hawk kit, black. Gretsch heavy duty cymbal stands. Gretsch heavy duty si-hat stands. Gretsch heavy duty sines stands. Gretsch heavy duty sines stands. Gretsch heavy duty sines stands. Gretsch heavy duty base drum pedals. YAMAHA PRO CENTER	. 595 . 595 27 35 25 32
Stands. Gretsch S-drum black hawk kit, black. Gretsch heavy duty cymbol stands. Gretsch heavy duty hi-hat stands. Bretisch heavy duty snare stands. Gretsch heavy duty base drum pedels. YAMAHA PRO CENTER	. 695 . 595 27 35 26 32
Stands. Gretsch S-drum black hawk kit, black. Gretsch heavy duty cymbol stands. Gretsch heavy duty hi-hat stands. Bretisch heavy duty snare stands. Gretsch heavy duty base drum pedels. YAMAHA PRO CENTER	. 695 . 595 27 35 26 32
Stands. Gretsch S-drum black hawk kit, black. Gretsch heavy duty cymbol stands. Gretsch heavy duty hi-hat stands. Bretisch heavy duty snare stands. Gretsch heavy duty base drum pedels. YAMAHA PRO CENTER	. 695 . 595 27 35 26 32
Stands. Gretsch S-drum black hawk kit, black. Gretsch heavy duty cymbol stands. Gretsch heavy duty hi-hat stands. Bretisch heavy duty snare stands. Gretsch heavy duty base drum pedels. YAMAHA PRO CENTER	. 695 . 595 27 35 26 32
Stands. Gretsch S-drum black hawk kit, black. Gretsch heavy duty cymbol stands. Gretsch heavy duty hi-hat stands. Bretisch heavy duty snare stands. Gretsch heavy duty base drum pedels. YAMAHA PRO CENTER	. 695 . 595 27 35 26 32
stands. Gretsch 5-drum black hawk kit, black. Gretsch heavy duty cymbal stands. Gretsch heavy duty si-hat stands. Gretsch heavy duty sines stands. Gretsch heavy duty sines stands. Gretsch heavy duty sines stands. Gretsch heavy duty base drum pedals. YAMAHA PRO CENTER	. 695 . 595 27 35 26 32
stands. Gretsch S-drum black hawk kit, black. Gretsch beavy duty cymbal stands. Gretsch heavy duty shat stands. Gretsch heavy duty base drum pedels. YAMAHA PRO CENTER Yamaha S-drum 5000 series outfit, silky black. Yamaha S-drum 5000 series outfit, silky black. Yamaha S-drum 5000 series outfit, silky roust. Yamaha S-drum 5000 series outfit, secondhand. Yamaha 700 cumbal stands. Yamaha 700 share drum stands. Yamaha 700 share drum stands. Yamaha 700 bass drum pedals.	. 695 . 595 27 35 26 32
stands. Gretsch S-drum black hawk kit, black. Gretsch beavy duty cymbal stands. Gretsch heavy duty in-hat stands. Gretsch heavy duty share stands. Gretsch heavy duty snare stands. Gretsch heavy duty sase stands. YAMAHA PRO CENTER Yamaha S-drum 5000 series outfit, siky blue. Yamaha S-drum 5000 series outfit, siky blue. Yamaha S-drum 5000 series outfit, siky blue. Yamaha S-drum 5000 series outfit, siky ust. Yamaha S-drum 5000 series outfit, secondhand. Yamaha 700 cumbal stands. Yamaha 700 series drum stands. Yamaha 700 series drum stands. Yamaha 700 bass drum pedals.	. 595 . 595 . 27 . 35 . 26 . 365 . 3
stands. Gretsch S-drum black hawk kit, black. Gretsch beavy duty cymbal stands. Gretsch heavy duty inhat stands. Gretsch heavy duty share stands. Gretsch heavy duty snare stands. Gretsch heavy duty saner stands. YAMAHA PRO CENTER Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky plue. Yamaha 5-drum 5000 series outfit, siky stands. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 series outfit, secondhand. Yamaha 700 series drum stands. Yamaha 700 bass drum pedals. ACCESSORIES Rottoroms 6 + 8 + 10 bar and Rogers stand. Rottoroms 8 + 10 + 12 bar and Rogers stand.	. 595 . 595 . 595 . 27 . 35 . 26 . 365 . 3
stands. Gretsch S-drum black hawk kit, black. Gretsch beavy duty cymbal stands. Gretsch heavy duty in-hat stands. Gretsch heavy duty in-hat stands. Gretsch heavy duty snare stands. Gretsch heavy duty snare stands. Yamaha S-drum 5000 series outfit, siky blue. Yamaha S-drum 5000 series outfit, siky blue. Yamaha S-drum 5000 series outfit, siky rust. Yamaha 700 cumbal stands. Yamaha 700 share drum stands. Yamaha 700 share drum stands. Yamaha 700 bass drum pedals. ACCESSORIES Rototoms 6+8+10 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Rototoms 2+14 bar and Rogers stand.	. 595 . 595 . 27 . 35 . 35 . 365 . 365 . 365 . 365 . 365 . 365 . 35 . 35 . 35 . 35 . 35 . 35 . 35 . 3
stands. Gretsch S-drum black hawk kit, black. Gretsch beavy duty cymbal stands. Gretsch heavy duty in-hat stands. Gretsch heavy duty in-hat stands. Gretsch heavy duty snare stands. Gretsch heavy duty snare stands. YAMAHA PRO CENTER Yamaha 5-drum 5000 series outfit, silky blue. Yamaha 5-drum 5000 series outfit, silky blue. Yamaha 5-drum 5000 series outfit, silky black. Yamaha 5-drum 5000 series outfit, silky fust. Yamaha 5-drum 5000 series outfit, silky rust. Yamaha 700 cermbal stands. Yamaha 700 cermbal stands. Yamaha 700 share drum stands. Yamaha 700 bess drum pedals. ACCESSORIES Rototoms 6+8+10+12 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Bototoms 12+14 bar and Rogers stand. Elsetro-Harmonix space drums.	. 695 . 595 . 357 . 35 . 27 . 35 . 28 . 365 . 365 . 365 . 365 . 365 . 365 . 365 . 37 . 385 . 385
stands. Gretsch S-drum black hawk kit, black. Gretsch S-drum black hawk kit, black. Gretsch heavy duty in-hat stands. Gretsch heavy duty share stands. Gretsch heavy duty snare stands. Gretsch heavy duty same stands. YAMAHA PRO CENTER Yamaha S-drum 5000 series outfit, silky blue. Yamaha S-drum 5000 series outfit, silky ust. Yamaha S-drum 5000 series outfit, secondhand. Yamaha 700 cumbal stands. Yamaha 700 series drum stands. Yamaha 700 series drum stands. Yamaha 700 bess drum pedals. ACCESSORIES Rototoms 5 + 8 + 10 bar and Rogers stand. Rototoms 8 + 10 + 12 bar and Rogers stand. Blectro-Harmonix space drums. Electro-Harmonix deluxe space drums. Synare three drum synthesisers.	. 696 . 597 . 35 . 365 . 365 . 365 . 365 . 365 . 365 . 365 . 32 . 35 . 35 . 365 . 36
stands. Gretsch S-drum black hawk kit, black. Gretsch S-drum black hawk kit, black. Gretsch heavy duty in-hat stands. Gretsch heavy duty snare stands. Gretsch heavy duty snare stands. Gretsch heavy duty snare stands. YAMAHA PRO CENTER Yamaha S-drum 5000 series outfit, silky blue. Yamaha S-drum 5000 series outfit, silky blue. Yamaha S-drum 5000 series outfit, silky plue. Yamaha S-drum 5000 series outfit, silky plue. Yamaha S-drum 5000 series outfit, silky plue. Yamaha 700 cumbal stands. Yamaha 700 surae drum stands. Yamaha 700 snare drum stands. Yamaha 700 snare drum stands. Yamaha 700 snare drum stands. ACCESSORIES Rototoms 6+8+10 bar and Rogers stand. Rototoms 12+14 bar and Rogers stand. Electro-Harmonix space drums. Electro-Harmonix deluxe space drums. Synare three drum synthesisers. Synare three drum synthesisers.	. 595 . 595 . 27 . 35 . 32 . 365 . 3
stands. Gretsch S-drum black hawk kit, black. Gretsch beavy duty cymbal stands. Gretsch heavy duty in-hat stands. Gretsch heavy duty share stands. Gretsch heavy duty snare stands. Gretsch heavy duty save stands. Gretsch heavy duty save stands. YAMAHA PRO CENTER Yamaha 5-drum 5000 series outfit, silky blue. Yamaha 5-drum 5000 series outfit, silky blue. Yamaha 5-drum 5000 series outfit, silky ust. Yamaha 5-drum 5000 series outfit, siky ust. Yamaha 5-drum 5000 series outfit, secondhand. Yamaha 700 cumbal stands. Yamaha 700 series outfit, secondhand. Yamaha 700 series outfit, secondhand. Yamaha 700 series outfit, secondhand. ACCESSORIES Rototoms 6 + 8 + 10 bar and Rogers stand. Rototoms 8 + 10 + 12 bar and Rogers stand. Blectro-Harmonix space drums. Electro-Harmonix delluxe space drums. Synare sensor drum synthesisers. Synares sensor drum synthesisers.	. 595 . 527 . 325 . 327 . 327 . 365 . 365 . 365 . 365 . 365 . 327 . 35 . 35 . 35 . 35 . 35 . 35 . 365 . 365
stands. Gretsch S-drum black hawk kit, black. Gretsch beavy duty cymbal stands. Gretsch heavy duty inhat stands. Gretsch heavy duty share stands. Yamsha S-drum 5000 series outfit, silky black. Yamsha S-drum 5000 series outfit, silky plack. Yamsha S-drum 5000 series outfit, silky plack. Yamsha S-drum 5000 series outfit, silky plack. Yamsha 700 cumbal stands. Yamsha 700 oumbal stands. Yamsha 700 share drum stands. Yamsha 700 share drum stands. Yamsha 700 bess drum pedals. ACCESSORIES Rototoms 6+8+10 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Electro-Harmonix space drums. Electro-Harmonix space drums. Synare sensor drum synthesisers. Synare sensor drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers, secondhand.	. 595 . 527 . 325 . 327 . 327 . 365 . 365 . 365 . 365 . 365 . 327 . 35 . 35 . 35 . 35 . 35 . 35 . 365 . 365
stands. Gretsch S-drum black hawk kit, black. Gretsch Servy duty cymbal stands. Gretsch heavy duty in-hat stands. Gretsch heavy duty in-hat stands. Gretsch heavy duty snare stands. Gretsch heavy duty snare stands. YAMAHA PRO CENTER Yamaha S-drum 5000 series outfit, siky blue. Yamaha S-drum 5000 series outfit, siky ust. Yamaha S-drum 5000 series outfit, secondhand. Yamaha 700 cumbal stands. Yamaha 700 series drum stands. Yamaha 700 bass drum pedals. ACCESSORIES Rototoms 6+8+10 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Blactro-Harmonix space drums. Electro-Harmonix space drums. Synare three drum synthesisers. Synare sensor drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers.	. 896 . 27 . 35 . 26 . 365 . 365 . 365 . 365 . 365 . 450 . 35 . 35 . 35 . 450 . 35 . 35 . 450 . 35 . 35 . 365 . 365 . 365 . 450 . 365 . 36
stands. Gretsch S-drum black hawk kit, black. Gretsch Servy duty cymbal stands. Gretsch heavy duty inhat stands. Gretsch heavy duty snare stands. Gretsch heavy duty snare stands. Gretsch heavy duty snare stands. YAMAHA PRO CENTER Yamaha S-drum 5000 series outfit, silky blue. Yamaha S-drum 5000 series outfit, silky blue. Yamaha S-drum 5000 series outfit, silky plusc. Yamaha S-drum 5000 series outfit, silky plusc. Yamaha S-drum 5000 series outfit, silky fust. Yamaha S-drum 5000 series outfit, secondhand. Yamaha 700 umbal stands. Yamaha 700 umbal stands. Yamaha 700 share drum stands. Yamaha 700 share drum stands. Yamaha 700 share drum stands. Yamaha 700 bass drum pedals. ACCESSORIES Rototoms 6+8+10 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Rototoms 12+14 bar and Rogers stand. Electro-Harmonix space drums. Electro-Harmonix space drums. Synare three drum synthesisers. Synare stand drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers. SNARE DRUMS Ludwig black beauty 6½ Inch.	. 595 . 527 . 325 . 327 . 327 . 365 . 365 . 365 . 365 . 365 . 327 . 35 . 35 . 35 . 35 . 35 . 35 . 365 . 365
stands. Gretsch S-drum black hawk kit, black. Gretsch Servy duty cymbal stands. Gretsch heavy duty inhat stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Gretsch heavy duty same stands. YAMAHA PRO CENTER Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky stands. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 bass drum pedals. ACCESSORIES Rottorms 8+ 10+ 12 bar and Rogers stand. Rottorms 8+ 10+ 12 bar and Rogers stand. Blectro-Harmonix space drums. Electro-Harmonix space drums. Synare ensect drum synthesisers. Synare ensect drum synthesisers. Simmons twin drum synthesisers.	. 595 . 27 . 35 . 25 . 365 . 3
stands. Gretsch S-drum black hawk kit, black. Gretsch Servy duty cymbal stands. Gretsch heavy duty inhat stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Gretsch heavy duty same stands. YAMAHA PRO CENTER Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky stands. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 bass drum pedals. ACCESSORIES Rottorms 8+ 10+ 12 bar and Rogers stand. Rottorms 8+ 10+ 12 bar and Rogers stand. Blectro-Harmonix space drums. Electro-Harmonix space drums. Synare ensect drum synthesisers. Synare ensect drum synthesisers. Simmons twin drum synthesisers.	. 595 . 27 . 35 . 25 . 365 . 3
stands. Gretsch S-drum black hawk kit, black. Gretsch Servy duty cymbal stands. Gretsch heavy duty hi-hat stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Yamaha S-drum 5000 series outfit, siky blue. Yamaha S-drum 5000 series outfit, siky plue. Yamaha S-drum 5000 series outfit, siky rust. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 share drum stands. Yamaha 700 share drum stands. Yamaha 700 bass drum pedals. ACCESSORIES Rototoms 6+8+10 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Electro-Harmonix space drums. Electro-Harmonix space drums. Electro-Harmonix deluxe space drums. Synare three drum synthesisers. Synare sensor drum synthesisers. Simmons twin drum synthesisers. Ludwig black beauty 6½ Inch. Ludwig 400 snare 6 % Inch. Ludwig 400 snare 6 % Inch.	. 695 . 27 . 35 . 25 . 32 . 365 . 365 . 450 . 325 . 450 . 325 . 355 . 450 . 325 . 325 . 450 . 325 . 32
stands. Gretsch S-drum black hawk kit, black. Gretsch Servy duty cymbal stands. Gretsch heavy duty hi-hat stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Yamaha S-drum 5000 series outfit, siky blue. Yamaha S-drum 5000 series outfit, siky plue. Yamaha S-drum 5000 series outfit, siky rust. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 share drum stands. Yamaha 700 share drum stands. Yamaha 700 bass drum pedals. ACCESSORIES Rototoms 6+8+10 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Electro-Harmonix space drums. Electro-Harmonix space drums. Electro-Harmonix deluxe space drums. Synare three drum synthesisers. Synare sensor drum synthesisers. Simmons twin drum synthesisers. Ludwig black beauty 6½ Inch. Ludwig 400 snare 6 % Inch. Ludwig 400 snare 6 % Inch.	. 695 . 27 . 35 . 25 . 32 . 365 . 365 . 450 . 325 . 450 . 325 . 355 . 450 . 325 . 325 . 450 . 325 . 32
stands. Gretsch S-drum black hawk kit, black. Gretsch Servy duty cymbal stands. Gretsch heavy duty hi-hat stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Yamaha S-drum 5000 series outfit, siky blue. Yamaha S-drum 5000 series outfit, siky plue. Yamaha S-drum 5000 series outfit, siky rust. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 share drum stands. Yamaha 700 share drum stands. Yamaha 700 bass drum pedals. ACCESSORIES Rototoms 6+8+10 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Electro-Harmonix space drums. Electro-Harmonix space drums. Electro-Harmonix deluxe space drums. Synare three drum synthesisers. Synare sensor drum synthesisers. Simmons twin drum synthesisers. Ludwig black beauty 6½ Inch. Ludwig 400 snare 6 % Inch. Ludwig 400 snare 6 % Inch.	. 695 . 27 . 35 . 25 . 32 . 365 . 365 . 450 . 325 . 450 . 325 . 355 . 450 . 325 . 325 . 450 . 325 . 32
stands. Gretsch S-drum black hawk kit, black. Gretsch Servy duty cymbal stands. Gretsch heavy duty hi-hat stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Yamaha S-drum 5000 series outfit, siky blue. Yamaha S-drum 5000 series outfit, siky plue. Yamaha S-drum 5000 series outfit, siky rust. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 share drum stands. Yamaha 700 share drum stands. Yamaha 700 bass drum pedals. ACCESSORIES Rototoms 6+8+10 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Electro-Harmonix space drums. Electro-Harmonix space drums. Electro-Harmonix deluxe space drums. Synare three drum synthesisers. Synare sensor drum synthesisers. Simmons twin drum synthesisers. Ludwig black beauty 6½ Inch. Ludwig 400 snare 6 % Inch. Ludwig 400 snare 6 % Inch.	. 695 . 595 . 27 . 35 . 25 . 32 . 365 . 365 . 450 . 325 . 450 . 325 . 450 . 325 . 450 . 325 . 450 . 325 . 32
stands. Gretsch S-drum black hawk kit, black. Gretsch Servy duty cymbal stands. Gretsch heavy duty hi-hat stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Yamaha S-drum 5000 series outfit, siky blue. Yamaha S-drum 5000 series outfit, siky plue. Yamaha S-drum 5000 series outfit, siky rust. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 share drum stands. Yamaha 700 share drum stands. Yamaha 700 bass drum pedals. ACCESSORIES Rototoms 6+8+10 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Rototoms 8+10+12 bar and Rogers stand. Electro-Harmonix space drums. Electro-Harmonix space drums. Electro-Harmonix deluxe space drums. Synare three drum synthesisers. Synare sensor drum synthesisers. Simmons twin drum synthesisers. Ludwig black beauty 6½ Inch. Ludwig 400 snare 6 % Inch. Ludwig 400 snare 6 % Inch.	. 695 . 595 . 27 . 35 . 25 . 32 . 365 . 365 . 450 . 325 . 450 . 325 . 450 . 325 . 450 . 325 . 450 . 325 . 32
stands. Gretsch S-drum black hawk kit, black. Gretsch beavy duty cymbal stands. Gretsch heavy duty inhat stands. Gretsch heavy duty snare stands. YAMAHA PRO CENTER Yamaha 5-drum 5000 series outfit, silky blue. Yamaha 5-drum 5000 series outfit, silky blue. Yamaha 5-drum 5000 series outfit, silky blue. Yamaha 5-drum 5000 series outfit, siky rust. Yamaha 5-drum 5000 series outfit, secondhand. Yamaha 700 cumbal stands. Yamaha 700 series outfit, secondhand. Yamaha 700 series outfit, secondhand. Yamaha 700 series outfit, secondhand. ACCESSORIES Rototoms 6 + 8 + 10 bar and Rogers stand. Rototoms 8 + 10 + 12 bar and Rogers stand. Retotor-Harmonix bace drums. Synare sensor drum synthesisers. Synare sensor drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers, secondhand. SNARE DRUMS Ludwig black beauty 6 ½ inch. Ludwig 400 snare 5 inch. Rogers super ten 5 inch. Rogers super ten 6 inch. Pearl Jupiter 6 ½ inch. Singerland brass shell custom 6 ½ inch. Singerland brass shell custom 6 ½ inch. Premier 2003 snare 6 ¼ inch.	. 695 . 27 . 35 . 28 . 36 . 36 . 36 . 36 . 36 . 36 . 36 . 36
stands. Gretsch S-drum black hawk kit, black. Gretsch beavy duty cymbal stands. Gretsch heavy duty inhat stands. Gretsch heavy duty share stands. Gretsch heavy duty snare stands. Gretsch heavy duty snare stands. YAMAHA PRO CENTER Yamaha 5-drum 5000 series outfit, sikky blue. Yamaha 5-drum 5000 series outfit, sikky blue. Yamaha 5-drum 5000 series outfit, sikky blue. Yamaha 5-drum 5000 series outfit, sikky stands. Yamaha 5-drum 5000 series outfit, sikky stands. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 share drum stands. Yamaha 700 share drum stands. Yamaha 700 bass drum pedals. ACCESSORIES Rottoroms 6 + 8 + 10 bar and Rogers stand. Rottoroms 8 + 10 + 12 bar and Rogers stand. Beletto-harmonix space drums. Electro-harmonix space drums. Electro-harmonix space drums. Electro-harmonix space drums. Synare three drum synthesisers. Simmons twin drum synthesisers. Si	. 695 . 27 . 35 . 25 . 25 . 365 . 26 . 365 . 450 . 395 . 450 . 395 . 450 . 395 . 450 . 395 . 450 . 395 . 450 . 395 . 395
stands. Gretsch S-drum black hawk kit, black. Gretsch beavy duty cymbal stands. Gretsch beavy duty shahat stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Gretsch heavy duty saner stands. Gretsch heavy duty saner stands. YAMAHA PRO CENTER Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky stands. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 series outfit, secondhand. Yamaha 700 series outfit, secondhand. Yamaha 700 bass drum pedals. ACCESSORIES Rototoms 6 + B + 10 bar and Rogers stand. Rototoms 8 + 10 + 12 bar and Rogers stand. Rototoms 8 + 10 + 12 bar and Rogers stand. Rototoms 8 + 10 + 12 bar and Rogers stand. Selectro-Harmonix space drums. Synare three drum synthesisers. Synare sensor drum synthesisers. Synare sensor drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers, secondhand. Ludwig black beauty 6 ½ inch. Ludwig black beauty 6 ½ inch. Ludwig 400 snare 6 ½ inch. Rogers super ten 6 inch. Rogers super ten 6 inch. Pearl Jupiter 6 ½ inch. Singerland brass shell custom 6 ½ inch. Premier 2003 snare 6 % inch.	. 695 . 27 . 35 . 25 . 36 . 36 . 365 . 450 . 39 . 450 . 450
stands. Gretsch S-drum black hawk kit, black. Gretsch beavy duty cymbal stands. Gretsch beavy duty shahat stands. Gretsch heavy duty share stands. Gretsch heavy duty share stands. Gretsch heavy duty saner stands. Gretsch heavy duty saner stands. YAMAHA PRO CENTER Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky blue. Yamaha 5-drum 5000 series outfit, siky stands. Yamaha 700 cumbal stands. Yamaha 700 cumbal stands. Yamaha 700 series outfit, secondhand. Yamaha 700 series outfit, secondhand. Yamaha 700 bass drum pedals. ACCESSORIES Rototoms 6 + B + 10 bar and Rogers stand. Rototoms 8 + 10 + 12 bar and Rogers stand. Rototoms 8 + 10 + 12 bar and Rogers stand. Rototoms 8 + 10 + 12 bar and Rogers stand. Selectro-Harmonix space drums. Synare three drum synthesisers. Synare sensor drum synthesisers. Synare sensor drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers. Simmons twin drum synthesisers, secondhand. Ludwig black beauty 6 ½ inch. Ludwig black beauty 6 ½ inch. Ludwig 400 snare 6 ½ inch. Rogers super ten 6 inch. Rogers super ten 6 inch. Pearl Jupiter 6 ½ inch. Singerland brass shell custom 6 ½ inch. Premier 2003 snare 6 % inch.	. 695 . 27 . 35 . 25 . 25 . 365 . 26 . 365 . 450 . 395 . 450 . 395 . 450 . 395 . 450 . 395 . 450 . 395 . 450 . 395 . 395

NEW CYMBALS Paiste 404 13 inch hi-hats. Paiste 404 13 inch hi-hats. Paiste 404 15 inch hi-hats. Paiste 404 15 inch hi-hats. Paiste 404 16 inch crash. Paiste 404 20 inch ride. Paiste 404 20 inch ride. Paiste 404 22 inch ride. Paiste 505 13 inch hi-hats. Paiste 505 15 inch hi-hats. Paiste 505 15 inch hi-hats. Paiste 505 16 inch crash. Paiste 505 16 inch crash. Paiste 505 16 inch medium. Paiste 505 18 inch medium. Paiste 505 18 inch medium. Paiste 505 18 inch medium. Paiste 505 20 inch medium. Paiste 505 20 inch medium. Paiste 505 22 inch ride. Paiste 2002 13 inch hi-hats. Paiste 2002 13 inch hi-hats. Paiste 2002 14 inch hi-hats. Paiste 2002 15 inch sound edge. Paiste 2002 15 inch ni-hats. Paiste 2002 15 inch sound edge. Paiste 2002 15 inch ni-hats. Paiste 2002 15 inch medium. Paiste 2002 16 inch medium. Paiste 2002 18 inch ride. Paiste 2002 18 inch ride. Paiste 2002 18 inch ride. Paiste 2002 20 inch crash. Paiste 2002 18 inch ride. Paiste 2002 20 inch crash. Paiste 2002 20 inch China. Paiste 2002 20 inch China. Paiste 2002 20 inch China. Paiste 2002 21 inch ride. Paiste 2002 22 inch ride. Paiste 2002 23 inch China. Paiste 2002 23 inch China. Paiste 2002 23 inch China. Paiste 2002 21 inch ride. Paiste 2002 13 inch China. Paiste 2002 14 inch paper (hin. Paiste 602 15 inch hi-hats. Paiste 602 15 inch medium. Paiste 602 16 inch medium.	
Paiste 404 13 inch hi-hats.	. 32
Paiste 404 14 inch hi-hats	38
Paiste 404 16 Inch crash.	. 27
Paiste 404 20 inch ride.	33
Paiste 404 22 inch ride.	. 59
Pointe 505 13 inch hi-hats	- 47 54
Paiste 505 15 inch hi-hats	. 68
Paiste 505 16 inch crash,	. 35
Paiste 505 16 inch medium	. 42
Paiste 505 18 inch crash	. 42
Paiste 505 20 inch medium	. 54
Paiste 505 22 inch ride	. 65
Paiste 2002 13 inch hi-hals	. 84
Paiste 2002 14 inch sound edge.	139
Paiste 2002 14 inch heavy	- 63
Paiste 2002 15 inch sound edge	149
Paiste 2002 16 inch crash	54 54
Paiste 2002 18 inch crash	.65
Paiste 2002 18 inch ride.	. 66
Paiste 2002 20 inch clash.	. 76
Paiete 2002 18 inch China.	. 93
Paiste 2002 20 inch China	. 119
Paiste 2002 24 inch ride,	119
Paiste 2002 11 inch splash	45
Paiste 602 13 inch hi-hats	. 99
Paiste 602 14 inch hi-hats	106
Paiste 602 15 inch hi-hats	119
Paiste 602 15 inch sound edge	. 149
Paiste 602 16 inch thin	. 69
Paiste 602 16 inch medium	69
Paiste 602 18 inch crash	. 83
Paiste 602 18 inch (let ride	. 93
Paiste 602 20 inch ride.	.99
Paiste 602 22 inch ride	129
Paiete 602 16 inch paper thin	. 69
Paiste sound-creation 18 inch short crash	. 69
Paiste 602 16 inch paper thin. Paiste sound-creation 18 inch short crash. Paiste sound-creation 18 inch dark ride. Paiste sound-creation 18 inch dark ride. Camber 18 inch flat ride. Camber 20 inch flat ride. Camber 20 inch rist ride. Camber 20 inch crystal. Camber 21 inch pronze. Camber 18 inch brass. Camber 18 inch brass. Camber 18 inch brass.	145
Camber 18 inch flat ride	. 25
Camber 20 inch flat ride	30
Camber 22 Inch bronze	. 45
Camber 16 inch brass	. 15
Camber 20 inch brass. Camber 20 inch nickel.	. 22
Camber 20 inch nickel	28
Camber 20 inch nickel Zyn standerd 12 inch hi-hats. Zyn standerd 13 inch hi-hats. Zyn standard 14 inch hi-hats. Zyn standard 14 inch hi-hats.	. 13
Zyn standard 14 inch hi-hats	14
Zvn standard 16 inch ride.	. 16
Zvn standard 18 inch ride	18
Zyn standard 20 inch ride. Zyn standard 22 inch ride.	. 26
K-Zildjian 22 inch medlum ride	. 89
K-Zildjian 20 inch ride, secondhand.	. 42
K-Zildjian 18 inch crash, secondhand	32
K-Zidjan ZZ inch medium ride. K-Zidjan ZZ inch medium ride. K-Zidjan ZD inch ride, secondhand. K-Zidjan ZD inch ride, secondhand. K-Zidjan 18 inch crash, secondhand. K-Zidjan 16 inch crash. K-Zidjan 16 inch ride. K-Zidjan 16 inch ride. Avedis Zidjan 16 inch ride. Avedis Zidjan 16 inch rock crash. Avedis Zidjan 19 inch rock crash.	. 55
Avedis Zildjien 16 inch crash	. 52
Avedis Zildjian 19 inch rock crash. Avedis Zildjian 20 inch ride.	65 89
Avedis Zildjian 20 inch thin, secondhand	. 45
Avedis Zildjian 20 inch earth cymbal, ride	. 95 .105
Avedis Zildjian 15 inch new beat hi-hat	119
Avedis Zildijan 19 inch rock crash. Avedis Zildijan 20 inch ride. Avedis Zildijan 20 inch thin, secondhand. Avedis Zildijan 20 inch eanh cymba!, ride. Avedis Zildijan 16 inch eanh cymba!, ride. Avedis Zildijan 15 inch new beat hi-hat. Avedis Zildijan 15 inch new beat hi-hat. Palate 36 inch sym phonic gong (new price 875). Paiste 16 inch symphonic gong.	245
Paiste 13 inch symphonic gong.	.39
Paiste cymbal cleaner	. 45 . 39 3.20 2.95
environ symbol septiments	20

17

Û

Largest selection in the South-East, phone for prices.

L.P. PERCUSSION

All Prices include VAT and are available on NO DEPOSIT HP Access, Barclaycard and Part Exchange welcome. Mail order and freight, world wide. SOUTHEND (0702) 553647

Dynamic clarity through the sound universe.

The warm timbre and wide range of Elkie Brooks' voice has subtleties which demand a microphone that can respond clearly an smoothly right through the sound spectrum

The highest highs and lowest lows picked up perfectly by the Beyer Dynamic Soundstar microphone.

It's an all-purpose, unidirectional microphone with a universal ability. Whatever the concert hall, the size of the audience and the type of singer, it will project the individual sound without projecting other noises in the auditorium.

The Soundstar is also remarkable free of feedback problems, another result of dedicated Beyer microphone technology which has been around for nearly \$0 years.

which has been around for nearly 50 years.

Like so many other top stars of today, the immense appeal of the Elvie Brooks style is fully complemented by the unifersal versatility and popularity of the eyer Dynamic Solindstar microphone.

For the complete catalogue of Beyer products, send to the address below.

Beyer))) Dynamic Circle 764 on Reader Service



Now...enhance your live sound with live lighting from Meteor!



METEOR LIGHT and SOUND COMPANY Ideal for live group work, the Meteor Sona-

Phase send inford Projectors Strabes Effects Mixers	15 LiGHT and SOI 155 Michael Dr. S ation on Loudspeakers Lighting Controllers Mobile Installations Fixed Installations	Disco Walls
Address		
City	State	Zip

155 Michael Drive, Syosset, New York 11791 Lite 3000 combines five separate effect se-Telephone (516) 364-1900. Telex 96-1396. lections with three channel sound-to-light translation. Two light levels, manual individual channel over-ride enabling lights to be 'played,' plus chase functions add up to a powerful lighting package.

> Easily transported, ready for instant use and ruggedly reliable, the Meteor SonaLité 3000 is the ideal mobile lighting choice. See one at your Meteor dealer or complete coupon for further details on the Sona Lite 3000 and other Meteor lighting systems and effects.

Dean Markley Stockists

Magnum Sound, Wishaw, Lanarkshire. Largs, Dundee. Wilkinson Music, Airdrie. Simpsons, Edinburgh. Organ Loft, East Kilbride. McCormacks, Glasgow. Road Show, Bridge of Allen, Stirling.

NORTHERN IRELAND

Matchetts Musical Instruments, Belfast.

Modern Music, Newtonards.

REPUBLIC OF IRELAND
J. Raftery & Sons Ltd., Galway.
McCullough Piggot Ltd., Dublin 2.
McCullough Piggot Ltd., Cork.

ENGLAND

Rock City Music, Newcastle. Music Maker, Carlisle. Wilson Musical Services, Halton, Frank Hessey, Liverpool.

The Guitar Player, Rochdale. Yardleys, Birmingham. Honky Tonk Music, Hadleigh, Essex. Soundwave, Romford, Essex. Mr. Music, Bedford. Hodges & Johnson, Chelmsford. Ace Music, Colchester, Essex. K.E.T. Guitars, Hitchin, Herts. Albert Balaam, Bury St. Edmunds. Rose-Morris & Co. Ltd., London W1.

Sounds, London W1. Rhodes Music, London WC2. Boogie Music, London WC2. Maurice Plaquet, London W12 Hilda Pash, London W11. John Beebys, London N8. Blanks Music Store, London NW6. Alberts Music Shop, Twickenham,

Middlesex. Hammonds, Watford, Herts. Holiday Music, Leytonstone. Harrow Music, Harrow, London NW1.

Gig Sounds, Streatham, London South Eastern Entertainments,

London SE13. Monster Music, London SW18.

Rock Bottom, Croydon. Andertons Music, Guildford, Surrey. Wing Music, Bromley.

Dick Middleton Music, Guildford, Surrey Approximate Music, Worthing.

Chandler Guitars, Kew, Surrey. Kennards, Canterbury, Kent. Russells Music, Tunbridge Wells,

Moss Music, Gillingham, Kent. Classical Guitar Centre, Eastbourne,

Becketts, Southampton Kempsters, Swindon, Wilts. Duck Son & Pinker, Bath, Avon. Coast Music, Charminster, Bournemouth.

Marvo Music, Andover, Hants.



Rose, Morris & Co Ltd 32-34, Gordon House Road LONDON NW5 1NE Telephone 01-267 5151

It's Not So Lonely

ALICE COOPER BAND
THE BABYS
BAD COMPANY:
BILLY COBHAM BAND
BLACK CAK
CHUCH RAINEY
DAVID KISWINEY
ERIC CAEE (STUFF)
HUARTON
JOHN MAYAUS

LITTLE RIVER BAND

MOLLY HATCHETT OUTLAWS

PAUL JACKSON (HERBIE HANCOCK)

PEIDICEP RICK DERRINGER RUSH SPERIC TEASER

ttin lizzy. .38 special alemeic guitars 'Lago of canada



DEAN MARKLEY STRINGS 3350 Scott Blvd. #29 Santa Clara, CA 95051 [408] 988-2456

. \$1920 Dann Markley Strings

THE SOUND IS BIG, BLUE SOUND IS BLUE THE COLOUR IS BLUE THE REPRODUCTION TO BE AUTIFUL....



TURBOSOUND It's BIG, BLUE and BEAUTIFUL

We're not about to let you into the intimate secrets of Turbosound but we can assure you that it means a real break-through in professional P.A. equipment.

O

The sound is BIG — Turbosound technology has been developed specifically to combine compactness with all the power you need.

The colour is BLUE because Turbosound stands out from the crowd in every way.

The reproduction is BEAUTIFUL because S.S.E. build quality into Turbosound every step of the way from craftsmen designed and built cabinetry to the outstanding acoustic engineering in all our systems.

Our research team has developed Turbo



JURBOSOUND

Sigma Sound Enterprises Ltd

Manufacturers and Suppliers of the complete range of P.A. equipment

Atkins Works, Faraday Road, Lenton, Nottingham, England. Tel Nottingham (0602) 783306 sound over a period of 8 years, and during the last 2 years, Turbo systems have been put through the most exhaustive programme of testing during use by major bands all over the world.

We've built our reputation on attention to your needs and we're now proud to offer you a chance to learn more about Turbosound — the world's most compact and efficient P.A. system.

You'll also be pleasantly surprised when we get down to talking about price.

Contact S.S.E. today, or any appointed Turbosound agent to learn more about this revolutionary new system.

Trade and export enquiries invited.



T60 GUITAR T40 BASS

The quality American instruments that still cost less than £300 including V.A.T. and plush lined case!

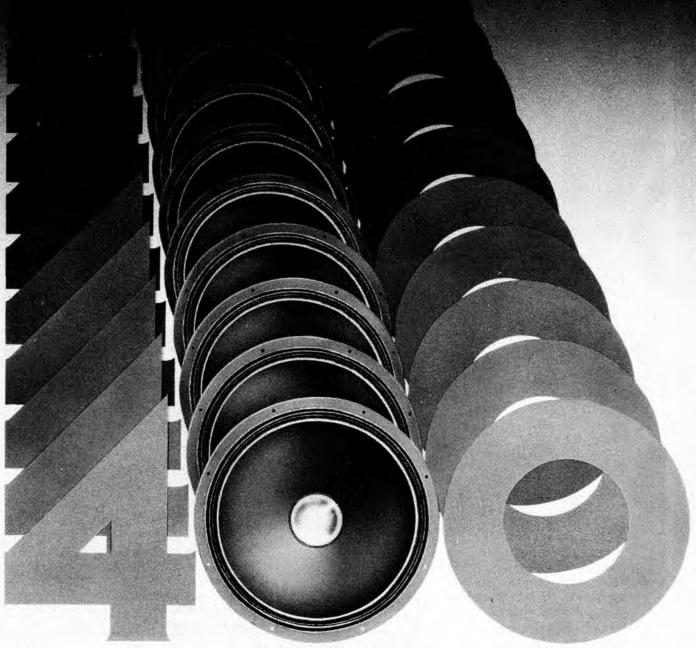


Now available with optional extra colours Sunburst, White or Black and Rosewood Fingerboard

Send S.A.E. for new colour brochure to:
Peavey Electronics (UK) Ltd.,
Unit 8, New Road, Ridgewood, Uckfield, Sussex.



NEW FROM GAUSS



WATTS RMS

Introducing and immediately available, our new series of 300/400 Watt PMS super high powered laudspeakers for the 1980s. Never before has there been such an incomparable selection of professional Gauss loudspeaker components ranging from the 1502 super high frequency tweeters through the mid and low mid frequencies to the specialised bass models to suit all applications. With these new loudspeaker models which are available in 10, 12, 15 and 18"Gauss once again sets new standards of unparallelled acoustic excellence and reliability, and remains the number one choice for the new musical decade.

9auss the ultimate sound

For further information relating to the NEW super high powered range of all Gauss professional audio products please write or phone Mike Cotter at:

Cetec International Limited, 16 Uxbridge Road, Ealing, London W5 2BP. Telephone 01-579 9145/8, Telex 935847



Circle 798 on Reader Service Card

To try and categorise the music of Mike Oldfield is like trying to play chess blindfold, you can get hold of the individual pieces and recognise them, but you will never know the whole story. His music is complex, containing influences from all types of music from traditional folk to the classical works of Sibelius and Debussy.

His musical career began at the age of 15 when, at the suggestion of his sister Sally, they formed the duo Sallyangie. Their work together included an album of the same name (recently re-released) which sank almost without trace. This was his first experience of life as a working musician, the decision was not made for the esoteric joy of the career, but to leave school.

"I wanted to leave very badly, but I had to have something to do when I left." It was Sally's suggestion that I came to play guitar for her, I didn't know anything about the image bullshit, all I knew was that I enjoyed playing the music. As a first introduction to the music business, it was 'terrible."

However he survived the ordeal and, after the break with his sister, went on to join Kevin Ayers and the Whole World. This was perhaps the most important of his formative years; the switch from acoustic folk guitar to electric bass, and his subsequent meeting with David Bedford, then the Whole World's keyboard player, which spawned the idea of what later became Tubular Bells.

From there, with the ideas on tape he approached the embryonic Virgin Records and eventually became their first artist, in every sense of the word.

From this point his success has increased to a level which is quite astounding. *Tubular Bells* has now sold 10 million copies all over the world; a statistical giant, only *Hergest Ridge* could push it from the number one posi-

from its the UK charts — wher holding there for over a year; a musical triumph

fils dispital knowledge a prodigous, and his technical expertise, not separatingly, rolls the occupation of engineer, producer and mosician into one, is a style that has become his trademark. On tour he has to create the sounds that an entire studio, plus effects and overdubbing, have made. Not an easy task, but one that Oldfield executed admirably on his mammoth tour of Europe last year.

This was achieved by employing 52 of the world's most respected musicians, including Pierre Moerlin and his brother Benoit, Maddy Prior, Peter Lemer and of course the avant garde composer David Bedford who conducted the entire orchestra and also arranged all the pieces for the tour.

His personal guitar sound, perhaps the most important single instrument in the band, was created with the simple use of ingenuity: "On the tour I had a flight case with all my personal gear in it, there was the 'normal' sound, which came from a Twin Reverb, then there was the broken up distorted sound which came out of a Princeton, and there was the solo sound from a Mesa Boogie.

"I overload the Boogie as far as it can go, further in fact, I put a pre-amp on it to overload it, followed by a noise gate. Down at the front of the stage I had a footswitch with three settings to direct the guitar sound. We had some monumental problems with the set up but the basic idea worked well under the circumstances."

The circumstances were a tour that

dash from sovery to spentry. Stark contest to the return, head like as stable Obligation enjoyed previously proken any by a single compact of Tubular Bells at the Queen Elizabeth Hall in London just after the release of the album.

"Although the audience loved it, I was disappointed by the actual result," he commented, "I never wanted to play the album live because of all the problems we had recording it, I had agreed with the record company to do the gig so it had to go ahead. I waited until it was my decision before I did another one!"

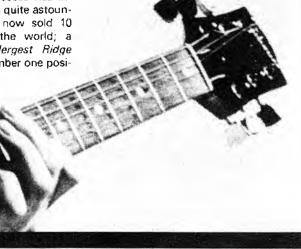
The band that he employed for the gig was supplemented by the likes of Mick Taylor but it was not the band that he had intended for the concert, "No, I really wanted folk or acoustic musicians that could play electric, like Al Stewart or John Renbourn. Not that I regret that band, they were an incredible bunch, and they were both technically competent and also enjoying what they did. Perhaps that's more important."

That was followed, on his own decision, by the last tour, but the next will be the subject of a number of Mike Oldfield cuts; "The next tour will find everybody necessary. I found that we could do without all those strings, after all they're just one instrument really. I'm also cutting down on the choir, perhaps just four or five really good singers would do. I'm hoping to cut it down to just about 12 or so, we can get away with it just as easily, and have just as good concerts."

A comment that the Police and the Jam seem to have just as good concerts with three musicians is given the full treatment of the Mike Oldfield Short Sharp Answers department. "You ask the Police to play Tubular Bells then..."

After the tour Oldfield will retire once more to the rural retreat where he will lay down the tracks of the next album. "I expect to start almost as soon after the tour as I can, perhaps early August, I've no idea how long it will take, could be months or just weeks. I'm going to make it another solo venture, I'll do nearly eveything myself," for any particular reason? "Well I don't have to use sessions musicians you know..."

While recording the tracks Oldfield sits at the desk to enable him to control



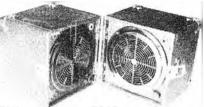
Studio Supply for the Creative Musician

turnkey

24 tracks, we

specialise in professional audio equipment from major manufacturers. Call us with your system requirements. Our business is helping you with yours.

Mighty Auratones



F45.42 £62.10

These innocent looking speakers are used as reference monitors in top studios throughout the world. The volume and quality that they produce is stunning to say the least. Available in teak or the vinyl covered 'Road' version. Road Cubes lock together in pairs and have individual line fuses. — Ideal for a micro PA system. Sold only in pairs.

TEAC Portastudio

At last, affordable multitrack for every musician. TEAC's new Portastudio combines a mixer and multitrack tape recorder in one compact unit. The solenoid, cassette transport runs at twice normal speed and with the built in Polby system produces

remarkable sound fidelity, Precision heads enable four tracks to be recorded with full sel-sync and ping-pong facility. The mixer section accepts any signal with bass, treble, echo send and pan on each

send and pan on each channel. These are switched from laying tracks to performing mixdown. The simplified monitoring allows you to listen to the mix you are recording, plus the tracks already on tape. Use the powerful internal headphone amplifier or an external speaker/amp system. Track bouncing, signal processing, memory rewind and varispeed are more facilities that put

this remarkable unit on par with what you will get from systems costing many times the price. Just plug in a microphone and a pair of cans and you have your own four track demo setup. You make the music, Portastudio does the rest. Full details on request.

Accessit Aunique

Are you ready for Multitrack ?

TEAC

60p

A unique range of add-on signal processors for PA or studio use. As reviewed in this magazine.

Compressor £31.97 Variable threshold and speed give scope for effects Parametric £31.97 Low and high band, tunable equaliser design Booster £33.12 Four way line amplifier solves all matching problems Compander £34.27 Up to 30dB of noise reduction for semi-pro recorders Reverb £33.12 Custom spring and variable EQ ensure a natural sound Power Supply £28.52 Mains operated, will power up to four Accessit units Rackit £19.55 Mounts three Accessit units to standard 19" rack

Send for the new data folder including specification cards, application notes, review reprints and details of the 21 day free trial offer.

EMO D.I.

A rugged, studio spec, direct injection box to match instrument, line or speaker level signals directly to low impedance microphone inputs. For live and recording applications.

£639 including mike and cans



E56.52 Active version £68.72

with many pages about the equipment to use. "The Multitrack

"Are you ready for Multitrack?" explains recording techniques

from sound on sound

through to eight track,

BOOKS

Primer" from TEAC is a practical guide to setting up a home studio with many tips on wiring, acoustics, mike placement etc. The book is packed with superb illustrations. The best guide around by far.



£68.72 Primer" from

AKG MIKES

By mail, to your door

D12...£82.52 D190...£44.57 D202...£82.52

SE5/10...**£35.37** CE1 (caps)...**£30.77**

CE2 (caps)...£30.77 CE5 (caps)...£38.82 Prokit £108.33 ASSEMBLED £161.45

Professional Mixer in Kit Form

Prokit is a six input stereo mixer featuring wide range gain, treble, bass, echo, foldback and pan on each channel. For compact PA, keyboards, stage monitoring or recording, the ultra slim design is at home anywhere. Available ready to go or save over £50 by putting it together yourself (about 8 hours). 12 page brochure on request.

All prices shown are inclusive of postage and VAT. You can order by phone using Visa or Access Cards, or drop in and see us! Export enquiries welcome.



TURNKEY

8, East Barnet Road, New Barnet, Herts EN4 8RW. Phone 01-440 9221 Telex 25769

MIKE OLDFIELD

the battery of technological weaponry he employes. The mixer is also the one that is used on tour, packed away into his control room along with his prodigious guitar collection. Of all these, the guitar he most favours for both live work and recording is the Gibson L6S.

"I tend to use the whole fretboard and I tried to find a guitar that was really accurate up on the top, the L6S is good but its not as good as I would like it to be. I suppose I should really get an ES335, now they are really in tune. But I like the L6S neck, the shape is just right and, for me, that's one of the most important features, the pickups on it aren't all that good but that's cancelled out by the amps, they can make anything sound good."

But what sort of influences have gone into something like Tubular Bells and Ommadawn? "Well there was the King Crimson first album, when I heard that I was knocked out, I really was. Then of course there was Rainbow in Curved Air by Terry Riley, an absolute classic. Then there are the contemporary guitar players like John Renbourn, he has the most incredible guitar style. And of course, there is the bagpipes bit, I've always loved the idea of a drone, perhaps the Terry Riley thing again, that idea of ostinato. That was really the basis behind Incantations, playing all the notes at once to make this great big drone. I tried to really get into the bagpipe thing with a set of Northumbrian pipes but they are incredibly difficult. The coordination is just impossi-

Consequently, Oldfield employed Herbie to play the Northumbrian pipes for him. Paddy Moloney from the Chieftains came in to do the Uillean pipes break on Ommadawn. That remains perhaps the most haunting of all the sections of the album, it comes out of the same sort of "break" that made *Tubular Bells*, but the pastoral feel is much stronger, something he thinks will increase in his work

As to the critics who attacked his latest work *Platinum*, Oldfield could not care less, "Obviously it's not nice to have terrible criticism of something that you personally think is good, but it didn't bother me all that much. *Platinum* was very well received by musician friends of mine, I think that's more important coming from people I know, who know what I'm doing, as opposed

to a reviewer that I don't know and who doesn't know me.

"Unfortunately, I am a spectacle, a persona, the media isn't allowed to admit that people actually like what I do." Platinum will be followed by the next venture, and one that will be different again from the others.

"Incantations was based on intervals in the music of fifths. In some sort of progression the next piece will be based on intervals of four. It's going to make for an unusual sound, more so than Platinum. That was a progression towards more ordinary contemporary music. For a start there was more of an emphasis on the bass and drums which I tend to leave out, I'm not sure about the direction yet of the new one."

But the production may well be influenced by many of the 'new wave' type bands such as the Boomtown Rats and the Police (even if they can't play Tubular Bells), not that he has any affection for the atmosphere that brought them into the limelight. "The music scene now is much more pretentious than-ever before. I think that everything has gone down very low, there are very

few bands who really shine out and Police and the Rats are two of them. Of course there are the few records that I hear that are OK but by and large I think it must be at an all time low."

The reason? "Well it's obvious isn't it? There just isn't any money about, none at all. When you think of a pound you think of all the pennies and sixpences that go into it, but that's irrelevant now. A pound used to be worth such a lot but you can wipe your nose with them now. Look at a whole pound note, you can hardly buy a packet of cigarettes with that these days."

Oldfield adds the final word, a product perhaps of his recent fatherhood and the fact that the last tour lost a half a million pounds; "I can't afford a new desk anymore, I tried to sell my plane but, well, no-one wanted to buy it."

Armed with this new world optimism, let us hope that the music and dreams of Mike Oldfield do not fade, rather that they develop and progress taking the influences of all his past works together. Bring on the bagpipes, bring on the steel seaguils. I'm guilty.

Tim Oakes

WHAT DO YOU LOOK FOR IN CHOOSING A **RECORDING STUDIO?**

A STUDIO WITH A <u>TRUE</u> SOUND-GREAT ON RADIO	
A STUDIO THAT'S PRODUCED MANY <u>HIT</u> RECORDS	
EXPERIENCED, CREATIVE, ENTHUSIASTIC ENGINEERS	
FITS THE BILL AND YOUR <u>BUDGET</u>	
USES TOP PROFESSIONAL STUDIO EQUIPMENT	
CARES ABOUT <u>YOUR</u> SESSION	

WE'RE ALL THAT AND MORE.....

Recording & Mixing

24 track	£45 p.hr.	
2 track Voice Over	\$30 p.br.	
Copying	£15 p.hr.	
Discount on bulk copying		
Overtime after 6pm 7 days a week	£9.50p.hr.	
Any instruments available for hire.		

Engineer / Lroducers John Rudson / Brian Tench

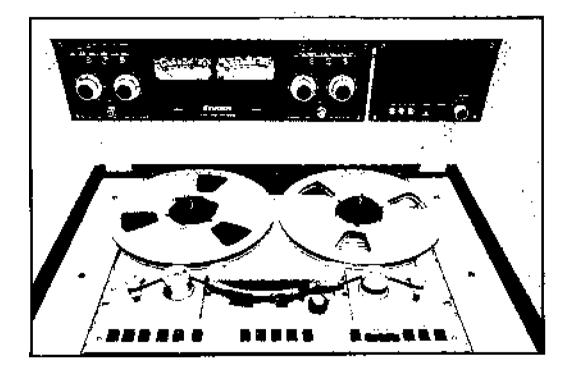
Mayfair Studios has been the birthplace of the sounds of GARY GLITTER, BAYCITY ROLLERS, and currently B. A. ROBERTSON as well as new bands like THE V.I.P.'s, SPITFIRES, PARIS 9 and the exciting electronic sounds of VISAGE.



Mayfair Recording Studios

64. South Solton Street, London WYY 1TGC Telephone: 01-499 7173

RECORDING WORLD



CONTENTS

115 Studio Diary

Studios round up

117 Studio of the Month

Almost a daytrip to Bangor — this month's studio is Sain Recorders in North Wales.

121 APRS Preview

130 Studer B67

A review of the impressive Studer tape machine by Keith Spencer-Allen

134 Yamaha P2200 power amp

127 MCI 600 Series Desk

Checked out by Jimmy Douglas

137 Court 30 Band Graphic Eq

122 Recording in the 80's

A look at the growth of recording to the present day

140 Audio Shop Survey

YOU CAN'T BEAT THE SYSTEM



Studio Diary

Who's been recording what, where...

This month over at Basing Street the staff have been working as hard as ever. Engineer Norman Mighell has been working with Madness who were in to do some overdubs and remixes...Bo Benham was laying down some tracks with the aid of John Wood's production and engineering...Murray Head has now finished the album which he has been working on for a while now...Now here's an interesting piece of news -Joe Jackson has been trying his hand at producing (quite inevitable really) and the band concerned was Rasses. . . Ex-Racing Cars vocalist G.T. Mortimer was in for a while working on some tracks with Nigel Thomas producing and Andy Lyden engineering...The mobile went to the Stranglers' gigs at the Rainbow for a couple of days and Howard Kilgour recorded some live music for them...Basement 5, a band who play a mixture of reggae and rock songs were in to mix a B side. . . Squeeze were mixing some live tapes with John Wood engineering...the Q Tips were in working on some tracks. Other clients included the Undertones...Horse Power...the Joe Jackson Band working on a new single...French artist Jean Robert working on his album Eric Dufaure producing)...American band Slow Children with Robert Ash engineering...The Head Boys doing some mixing...Dire Straits were mixing a track called "Solid Rock" which is destined for the sound track of the Eddie Kidd film (Aaarrrgh!)...Punk band Killing Joke were working hard with Andy Lyden... The Set, who are a sixties band, that is they are into sixties type music. were in at the same time as the Q Tips and everyone got on really well by all accounts., Island artist Jim Diamond did some mixes with Robert Ash engineering...Other mobile gigs in-





cluded Selector at Coventry...and Sad Cafe in Manchester and of course Howard Kilgour the mobile man did both of these...

Surrey Sound Studios have had their usual top class clientele, not to mention of course that Eric Clapton has been in working on some album tracks with Glyn Johns producing and co-engineering with Sean Fullan...Code Blue were finishing off their album with Gary Tibbs from Roxy Music and Nigel Gray . . . Soiuxsie and the

Banshees have also been around...and also The Planets...

Up in North London at Konk Studios Leslie McKeown has finally finished his second solo album which is to be called The Face Of Love. The album was engineered by Ben Fenner (alias, I am told Benedict Tobias) and coproduced by Les and Scobe Ryder. The album is however, only on release in Japan at the moment since the band will be touring that country in the very near future....Work is current-

ly going on on a third album for ace guitarist **Trevor Rabin** with **Simon Philips** on drums and I did hear **Jack Bruce** on bass. Once again the sessions are being engineered by Konk's engineer quote El Fabbo (BF), These engineers are all the same!

Central London's Polygram Studios have been doing some interesting work. Ace engineer Owen Davies was working for Australian singer Al Kamahl (MOR) with Chris Harding producing...Producer Pete Wilson was in with Sham 69 working on the new album, and the engineer was Chris Gorman...Greg Lake dropped in and worked with two engineers — Brian Robson and John Tindley...And would you believe that Harry Secombe has been working on a single? Oh yes, with Robert Golding engineering...

Ridge Farm have gone cosmopolitan with Ulf Lundell who is, it seems, a kind of Swedish Bruce Springsteen. The band were recording for EMI Svenska. They recorded and mixed a complete double album in an amazing two weeks. Frank Andrews, studio manager said they worked hard!...After that Ozzie Osborne (ex-Black Sabbath) and his new band were in, working for Jet Records, and mixing some tracks. The work was co-produced by the band and Ridge Farm's engineer Max Norman...Since this everybody has been rushing around frantically while the studio has been closed for maintenance. As you may have read in IM last month they have just recently installed completely new equipment and inevitably it needed looking into now that it has had a chance to settle in. Also, the computer had to be put into the desk which must have caused great excitement since now the re-equipment is complete. Other maintenance included some acoustic treatment in order to create more variety within the studio area.

Infant on the second of the se



A new addition to the

Tannoy family was safely conceived recently and is doing fine.

We've called him our Little Red Monitor, he weighed in at 19.2kgs, has already demonstrated high power handling, appealing sensitivity, and an SPL just like his dad.

He has a single point sound source in a small enclosure and is no problem to carry at all. Just like his big brothers he has accurate reproduction, low distortion, and is completely at home in control rooms and mobile studios.

For further details why not ring David Bissett-Powell now,

he thinks the Little Red Monitor is already showing signs of genius. The Little Red Monitor by

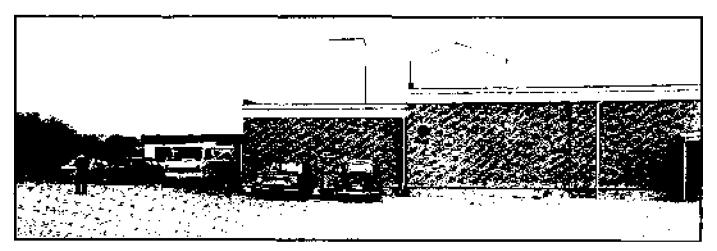
TANOY.

PROFESSIONAL PRODUCTS DIVISION

St. John's Road, Tylers Green, High Wycombe, Bucks. Tel: 049 481 5221

Studio of the Month

Sain Studios



In the beginning was Sain and Sain was a record company in Wales set up specifically to record any music in the Welsh language, Huw Jones and Dafydd Iwan started their musical careers as folk singers, quite independant of each other. They did the usual round of clubs etc, but when they came to record they had to find a studio. As most people are aware, Wales is not thick with studios and quite often they found themselves having to come up to London which was a very costly business indeed.

Therefore the obvious answer to this dilemma was a studio of their own. The record company was set up about 10 years ago, and the first studio that they had was a little eighttrack "in a cowshed not far from here" (here being the new studio opened only two months ago). "A very well converted cowshed!" This studio was very basic but adequate for the beginnings of what now seems to be a very flourishing and efficient business.

The "new" studio I mentioned earlier is in fact a brand new, very impressive version of Sain. Industrial land in Wales is not as expensive as one might imagine and the company found an old RAF building in their local village of Penygroes, North Wales, and transformed it into a huge studio.

In fact they have got so

much room they don't know what to do with it all — something a lot of other studios would love to be able to say. Vast rooms stand empty, or with just one table in them. Eventually they will be moving all their offices into the same location — but obviously you can't do everything at once. At the moment all the record company business and the studio administration is conducted from their old offices about two miles away.

Not wishing to waste any opportunities, Sain are using all the equipment from the old eight-track to furnish yet another venture - the Sain mobile. They have actually been recording gigs for quite some time now just by throwing some gear in the back of someone's car, proving, if nothing else, that they will try anything. I had a look at the mobile which, at the time of writing, was more than half finished, and it looks as if once again they have spared no expense and have paid attention to every little detail.

I feel a word on the Welsh music scene is needed, because I didn't know anything about it so why should anyone else? Obviously artists who work solely in the Welsh music field are going to find a very limited market to consume these goods. If a record manages to sell between 4,000 and 5,000 then you can consider it a hit.

The Welsh market is

perfectly aware of what is going on in the UK charts etc and therefore Welsh artists have a standard to match before they even begin to try. Sain, which is in fact very well known and respected in Wales, put out between 30 and 40 albums and about 12 singles/EPs every year. The type of music cannot be categortised any more than it will always be in the Welsh language, Anything from heavy rock, MOR, pop, to folk, classical and male voice choirs (which funnily enough seem to be quite popular there!).

With all this Welsh music around I thought it was reasonable to suppose that there was a Welsh Chart, but apparently it was disbanded as not everyone could agree on a fair way of assessing sales! But as Huw said, they are selling to such a small market, one which they know very well indeed, and it is very easy to assess how well your record has gone down simply by the number you sell, without having to know how many anybody else has sold.

There is however, Welsh radio and television and of course, music can always be promoted at gigs. At the moment there is a big revival of the Welsh culture and language. Welsh television is being more carefully promoted and of course they have started teaching the language in their schools again. And in a great many cases, as at Sain, it is the working language. The

main radio stations are Swansea Sound, Cardiff Broadcasting (which play mainly records from the UK charts) and also Radio Wales which presents Welsh language programmes. Every Saturday morning, for one and a half hours they turn their attention to the Welsh releases, and so this is where all interested parties should concentrate their efforts.

Now with such a small market, these new releases have to be found, and therefore it seems likely that they will play anything you put out, so it is just a question of getting organised. So, airplay is not a problem. The problem is producing good quality records which match easily the standard of records in the UK. The radio stations share this problem in that obviously all of Wales can receive the usual BBC radio stations and that is guite something to have to compete with. However, there quite definitely is a Welsh market, and, although it is still small, with the Welsh revival going on all round them, the interest is growing all the time.

Here I must point out that although it is the record company's policy to concentrate on the nationalistic side of things, the studio doesn't. They have a lot of their own work to put through obviously, but they want anyone and everyone to come and use the facilities to the full.

Sain has a staff of 15. Four are producers, and three are

engineers, an impressive number for any studio. Their main aim in life at the moment is to get both the studio and the mobile working round the clock, and to this end they have opened up with a remarkable offer or "competitive rate" as they put it.

Since they have so much of their artists' work to concentrate on at the moment, they would like to encourage outside bands to work at night and so for the period of 13 hours between 7pm and 8am you can hire the place for £200 which works at out an amazing £15.40 (well my maths always was rough) an hour. They have also "done a deal" with the village hotel where you can purchase bed and breakfast for £4.50 or £7 including an evening meal. The hotel has an advantage over any accommodation that Sain could arrange in that it is licenced.

The location should also be mentioned. They are very near Snowdon and the sea and the village feels as if it is miles from anywhere with beautiful countryside all around. Another nice thing is that village reaction hasn't been outrage, but rather excitement, which in turn means that they look after visitors extremely well.

Getting onto the studio itself, which, after all is what it is all about. The actual studio area is very large and beautifully finished with great attention paid to little details. The acoustics were designed by Bruce Elliott of Elliott Brothers Audio Systems who worked in conjunction with local architect Dewi Jones. They have tried to retain some local flavour in its appearance eg, the use of local stone for the wall in the "live" area, and in the same area, local slate on the floor, giving not only perfect acoustics but also a very pleasant appearance. Another local company was brought in to finish the place off, Rabitt Ltd, who also worked on the newish Marcus studios in Kensington, London.



Studio of the Month



The live area was designed with acoustic work in mind such as choirs, classical singers, harp, strings etc. Behind most of the walls there are hanging Fibreglass blankets to absorb some of the bass. Another Welsh factor is local wool used for the curtains and carpets. There is a drum booth which is at present very live, but will incorporate curtains so that an appropriate acoustic can be created for every session. It is built floating on rubber, and on Fibreglass, and on sand, thus completely separated from the rest of the studio floor. The walls and door are also full of sand and Fibreglass to "give maximum separation at drum level".

Instruments which live in the

studio and are available at no extra cost include a Rogers drum kit, Music Man bass amp and speaker, Yamaha bass guitar, Kawai Grand piano, Fender twin reverb amp, Hammond organ, ARP Odyssey, an Ovation acoustic and, wait for it, a tambourine. As you enter the studio there is a small corridor which is sealed by soundproofed doors and in here they have placed some extra microphone sockets so that if they ever had real problems they could utilise this area as another isolation booth.

In the control room is the very latest in the Cadac range — the "in line" 24-track console (incorporating among other things DC controlled faders), "Toys" include the Lexicon Prime Time, "very ver-

satile", the new H949 Eventide Harmoniser, an Orber De-Esser, Audio and Design parametric EQ (a left over from the eight-track days, but they say that the EQ on the desk is so good that they hardly ever need it), Urei Limiters, Audio and Design Compex Limiter ("faithful friend") and they have purchased a Rebis rack which contains two noise gates already and is rapidly filling up.

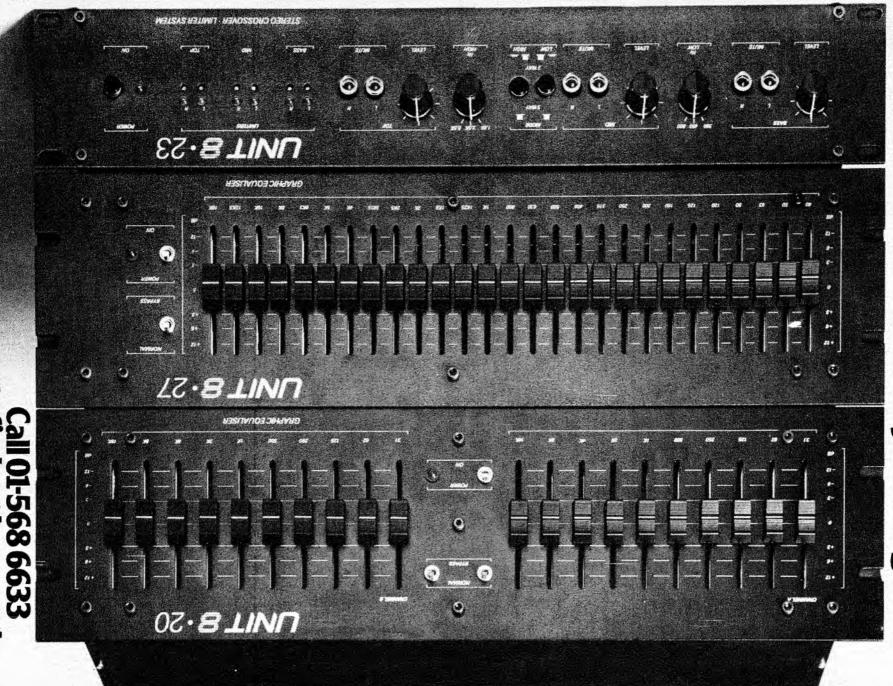
Equal enthusiasm was extended to the tape machines all of which are MCI. The 24-track is the JH116 with Dolby, eight-track - JH110 and two two-track JH110s. These (the two- and eighttrack machines) are apparently of a new design and everyone in the studio has been very pleased with their performance. They also have a couple of Revoxes. There is a Neal cassette on the way and also a fast copier. Echo is with an EMT echo plate and an AKG BX20 unit. Monitors are Tannoy Buckinghams (powered by HH V500 Moss Fet amps) and their own style "Auratone" type domestic speakers.

Sain like to encourage other engineers to use the studio and quite often bring in freelance guys for their own use. They also have a close tie-up with Rockfield which goes back to the days when they used the Rockfield facilities themselves, and have thus built up a longstanding friendship. Although they admit that to some extent they must be competing against each other, they don't somehow think it is very relevant partly because they are 180 miles apart and partly because they probably attract a different type of client.

So if you are interested, the rate, as I mentioned before, is £200 per night, or if you are definitely not a night person, Sain will cost you £30 per hour, plus tape, plus VAT. The man to get in touch with is Huw Jones and the number is Penygroes (028 5681) 732.

Janet Angus

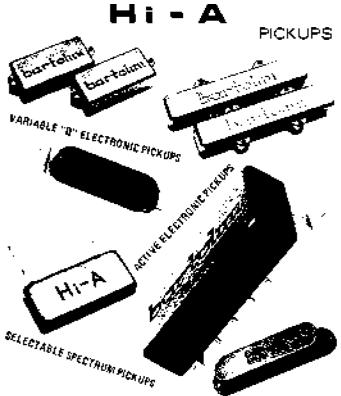
to find out how good.



23

Whichever way you look at it, they sound good.

bartolni



BARTOLINI GUITARS

BOX 934

LIVERMORE, CALIF. 94550

(415) 443-1037

Exact Replacement Pickups For Most Electric Guitars And Basses.

PILEDRIVER

Rigs and systems for all clubs, halls and tours. Up to 5K+Foldback mix, including the magnificent Bose 2.5K rig, and all stage equipment hire-combos, amps, cabs and mikes.

piledriver equipment hire





11 Harrison Gardens Edinburgh EHU ISJ 031-337 1071

SELECT THE IDEAL GUITAR PICK FOR YOUR INDIVIDUAL STYLE . . .



FOR PRICE LIST AND SAMPLE
OF 50 DIFFERENT PICKS
INCLUDING HARD TO FIND
STYLES, COLORS, XTRA HEAVY
& NYLON PICKS,

SEND \$7.00 (USA DOLLARS)
OR (CHECK ON USA BANK) TO:

SOUND & STAGE INC. • P.O. BOX 34 • PICKS FANWOOD, N.J. 07023 U.S.A.

HEAR THS!

250
watts r.m.s.

15" SPEAKER
Richard Allan
Linkles of Section 37-16



ATLAS 15

-don't settle for less

- even the price is good

Even top performers need a little help!

Your high performance relies on ours — can you afford to be without our Power Range of Speakers and Crossovers?

Send for this brochure



SEMD FOR	DETAILS	PRICES AND	REVIEWS	TO:-
SEMD FOR	DEI MIES,	LUICES WIST	netiews	10.

Richard Allan Radio Ltd,	Bradford Road, Gomersal, Cleckheato
West Yorks, BD19 4AZ.	Phone: Cleckheaton (0274) 8724
Grams: 'Acoustics	Bradford, Telex: 51311 Relays-G

Send POWER RANGE leaflet to.....

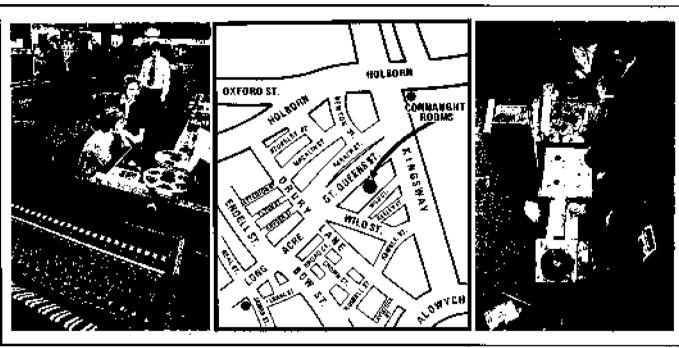
Address

Trade enquiries invited

IM3

APRS'80 Show

As usual the Association of Professional Recording Studios will be holding its annual exhibition of studio equipment at the Connaught Rooms, Great Queen Street, London on June 18-19-20. This year it has grown considerably and will be the biggest ever. A large number of exhibitors are there for the first time as well as all the regular companies. Space precludes a detailed preview but we have listed all the companies known to be present at the time of writing.



Company
- · ·
Advanced Music Systems
Agfa Gevaert Ltd
AKG Acoustics Ltd
Allen & Heath (Brennel) Ltd
Alice (Stancoil) Ltd
Amek Systems & Controls Ltd
Ampex Great Britain Ltd
Atlantex Music Ltd
Audio & Design (Recording)
Ltd
Audio Developments
Audio Kinetics (UK) Ltd
Audix Ltd
Avcom Systems Ltd
R. Barth KG
BASF United Kingdom Ltd
FWO Bauch Ltd
Beyer Dynamic
B&K Laboratories Ltd
C.A. Audio Systems Ltd
CB Electronics Ltd
Calrec Audio Ltd
Canford Audio Ltd
Capital Components

128-129 Cassette Duplicating Supplies

66-67 Court Acoustics Ltd

135 Design Electronics

468-47 Dolby Laboratories Inc.

130-131 Don Larking Audio Sales

1 Enertec Schlumberger

75 Covernain Ltd

Cetec International Ltd

Clive E Green & Co. Ltd

'	-
119	Eardley Electronics Ltd
15	
14	Feldon Audio
106	Fitch Tape Mechanisms
141	· · · · · · · · · · · · · · · · · · ·
93	***************************************
42-43	· ····
	(Allotrope Ltd)
34-35	Gulton Europe Ltd. Electro-Voice
17-18-	
20-21	
133	
	H/H Electronic
121-123	Harman Audio UK
26-27-	
28-29	The state of the s
91	
40	Recording World
19	
110	
137-138	John Page Ltd Keith Monks (Audio) Ltd
137-136	
122	
139	
41	Leevers-Rich Equipment Ltd
33	
82	
OZ.	(Woodworkers) Ltd
114-115	Lyrec (UK) Ltd
558-56	3M United Kingdom Ltd
101	Maglink Audio Products Ltd
76	···- g ··-·-
92	Malcolm Hill Associates
51-52-53	
	Equipment) Ltd

81 Wayne Kerr Division of

Wilmot Breeden

Studio Recording for the 80's

n the beginning, man made song. Then he devised a way to amplify his voice while singing these songs. And, to preserve these precious performances, he created wax discs, clyinders, and, finally, magnetic tape. Now these "golden" sounds could be captured forever on all sorts of frequency recording and reproduction devices. This not only revolutionized the film business, it merely gave birth to the recording industry and that's when the real madness began.

Because early recording techniques only afforded man one "printing", so to speak, perfection of reproduction was indeed a rarity — what with the built-in difficiencies and varying responses of microphones, poor — if any — tape alignment, mis-matched impedances, phasing and mike placement etc.

However, man found a way around these problems by devising ways to alter the frequency response, phase relations and even the apparent level of a recorded event before and after it (met and left) the tape.

Once again the mad race was on with electromechanical one-upmanship and the continuous building of better mouse traps, one step at a time, until everyone was ready for THE heavy change — BAM! — wherein the "state-of-the-art" had caught up to its program and consequently the time had now come for the state-of-the-art to dictate it.

Following Peter Goldmark's development of the long playing stereo disc, along comes Ampex with the concept of stacking heads so that tape recorders and monitors would now perceive like the human ear, one piece of information for each side of your head. Not only that, but man could now control one signal both before and after the tape in two different ways. (Another victory for technology.)

Enter the Age of Stereophonic Sound. And as with any earth-shattering invention or discovery, adding to it was something to be expected but not easy leg getting an aircraft off the ground was the hardest part, creating the Concorde was just a question of time in the logical chain of events within the stream of consciousness of the human mind).

Needless to say, with the help of major contributors like Scully, Ampex and the inimitable Les Paul, we were given Multi-tracking Synchronization and Ping-Ponging as part of an empirical process culminating in an average number of 24-tracks up to and including the 90 tracks used by Roy Thomas Baker on the sessions for Foreigner's Head Games album. So if you want to enter the Guinness Record Book for "Most Tracks Used Simultaneously" you'd better start locking everything from a string of cassettes up to throwing in your own home 2/4 track in order to up the ante. (By the way, cascading tape loops using an outboard 24-track machine does not qualify.) And if all of that doesn't tickle your fancy, perhaps International Musician and Recording World could sponsor an annual "History of Recording Trivia" contest where the winner might win something like "Engineer's Hands-On Manual Dexterity Award."

Anyway, to step back into the past for a moment, this new audio imagery needed something more to go with it than the unadorned, although luxuriant, sound of grandiose symphony orchestras pounding to a dramatic climax in Beethoven's Fifth, or even the abstract "groovy" vibes of jazz. Oddly enough, concurrent to and within years of the aforementioned developments in recording, a heightened interest in electronically amplifying guitars, basses, pianos and organs also came into play.

How curious, we now had these quaint little modified instruments which, in addition to allowing the musician to play



"traditionally," added a whole new aural dimension to recorded sound. In turn, this new decibel radiating force was coupled with the strange new ideas permeating popular music of the day - which, back in the mid-Fifties and early Sixties, was spearheaded by rock & roll and rhythm & blues. This quirky marriage of music and technology had but one place to go and there were now plenty of candidates ready and eager to both add to and fully utilize newborn concepts like multi-track recording, stereo and even - dare I say it? - quadrophonic sound. Studio wizardry, in all of its analogic glory, stood on the threshold of final fruition.

Now, with the stage having been set, an even greater challenge lay ahead for the Sixties. The unforseen combination of modern recording technology, the Beatles (and all of our other rock heroes, too numerous to mention here) and drugs somehow blended as harmoniously as a Duane Allman/Dickie Betts guitar This solo. unusual phenomenon went far beyond anyone's expectations, causing an incredible surge in musical consciousness. This was a time when the producer became more than just a contractor and the recording engineer more than a simple patch cord manipulator. This period also bore witness to some of the most forwardthinking ideas of this century's musical development. More engineers, producers and musicians, and a lot more money being spent on the actual record-making process. But this was OK, since rock throughout the Sixties had firmly entrenched itself all over the world as a viable form of entertainment, bringing with its lots of dreams, joy and money.

I was lucky enough to be one of the "blessed" ones who got to enjoy records from both sides of the turntable. Still growing up in an era where innocence was still in style and worshiping many of our rock and blues idols as a consumer listener, 1 suddenly found myself (at Atlantic Records in New York) working in a professional capacity with artists like Otis Redding, King Curtis, Jimmy Page, The Stones, Aretha Franklin, Sly Stone on through a list that now reads like a Who's Who of the record industry.

In those days, I worked on many projects which could involve anything from a single overdub all the way up to being principal or "star" mixer and all (the) combinations in between. On most of these future platinum or gold-

"There are probably as many 'EFX' contraptions as there are pills in modern medicine"

awarded projects, credit was not given nor was it of major importance. At times, I felt it was an achievement to have survived that era with my sense of perspective intact since all of these changes were taking place at a time when there were no audio recording schools, very few "official" assistant engineers — basically, no one to tell you how, when and why to do what. It was a basic case of "sink or swim."

This was also a time when one inch eight-track was the state-of-the-art and it was not uncommon to hear stories of how easy we had it compared to the "old four-track days", It was also not uncommon to do a four-track demo or re-mix a lot of music that had been recorded on a four-track, like the old Stax/Volt catalogue, material. Another standard practice was to re-mix both in stereo and in mono because a proven CSG unit had yet to be discovered and in-line console was making its debut but was not considered "the way to go".

Landmark technological achievements like man's landing on the moon, solid-state circuitry, the evolution of musical synthesis and computer technology through the use of micro-chips, eventually culminated in recording's major 16-track "jump", which called for far more hands and fingers than God had ever intended us to have!

Once again, new inventions and refinements started to flood the studios - as if they had ever stopped! Enter the second Age of Gadgets, "toys", and devices for all. No longer did you have to gang up two extra machines to get a flanging effect. You just had to push a button and - CLICK you were phasing. And another box would let you get both flanging and delay digitalwithout tape machines! There are probably as many. "EFX" countraptions as there are kinds of pills in modern medicine and, quite honestly.

many of these have often been used as a last-minute prescription to little or no avail. But if you think I dont like these "gimmicks", you're wrong. I love 'em all! One of my main credos is: I Must Have Toys.

After several years, a lot of recording projects and many different kinds of people encountered in the studio my basic theoretical approach to the recording process is that every time you make a record, you should try to create a "special sound", a sound as yet unheard by most people. You should try to record an instrument in a particular arrangement of frequencies and harmonics which will reproduce as amazingly fresh, real and pleasant to the various aural senses in your body. If you can do any of this, you've accomplished something of merit; however, this doesn't guarantee the records will sell! If the desire to create these "special sounds" is constantly brewing in your consciousness and a great artist, producer or hit song happens to come along, then you can elevate that hit to even greater heights while fashioning a sound that makes the whole thing more distinctive and special.

In Britain, after a period where early Motown and other American R&B techniques were mimicked, recording engineers have consistently striven to achieve this overall goal, something made all the more obvious by the Beatles and subsequent Brit-rock invasion of America.

As the Seventies fastforwarded into the Eighties we witnessed the amazing resurgence and devolution of R&B with "four-on-the-floor" into a format destined to take over the hit parade. We called it disco. Ironically, this form of music, considered to be mindless Muzak by most studio musicians and recording personnel responsible for creating it, ushered in an unprecedented era of technological evolution. An era which eventually brought us the standardization of noise reduction (Dolby, DBX), computer editing and mixing, digital recording and mixing and a host of other toys and gimmicks.

Meanwhile, most rock & rollers were spending half their lives and future royaties in the studio trying to avoid becoming instant "here today-gone-tomorrow" stars. This was The Age of the record, not the singer or the song: Ultraclean, highly compressed, state-of-the-art recording was often overpowering the talent being recorded.

Apparently, the world of recorded music has gone totally bananas. The all-important balance between music and technology has shifted, with too much emphasis on studio "wizardry", Predictably, studio equipment manufacturers hang in there like grim death, out-shouting and surpassing even the most ridiculous demands from artists, producers and studio personnel. And since consoles and other equipment are constantly gearing up for more speed, cleanliness and self-sufficiency within the context of futuristic digital technology, we might ask ourselves if the future of all recorded music will be reduced to mindless, electronically programmed, Muzak? Have we seen the end of our (human) musical heroes?

I've been fortunate enough to exchange ideas with leading manufacturers and can assure you that consoles are on drawing boards all over the world which can do anything from cooking your meals and serving dessert to providing the kind of "under-the-console" sexual gratification so highly (i.e. giving head) regarded in rock & roll circles. Will all of this get more out of hand?

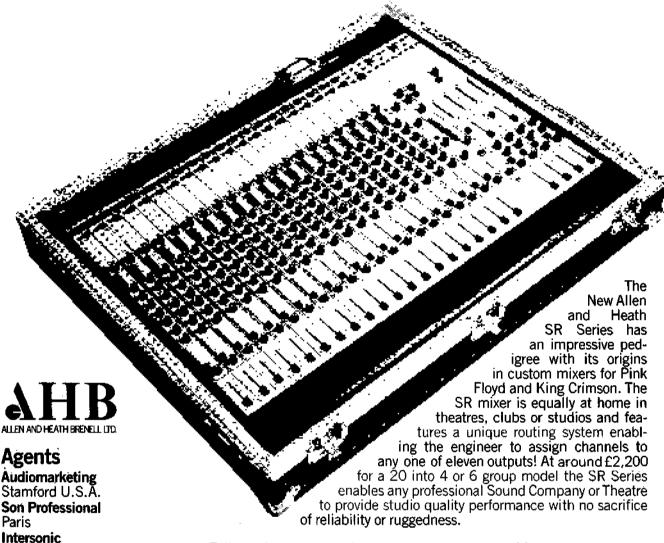
In effect, will we control the technology at our disposal or will it dictate to us? Will there be print-outs of "suggested mixing treatments" based on the programme's frequency, phase (ratio) and/or sine wave/square wave content? Imagine specific multiplechoice audio "paths" to take, based on the computer's sum data. You push one button which could then say: YOU MAY NOW ADD ECHO - IF YOU DESIRE IT. And will an onmivorous computer "erroneously" erase previous drop-ins just because it doesn't like that particular part?

Jimmy Douglass

Jimmy Douglass spent much of his career as a house producer with Atlantic Records in New York working with such acts as the Stones, Otis Redding, King Curtis, Hall and Oates and foreigner. He now works as a freelance producer in New York,



SR20 and SR28 MIXING BUSINESS WITH PLEASURE



Agents

Audiomarketing Stamford U.S.A.

Paris

Intersonic Stockholm

Fading Madrid

Studio Sound

Frankfurt

TEM

Brussels

Suri Music

Denmark

Audiolab Hellas

Greece

S.A.P.

Amsterdam

Audio Consultants

Italy

Lastron

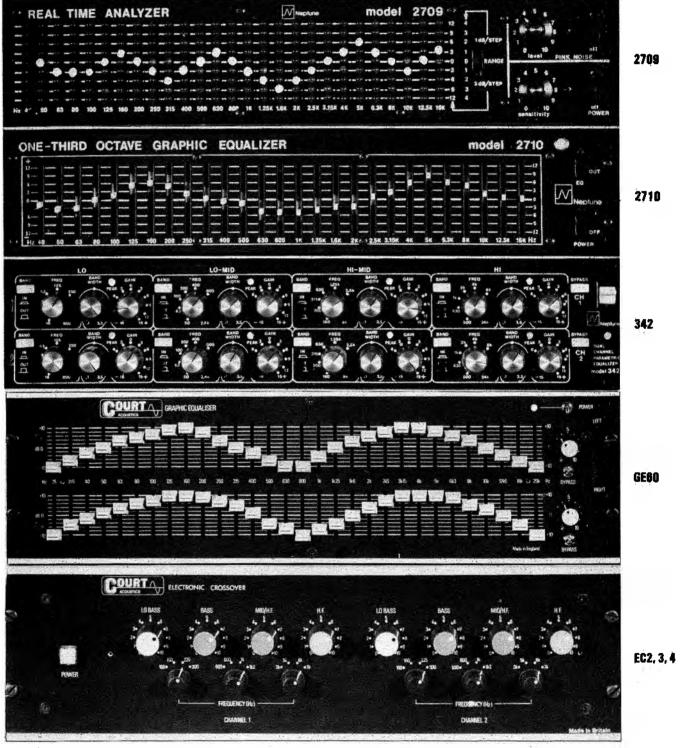
South Africa

• Fully modular construction allows any format up to 28 inputs per frame.

- 8 routing busses to groups and masters.
 3 auxiliary busses for foldback and effects.
- 10 echo returns for multiple effects mixing.
- Integral stage communications system.
- Built-in oscillator with frequency sweeping.
- Sweep frequency equalization as standard.
- Phantom power as standard.
- Heavy Duty external power supply.
- XLR transformer balanced microphone inputs with low noise preamplifier.
- LED Peak reading meters with stereo monitoring.
- Comprehensive headphone monitoring system.
- Military spec multipin connector optional
 + 18dBm output head room.
- ●—P&G fader option.
- Solo (PFL) of all desk functions.
- Special dual frame option for 40 or 48 inputs.
- Heavy duty flight case (as shown).

ALLEN AND HEATH BRENELL LTD. PEMBROKE HOUSE, CAMPSBOURNE ROAD, LONDON N8

.... And some are more equal than others



- 2709 Reptune 27-band Spectrum Analyser
 Giving 27-bands of display in 1db and 3db steps, with built in microphone amplifier, and pink noise generator, Like all Neptune products, fully balanced at around half the cost of other analysers.
- 2710 Neptune Electronics 27-band Graphic Equaliser
 All solid state giving ½ octave equalisation at a very low cost and giving considerably higher output and improved performance on any sound system. Also available in 10 band stereo and mono versions.
- 342 Neptune Stereo Parametric Equaliser
 A new addition to the Neptune range for which we are sole UK agents.
 This superb equaliser gives 4 overlapping bands which can be separately switched in, and giving broadband equalsation covering the entire audio spectrum in one sweep, down to an extremely sharp notch fifter. Balanced and unbalanced.
- GE60 30-band Stereo Graphic Equaliser

The ultimate equaliser with 60-bands on ISO centre frequencies from 25hz-20khz, up to 20db of gain, fully balanced with minimally flat filters allowing the unit to be used as a 'all cut' or 'all boost' equaliser.

- EC2, 3,4 Constant Phase Electronic Crossover.
 - 2, 3, and 4 way electronic crossovers switchable to standard frequencies.



COURT ACOUSTICS LTD

35/39 Britannia Row London N1 8QH 🛵 01-359 0956 Telex:268279 BRITRO G

A SUPERB NEW 24-TRACK STUDIO HAS NOW OPENED IN NORTH WALES



RECORDING STUDIO

MCI 24/8/2-track tape machines with Dolby; Cadac in-line console; Tanoy Buckingham monitors; H&H V500 Mos Fet amps; Eventide, Lexicon, Urei, Audio & Design, Rebis and Orban auxiliaries; EMT plate + AKG BX20 echo; Kawai Grand piano, Hammond organ, ARP synthesizer, Rogers drum kit, Music Man and Fender amps, Yamaha bass guitar all available at no extra charge. Full airconditioning. Room for 60 musicians and a spacious control room.





Five miles from the town of Caernarfon, two miles from the sea and only ten miles from Snowdon itself, the studio's beautiful location is an added attraction for all musicians who wish to lay down tracks in relaxed surroundings.

Basic rates: £30 per hour.
Discount for block bookings and night working, for instance, a whole week of night working (up to 13 hours per night) costs only £1,400 + VAT.

Very reasonable (licenced) accommodation easily arranged.

CALL US!

SAIN, Penygroes, Caernarfon, Gwynedd. Tel: Penygroes (028 681) 732



Studio Test

MCI 600 series

The latest range of desks from MCI is known as the 600 series and is a natural progression from the precious series. It incorporates many updated features together with proven ideas from the 500 series while retaining the economy of the 400 series. Facilities offered compare very favourably with desks costing considerably more and all the consoles are automated as standard.

The model 636 I used is installed at Celestial Sound Studios and has been in use there for three months.

The desk is very compact, measuring an inch under 7ft long and 31/2ft deep. At the rear of the desk, the height from the top of the meter housing to the ground is 3 1/2 ft. It can fit quite easily in even the smallest of control rooms. The basic 636 package consists of 36 transformerlesss line channels and four discrete output busses. A comprehensive patch bay is prewired to Tuchel connectors at the rear of the console enabling easy installation and inferfacing with changling equipment. All the microphone channels have phantom powering but it is possible to turn if off on selected channels if not required which is a useful feature.

The power supply is a split unit and each half powers 18 channels i.e. 1-18 and 19-36. Should a failure occur in one side of the power supply, only half the desk would be effected.

A useful new feature of MCI is an oscillator which has stepped

calibration points and eight clickstopped frequencies covering 20Hz to 20kHz in three switched ranges. Als included in the test section is a white and pink noise generator.

The in line modules are in two sections — buss routing, eq, sends, panning and monitoring in one section while the VCA/computer, automation, group and mute functions are in the other. Both sections can be switched independently of each other. The automation standard equipment as already mentioned.

Also standard in the 636 are the 28 VU meters but unfortunately there is no "Plasma Display" option as is available with the other series. Also optional are the send and phase meters but these are sure to be such requested options and one questions why they are not standard.

In addition to the 36-channels there are five VCA echo returns, two of which have sends on them. and can regenerate to themselves (spin). The fifth has a buss assignment to the multitrack. Pre-wired in the console is provision to add eight extra VCA faders below the patchfield on the right of the desk. Back to the channel module and it functions in more detail. The module is only 1 ½ inches wide and is well packed with controls. First comes a level switch with +6.0, -6dB positions, then comes the buss assignment in the form of 12 switches which to save space are the routing to both odd and even outs, eg. the first button is routing to 1 and 2 with an LED indicator. This is followed by a pan control, a trim pot, another LED indicating line in/line out status and a "dump" button used to re-route a track to an output buss when track bouncing.

The EQ is a three octave continuous shelving design with selectable peak on the high and low ends. These switches act as filters when the EQ is not in the circuit. The EQ itself was a bit too broad for me, and crossed at Lo-Mid-Hi which still left me needing another mid range frequency. MCI do, however, offer at a substantially high price a rather nice parametric EQ option.

Like the 500 series, the EQ can be assigned to the tape/monitor. There is also a phase reverse switch and status lights indicating all these functions next to the send section. You have to use these controls in this area with care as there is not a for of space to spare. There are six sends but they "ganged" in that they share in pairs the pre/post selection switches one and two, three and four, five and six. This makes for a less than ideal situation, yet it is still very usable. Send one and two have the wet function which is good for sending to tage. Sends five and six have normal reverb to cue send. MCI has still has not included on/off send switches.

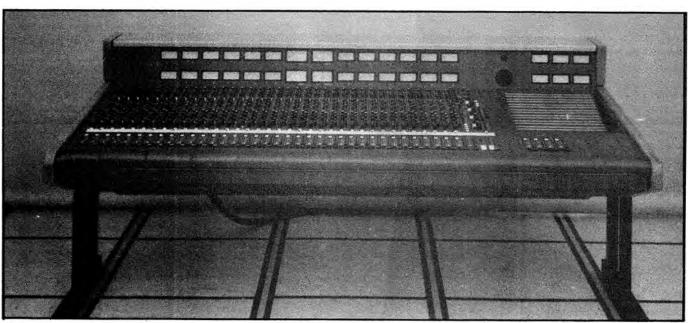
There are four solo points- after the mike, after the EQ, PFL, and in place solo with echo which I found very handy. Two mutes are provided, one for the monitor only, and main automated channel mute which all the functions follow.

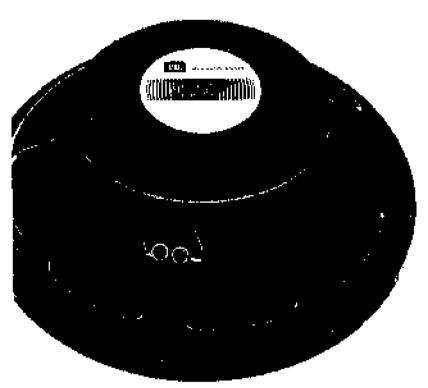
We now pass over the monitor fader, a group of status LED's and fader reversals on the the VCA, automation, mute and subgroup module. Last on the channel strip closest to your hand is the subgroup select control. This console has no cluster of group faders as each individual channel has the capability to become a group master which is indicated by a LED. The automation functions are simple one step operations on this console. Push once and up date, watch the null lights and you're out. On the right side of the fader within the total 1% inch width there are lots of little buttons and LED's and I found myself constantly changing functions without knowing it, so you have to watch the status lights. The feel of the buttons I find a bit strange as there is little or no travel distance to activate them or the mute.

I must say, however, that I was able to span the console diagonally from a sitting position which will make for many less tired, more willing-to-try engineers.

As far as I could tell the console was "clean" and "speedy" to use, quiet and professionally efficient. Maintenance? — well it functioned fine while I was working on it but I guess time is the true tester. As far as I'm concerned, pound for pound you can't find a console that will do as much for so little.

Jimmy Douglass





When someone with the reputation of JBL launch a new range of speakers, they've got to be better than anything else. Even our own.

And we've done it with the 'E series'.
So do you <u>really</u> get increased power handling, greater efficiency and even lower distortion levels than you got from our own highly-acclaimed 'K series'?

Absolutely.

How? Years of intensive research and development have culminated in an entirely new kind of speaker.

First we looked at the magnet. Our 'K series' was renowned for the excellence of the Alnico magnet. For the 'E series' we've superceded even our own almighty Alnicowith a new design of ferrite magnet that out-performs and out-classes any other.

It boasts SFG.

Symmetrical Field Geometry. The production of a totally symmetrical magnetic field to greatly reduce third harmonic distortion.

The JBL'K series' made news. The new JBL'E's' will make

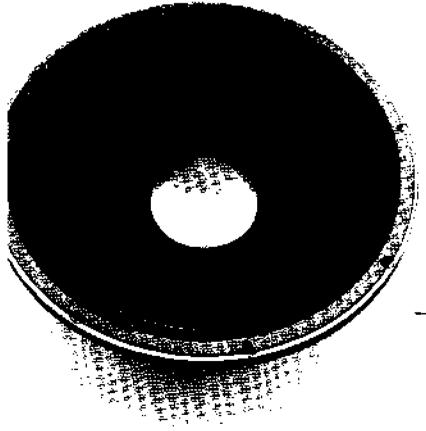
And to eliminate <u>second</u> harmonic distortion (as far as is technically possible) we've fitted an aluminium Flux Stabilising Ring.

A lot of changes? You're right.

But the things that don't change are the superior manufacturing standards that made

Like the hand-wound coils of aluminium ribbon, the specially developed high-temperature adhesives, the cast aluminium frame and assembly instead of stamped sheet metal. They're all part of the drive towards optimum efficiency and higher power rating.

So to put a headline in your backline, just post the coupon and we'll be happy to send you all the information.



•	
Please send me details o JBL 'E series:	f the new
Name	
Address	
Postcode	
Harman UK, St Johns Road,	
Tylers Green, High Wycombe,	
Bucks. Tel: Penn (049 481) 5331	

Owww Bass Combo

£189.00 inc. VAT



ONE OF THE NEW EXCITING RANGE OF AMPLIFIERS FROM OHM. MODEL GB60

- * 60 WATTS OUTPUT
- * 5 BAND EQ + CONTOUR SWITCH
- * PRE & MASTER GAIN CONTROLS
- * PRE-AMP OUTPUT
- * 15" 100 WATT FORMAC DRIVER
- * PORTED TUNED ENCLOSURE
- * H 23½" x W 20½" x D 11½"
- * AT YOUR OHM DEALER NOW

OHM AMPLIFICATION LTD., UNIT 1, KNUTSFORD INDUSTRIAL EST., PARKGATE LANE, KNUTSFORD, CHESHIRE WA168DX TEL: 0565-54641

Four sound reasons why you shouldn't call this just a crossover.

The MCS Series 200 Crossover. Modular. Expandable. Professional. With four outstanding features that set it apart from all other crossovers. Mid-filter limiters for each frequency band. Output level meters for each frequency band. 24, 18 or 12 dB per octave filter slopes. Subsonic and high frequency filters. Compact, reliable and versatile. The MCS Series 200 has established its own standard. Complete with two innovative accessories. The **RR105** lead tester and the **RR116** high performance direct injection box.



On Test STUDER B67

The basis of the transport used in the B67 was originally used in the Revox A700 but a closer examination reveals that as the deck developed through the A67 to the B67, many changes have taken place. The tape path and shape of the headblock are still similar but the materials used have been extensively professionalized. The electronics however are a completely separate development.

There are a wide variety of permutations available to suit many different recording and broadcasting requirements. The model under review was a 7½/15/30 ips stereo machine in a pedestal mounted console with a VU penthouse. The transport and electronics can be quite compactly mounted in some formats but in this style they are quite sizeable for a stereo machine. The width is 27 1/2 inches, 23 1/4 inches deep with a height of 431/2 inches to the top of the penthouse and 321/2 inches to the deck.

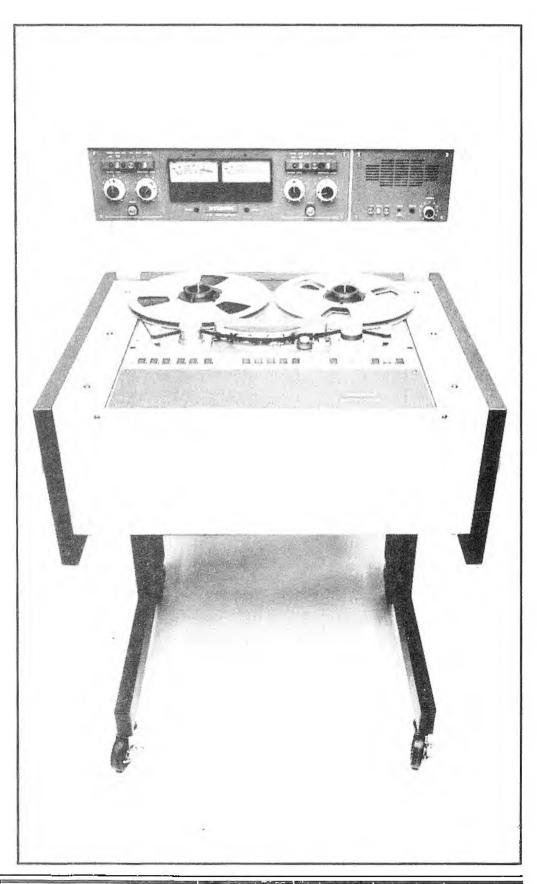
The Transport

The deck is able to accept reels of up to 10½ inch diameter and has a DIN centre spindle but is supplied with a pair of NAB adaptors.

The tape path is symmetrical about the headlock. Leaving the supply reel, the tape first passes over a sprung tape tension sensor and then a rotating roller before entering the headblock. On the other side of the headblock is an idler roller with a rubberized strip in contact with the tape to minimize slip. This acts as the tape motion sensor, having a toothed wheel under the desk reflecting an infra-red source which is then detected by sensors and the information passed to the transport logic. Before the take-up reel, the tape passes over the second tape tension sensor.

Access to the deck is easy and requires only a few screws. The headlock can be removed by three screws.

The headlock contains three heads all well screened with



the play head having a manually-operated head shield. There is a manuallyoperated tape lifter as well as the automatic that can be used to lift the tape from the erase and record heads. In addition. there is a knife edge that can be used for cutting tape while it is still laced up. It would impossible to do this accidentally as the level is behind the headblock and requires a very positive action. Mounted on top of the headblock is an editing block should you prefer to use it.

The deck controls are straight forward and include all the normal functions with a few extras.

"MOT. Off" turns off the take-up motor for editing and disables the fast wind modes. The "Repeat" button puts the machine into rewind while your finger depresses the button but when released puts the machine into play. This is very useful when editing or analysing a section of tape.

The "Auto" button has two possible operations. It can be pressed in play or record and when the tape reaches a transparent leader, it will be wound back to the start and stop. The other operation is the same except having rewound it will go into the play or previous mode record and keep the "Auto" function going. The choice of operation is programmed internally by a jumper on the tape transport control board.

"Fader Start" puts the machine into the stop mode and it requires an external signal to start the deck. This is often used in broadcasting applications where the machine is required to start playing as a fader is raised — cued by the internal switch in the fader.

Remaining is the "Pause" button which holds the play/record mode while it is depressed as it does not latch.

The tape counter shows tape running time in hours, minutes and seconds. What is actually displayed can also be controlled internally but our

version was able to show a minus value up to 59 min 59 sec if rewound beyond the zero point which I found useful. The counter was pretty accurate and stopped immediately the tape tension was removed even if the tape motion sensor roller was still spinning after fast wind.

The transport functioned very well and I have no complaints at all. The rewind time on 2,400 feet of tape I found to be well below Studer's flgure of 120 seconds for 2,300 feet, but maybe a little less speed would be beneficial as the wind on the tape (Ampex 456) is a little rougher than we have come to expect from modern machines with matt backed tapes.

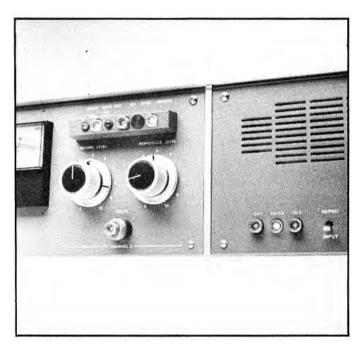
The Electronics

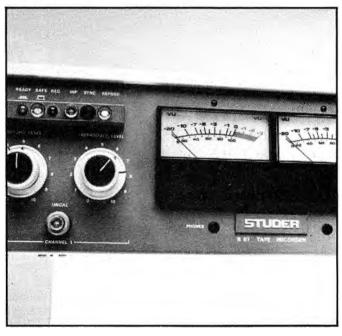
The penthouse is dominated by a pair of VU meters with 3½ inch scales with peak reading LEDs. The meters may be internally switched to read + 4dBm/+8dBm. Below each meter is a stereo headphone iack socket.

The controls for the left and right channels are on either side of the meters and consist of two concentric knobs for record and reproduce level with the inner knob being selected by pushing the "Uncall" switch and so making short term alterations to record and play levels possible. There are fish-eye switches for input/reproduce selection and for safe/ready status.

The right side of the penthouse contains a five by threeinch elliptical speaker with a panel containing a volume control, phones socket, repro/input select and to select channel 1, 2, 1+2 input to the speaker. There is ample volume from this speaker for editing and other machine local operations but I found it very easy to leave it on and not realize that I could still hear it while sitting in front of the studio monitors and so colour what I was hearing. A case for strict operational discipline.

Both the panels in the pen-





thouse are hinged and can be swung down to inspect the electronics etc. which are all on PCBs with connectors enabling easy removal.

The channel amplifiers and transport electronics are situated under the front of the deck but access involves unscrewing two hinged panels. All the amplifiers are on separate cards offering the usual wide range of Studer

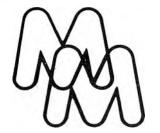
alignment adjustment.

The supplied manual is excellent with clear diagrams for maintenance and operating instructions.

Summary

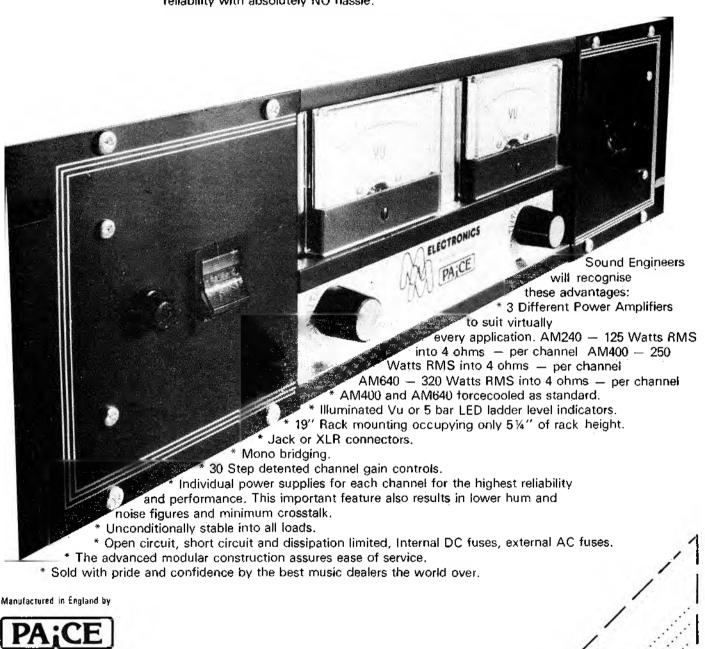
A good tape machine that has rightly found much acceptance in a wide variety of applications.

Keith Spencer-Allen



AM Series Professional Power **Amplifiers**

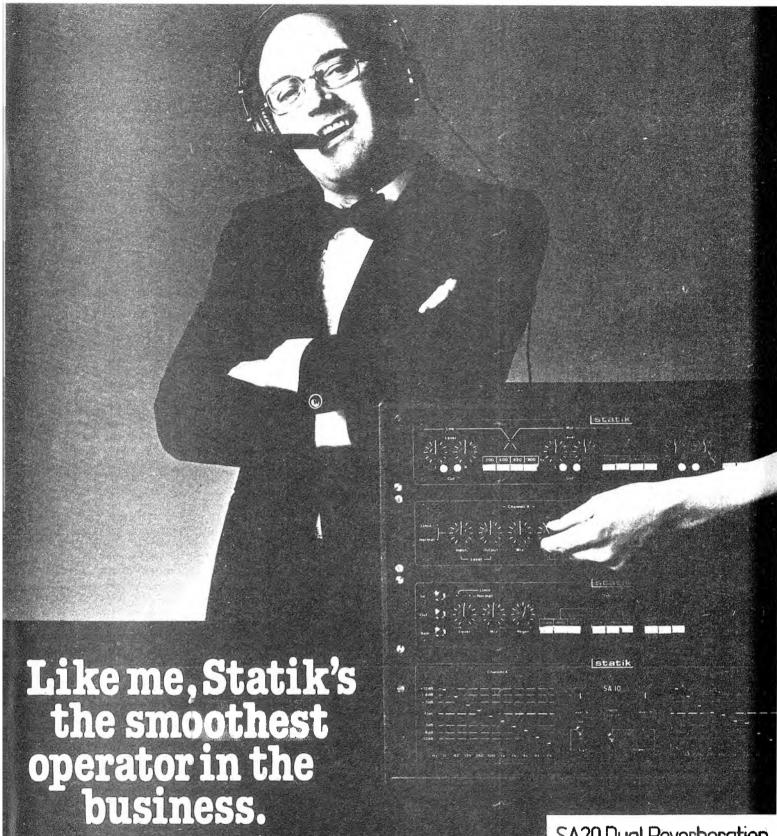
MM's new range of power amps are the result of taking a long, serious look at what is really required of a power amp in todays studio and PA systems. They're not built around some 'fancy', 'new' technology but based upon a well tried and tested design that quarantees to give you exactly what you want; Night after night of unflinching reliability with absolutely NO hassle.





ELECTRONICS

Contact your M M dealer now for further information or write to: Pace Musical Equipment Limited, 63 Kneesworth Street, Royston, Herts, Tel; (0763) 45321



Strangely, it's what's missing from our SA20 Dual Reverberation System that makes it

You il tind no driver-stage clipping or transducer saturation: thanks to an input limiter with frequency-dependent side chain.

You'll experience no output stage overload: the SA2C's excellent headroom and equalisation effectively deal with spring

Our noise figure is remarkably low too, while the SA20's new spring arrays feature significantly reduced flutter.

The result is, quite simply, a more natural-sounding reverberation.

Like all Statik Acoustics products, the SA20 combines excellent specifications with a really

competitive price tag.

SA20 Dual Reverberation System



Tel. No.

Please send information on Statik Acoustics, and the name of my nearest retailer. To: Statik Acoustics (Dept. 2), Coppice Trading Estate, Kidderminster, Words. Tel: (0562) 741515. Telex: 339821.

Address

Circle 834 on Reader Service Card

On Test

YAMAHA P-2200

The top model professional power amplifier from Yamaha is known as the P-2200. All the details regarding the P-2200 also apply to the P-2201 which is the same model but does not include the output meters.

The P-2200 is a very attractive looking amplifier — a professional robustness combined with good design. The front panel is 19-inch rack mounting. Seven inches deep and 1/4inch in thickness. The internal weight distribution is largely towards the front so the front mounting fixing will probably be sufficient and not require an additional rear fixing.



All the controls are recessed and cannot be accidently knocked. The power switch is a lever type with a positive clicking action backed up by exposing a red strip and an LED when turned on. Above this is another LED showing when the thermal cut-out is operative. These three controls are mounted on a panel that can be unscrewed separately from the front panel. A similar method of construction is used for the pair of meters and volume controls. The meters are a peak reading type calibrated in watts into 8 ohms as well as dB with 1,00W corresponding to 0dB. They are uniformly illuminated by four miniature bulbs on each meter being run at low intensity. Bulb replacement is achieved by removing this panel giving easy access to the bulbs.

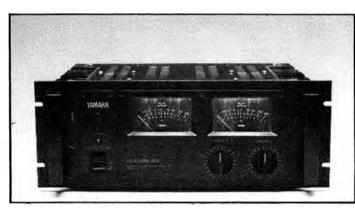
The level controls are a stepped type with 22 increments with the dB value marked around the perimeter.

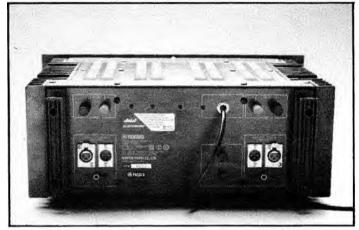
Substantial heat sinks are situated along each side of the amplifier with the power transistors caged between the fins.

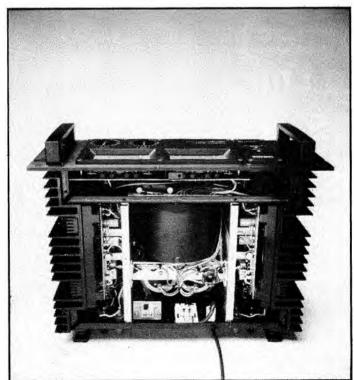
Power Supply

The rear panel contains the power fuses, speaker outputs and a pair of XLR type connectors — both male and female for each channel — wired in an unbalanced mode.

One reservation I had in this







area was the use of a two-core mains lead. The colour coding was also the Japanese standard. The usual practice in PA use is to earth all the system through the mixer, so in most applications, an earth would not be required. I would always prefer to see a threecore cable fitted and not use the earth as this leaves the choice open to use it if not being earthed through a mixing console. The internal terminal block which the cable ends in. has provision for a three-core cable so it would not be difficult to fit a new cable. Also the polarity of the cable is not crucial in practice but it should at least be indented in a manner that is obvious to a lessinformed potential user.

Internal construction is compact and neat. Over half the internal space is taken by a very large power supply with the amplifier channels electronics mounted on either side. Extensive use is made of screening panels that bolt in the frame and give the complete construction a great deal of strength.

There are no internal cooling fans but the bottom and top panels are slatted to allow passage of air through the interior — so an external fan could be used in a rack.

Summary

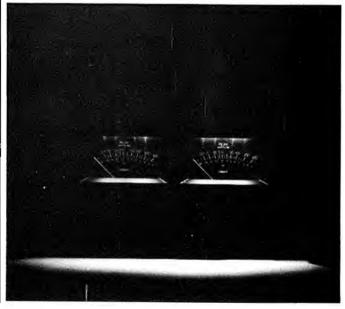
A well-designed amplifier that has much to recommend it. The only reservations I have are easily rectifiable and the price is particularly interesting.

Mark Sawicki and Keith Spencer-Allen

Stereo Power Amplifier

Párameter	Result	Test Condition	Comments
Specific Power Output IWatts RMS; R—Right channel L—Lett channel	519.84WRMS 510.76WRMS 289.20WRMS 285.60WRMS 196.WRMS 193.21WRMS	L. 4 Ohms 1kHz measured at	Yamaha's operating manual claim: 200 Wattis: continuous average sine wave power into 8 ohms with less than 0.05% THO over a bendwidth of 2012 to 20kHz — both channels driven. 230 watts: continuous average sine wave power into 8 ohms with less than 0.05% THO@ 1kHz — both channels driven. 400 watts: continuous average sine wave power into 16 ohms with less than 0.05% THO, 20Hz + 20kHz Monopural Mode.
Input Sensitivity IVAMS for 230WRMS; I42.89VRMS; Output signal, Ref. IkHz	R. 1.236VRMS Ł. 1.239VRMS	Ref. 1kHz signel. 8 ohms load applied. Measured digitally on Sangamo-Weston, Model 6000 digital multimeter. Accuracy better than 1%.	Man. Spec, says that an input of + 4dB (1.23VI), ± 0.5dB produces an output of 230 watts into 8 ohms, with input attenuator set for maximum level. With minimum of 25kohms of input impedance, the P-2200 inputs can accept most SEMI-PRO devices or to be used as a 1bridging load for a 800 Ohms source.
Total Harmonic Distortion (THD%)	Less then 0.005% (0.0023% typically) Less than 0.01%	@150 watts into 8 chms. Ref. 20Hz - 20kHz 	Very good. The P-2200 hat wide input headroom and high peak power output capabilities to help avoid the usual distortion problems. The automatic bissing circuitry also avoid crossover distortions under normal operating conditions.
Intermodulation Distortions (I.M)%	Less than 0.01%	Ref. single channel power cutput of 150WRMS into 8 ohms toad.	Quite good. These results correspond to frequencies of 70Hz & 7kHz mixed in a standard ratio of 4:1. The levels of f.M. are low enough to be wrtusfly inaudible even in the most critical situations.
Input Impedance	Approx. 25kohms	IkHz and corresponding to its minimum value	Unbalanced, Input connectors are one male and one female XLR connectors (in parallell Pin 2 "Hot" Pin 3 connected to Pin 1 (shield) and are switchable for pin 3 "Hot"
Péak Resding Meter	0dB = approx, 100 Watts.	Ref. 1kHz into 6 ohms. Meter Calibration: 0.01; 0.1; 1.0; 100; 300(wans) lin to 8 ohms foads) Simultaneously on —50; —40; 0; + 5(d8).	millisecands I - 40dB to
Signal/Noisa Ratio	Better than 110dB	Below rated power output into 8 ohms toad, Unweighted band of 20Hz – 20kHz.	Yemaha claim that the Hum and Noise performance of this amp will satisfy I.H.F.&A,S.A. requirements. INo. 224.3 — 1944.1
Channel Separation	Арргок. 82d8	Ref.)kMz śignal	At 20kHz channel separation is still better than 75dB.
Frequency Response	+ 0dB, - 0.5dB	Ref. 20Hz to 20kHz,	Man. Claims 20Hz + 50kHz frequency bands. Ref. + 0dB, = 0.5dB.
Damping Factor	Greater than 300 Greater than 70		Very good. Defined as load impedance divided by actual amplifier output impedance. Still great than 200 at 1kHz. Actual o/p impedance is smaller than 0.04 ohms from

Rise Time	Approx. 3.8ms	10% - 90% of 1voh@1kHz	Square wave output.
Slew Rate	45Vms	Rel. 175 watts into 8 ohms	200kHz "square" wave input.
Phase Shift	• 10 degrees'	20Hz to 20kHz	Acceptable.
Capacitance Load Test	ок	2µF non electrolytic capacitance and B ohms dummy load.	The overload protection circuits limit the max power available to drive any load. The effect of these circuits is to smoothly limit the power to loads below 2.5 ohms.
Open Circuit Stability Test	OK	Dummy load removed. Both LER channel level controls set@Max. Checked in both stereo and Mono modes of operation.	Stable during O.C.S. test. The dutput oldset voltage is typically smaller than + 10mV practically insignificant in normal use.
Short Circuit Test	25 seconds	Full drive into 8 ohms. Both channels tested but carried out separately.	Thermal warning lights turn on when heatsink temperature reaches 100 degrees centrigrade. A self resetting thermal switch shuts down the AC power if the transformer winding temperature reaches 130 degrees centigrade.



Your own one-off Ferrograph at a price no similar machine can equal.

hy Ferrograph?

ite simply because it es you the very best and recording quality, sed on 30 years eduction.

And the reliability that nes from near-total inuse manufacture, stage by ge control and 100% unit pection before despatch.

How else could every rrograph reel-to-reel recorder er you 10,000 hours regular

hy the SP7?

cause it offers all this rrograph quality in a machine it's custom-built with the exact ilities you need, at an



you don't need. You have the best there is within a budget.

without paying for features

Just specify the features you

They'll be built into a 3-head, 3-speed, 3-motor recorder which uses the transport and logic controls that made the Logic 7 famous.



ect your SP7 the facilities that interest you	
tereo + Mono Track Selection + Dolby	1
	٥
tereo + Mono Track Selection + Mic II	nputs
	Ö
· · · · · · · · · · · · · · · · · · ·	
lono	
ै 🖸	Ō
· · · · · · · · · · · · · · · · · · ·	
Iono + Mic input	

				■ Stereo + Mono Track Selection
Basic Type Mono Stereo (incl. Mono Selection) Line in/Line out Microphone Input(s) Heads Mono - Full Track	П 000 000	Optional Facilities Balanced Line in/out Power Amps (10w) + Speakers Dolby B NR System (Stereo Models only) Rack Mounting Kit (19in) NAB Adaptors (1 pair) Stainless Steel Reel Retainers Cannon XLR Connectors	0 0 000 00	Send us the completed coupon and we will let you know how much your custom-built SP7 would cost. And we'll send you the SP7 leaflet. Name Position Company Address
Tape Speeds (3) High 15"/7½"/3½" Medium 7½"/3½"/1½" Low 3½"/1½"/ ½"	000	Power Supply 240V 50Hz 220V 50Hz 110V 60Hz		Post Code Telephone (in case of any query)
Equalisation IEC/CCIR NAB		Quantity Required Demonstration requested		Simonside Works, South Shields, Tyne & Wear NE34 9NX, England Telephone: (0632) 566321. Telex: 537227

On Test

Court Acoustics GE60 Graphic Equaliser

Here is a rather interesting new product from Court Acoustics, a stereo graphic equaliser comprising 30 separate bands.

There are quite a few interesting features on this unit which although do not make it revolutionary do at least show that a considerable amount of time and effort has gone into making this graphic perform well and also — just as important — easy to use.

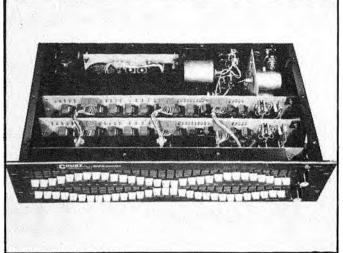
So let me first explain what this unit is. It is not just an extended version of the small, cheap and nasty guitar graphic equalisers that are found so often in either foot pedal form or built into guitar amplifiers. Don't get me wrong, those sort of graphics are perfect for what they are intended — musical instruments, where perhaps distortion and noise and accuracy are not really quite as important as whether it sound OK.

This Court Acoustics graphic has been designed and built for professional application, where the complete system has to be up to the highest studio standards. The unit as received is designed for 19 inch rack mounting and comes with a perspex cover (removable) as an optional extra to cover the front panel controls.

To say that the unit is solidly built would be an understatement. The chassis itself is in two halves — a U-shaped steel section for the back and sides with a hefty half inch thick front panel. Top and bottom panels are bolted on, although in fact just the top is removable,

A small compartment is provided just inside the back panel which houses the printed circuit board and transformer for the power supply. In fact apart from the mains on/off switch on the front panel this compartment is the only area where mains volts are floating around.

Three large glass fibre boards which run the whole length of the chassis house the rest of the electronics. One board at the front has all the graphic slider controls mounted onto it while the other two boards comprise the electronics for the left and right channels respectively. in bypass even with mains off). Finally a miniature toggle switch is provided for mains on/off with an LED for 'on' indication.



Most of the space on these two boards is taken up by the precision wound inductors (one required for each frequency band control). Additional screening is provided around these two boards to keep the hum and noise down to the lowest possible levels.

Input and output connectors are mounted on the back panel with both two-pole jacks and XLR-type connectors provided. Just next to these sockets inside the chassis is a row of eight-pin sockets for transformers for balanced line working. In fact on the test sample transformers were not supplied but instead shorting plugs were fitted.

As may be appreciated the two pole jacks only provide unbalanced connections to the unit (regardless) of whether transformers are fitted) and if used automatically, disconnect the XLR connectors (with or without transformers). An IEC mains connecttion is provided (with a retaining clip for the plug) with associated one amp fuse and mains selector.

Front panel facilities comprise the two rows of slider controls (30 mm travel on each), with at the right hand end, a gain potentiometer and bypass switch for each channel (incidentally the signal will pass straight through the unit So why are 30 controls required for each channel? Being a ½ octave graphic equaliser (each octave divided into three bands) a minimum of approximately 27-28 controls are required in order to cover the whole of the audio spectrum. What Court Acoustics have done is to add an extra couple of controls to be able to control signals you cannot hear.

Conditions can quite often be encountered where a signal outside the frequency spectrum you wish to reproduce gets through the system and has a detrimental effect on the wanted signal. The two sliders at the top (20kHz) and bottom (25Hz) act as low pass and high pass filters respectively in order to, allow control of this problem. The rest of the controls are just straight boost and cut at their respective frequencies.

Each slider has a click-stop in the centre of its travel with a movement up and down from this position of 15mm each way with an indicated boost and cut of 10dB (total 20dB). The reason given for using short travle faders was that it gives a much better idea of the frequency response of the system at a glance than looking at widely spaced controls. In fact this is quite true and there is no real problemin set-

ting up as fine adjustment is very easy.

Over the whole range of each graphic, the amount of boost and cut on each single control is between 10.1dB and 10.9dB. The 'Q' of each filter section is quite high so interaction between controls is low, maximum boost or cut on one band causes a maximum boost or cut of approx, 1.5dB on each adjacent band. This obviously means in practice that if say several hands close together are all set to maximum boost then the overall boost is a little higher than indicated. To be honest though it is not a problem, as the effect is only a dB or two and it is preferable to maintain a smooth response.

In fact because of the careful filter design with all controls in the same position anywhere between maximum boost or cut, the response is flat, without any of the peaks and troughs that are normally encountered when a graphic is used in the "boost only" or "cut only" conditions.

Each channel gain control canboost the entire signal by approximately 9dB or attenuate by approx. 30dB so any seting on the graphic can be adjusted to give unity overall gain. I must admit I was very impressed by this graphic and was quite amazed at the price considering that the unit is well up to full studio standards. Price approx. £630.

Dave Mann

1. Boost and cut range on each slider 20.2dB -21.8dB.
2. Alteration to range of slider when adjacent control set to max, boost -max, of 1.6dB.
3. Max, output level, Left channel — + 23.2dB
Right channel — + 23.5dB
4. Hum and noise, Left channel -86.5dB
Right channel -86dB
5. Gain adjustment, Left channel + 9.3db -30.1dB
Right channel + 8.5dB
-30.5dB

The Sunn Professional Guitarists Sound Check

- Can you select either or both channels without disturbing preset controls?
- Does your amp have C-MOS drive control?
- Can you combine the best of tube and solid state sound?

- Are you sure of the same response at all volume levels?
- Are you effectively patching in effects and/or other amps?
- ls your amp really portable?

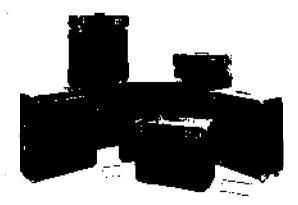
- Does your footswitch have L.E.D. and memory?
- Can you achieve the tonal coloration you want?
- Can you control channel interaction so that when you turn treble up, midrange and bass are not affected?

- Do you have individual channel volume controls and master volume control?
- Do your tone controls wash out at high levels?
- Can you use reverb without interference from your tone controls?

ģ

If you can't do all this and more with your present amplifier then you're limiting your potential performance ability.

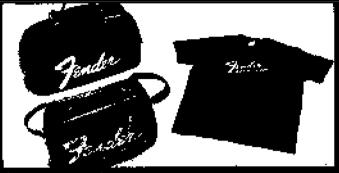
The Sunn Beta Series can do it for you. See your Sunn Dealer and make a sound investment in your performance.



The Beta Series

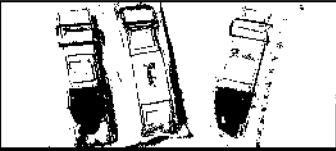


Sunn Musical Equipment Company • A Hartzell Corporation Company • Amburn Industrial Park • Tualatin, Oregon 97062



Fender Shoulder Bag

Fender T-Shirts. High Quality. Black Cotton, Made in USA.



Get a matching Fender Guitar Strap and Belt. As seen worn

Fender Guitar Strap The famous Fender Strap £4,99 incl. P.&P.



Fender Guitar Leads

COLED 231 25,99 incl. P.&P. 201 23,49 incl. P.&P.

LAST FEW LEFT. ORDER NOW!!







		779.
		Our Price
AO-70, Bronze Acoustic	£3:22	
	£3-22	
AO-12, Bronze 12 string		
N220 Nylon Classic	£2.73	
N330 Black Nylon Classic	£2.73	
	£3 .38	£1.49
	£3.88	

Please Note: When progray we or more service the same mode number a Cottley 10-s netriction is offered. Heave paper payment

ORDER FORM ICALLERS ALSO WELCOME!

To order any of the above Items, work out the value of your order (all prices include V.A.T.) and make cheques & P.O.'s payable to Soho Sound House Ltd.

Please send me: T-Shirts (Size) 25' Straight Lead.....

20' Straight Lead..... Shoulder Bag..... Power Drivers..... Holdall...... Strings 25' Coiled Lead...... AO-70 AOA70XL 20' Coiled Lead...

AO-12 N220 N330 N440 AO16..... 18A SOHO SQUARE, LONDON W.1.

TEL. (01) 434 1365

Circle 754 on Reader Service Card

AUDIO SER

REW 114-116 Charing Cross Road London WC2 Tel: 240 3386

REW are one of London's top audio and recording specialists.

The shop is made up of three seperate departments - video, hi-fi and professional audio departments, and all three are managed as seperate entities.

The audio department occupies the entire lower floor of the shop and is managed by Mr Neal Hassle, The department is spacious and is wired up for the potential customer to try out virtually any piece of equipment. They have a large selection of equipment by leading manufacturers including Shure, AKG, Beyer, Celestion, HH, Fane, JBL, Piezo, Revox, Wollensak, Neutrikm Uher and Ameron. Mixing consoles include models by A&H, Trident, Soundcraft, Canary, HH, Teac-Tascam, Alice, September Sound and Citronic.

They gater for the home recording enthusiast who may want to have the professional twist to his set up or to anyone considering building a 24 track studio. They will design, build and set up any size of studio. If you are considering building a studio you can call REW reverse charge and they will offer all their experience and expertise free. Considering their reputation - this amounts to a fair bit of knowledge. Some recent customers have included Steve Hillage, Smoky, The Buggles, Hank Marvin, Kate Bush and Roger Taylor of Queen. REW were also the first in the field of supplying Video Equipment to Studios. They have their own consultancy for designing studios and do a lot of business with television companies.

All staff have many years experience in the professional audio field and they have a service department which is 30 strong. In spite of the recession in the recording industry, REW seem to be doing a brisk trade, both from individual customers to the 24 track studios. If you are looking for the complete recording equipment spectrum under one roof all services included, REW is the shop to

They offer a reliable service and are competitively priced as manager Mr Neal Hassle says "We will better any advertised price anywhere."



Audio Reinforcement Services and Inset Alan Cheetham of Audio Service Company

Elliot Brothers (Audio Systems) Ltd, 114/115 Tottenham Court Road, London, W1.

Telephone: 01-388 1833-5

Elliot Brothers is not a shop, more of a base for dealing with customers who are restricted largely to professional sound recordists and broadcasting companies. Elliots aim upmarket, don't advertise much and depend on word of mouth to spread their reputation.

They aren't appointed agents or dealers for any particular brand of equipment, but do rate themselves as Tannoy specialists, and can demonstrate very comprehensively any Tannoy product, In addition to Tannoy, Elliots supply the usual gamut of recording equipment such as AKG, ADR, Alice, Beyer Dynamics, Ameron, Revox: anything the customer requires at the same price as the manufacturer can supply. In particular, Elliots stock a special brand of cable, Multipair, up to 32 core, with each lead individually screened and jacketed.

The raison d'etre of the company is as a consultancy cum supply service. Their forte is installation and advice, and they prefer to supply packages of equipment so thay can match it perfectly. Usually they specialise in new equipment, but as they take second-hand equipment in part exchange some used studio gear is offered for sale. This equipment is fully overhauled before it is sold and comes with a six month warranty.

Audio Service Company, 25, South Meadway, Highlane, Stockport, Cheshire. Tel: 06632 2442.

If you're planning to build your own eight track studio but are afraid of shelling out hard earned notes for equipment that you've never even heard in action, then it could pay you to visit the Audio Service Company, Owner Alan Cheetham, a former manager of the Hollies and the Merseybeats, has set up a full eight track studio package by Allen and Heath/Brenell as a demonstration studio, where potential customers can come and listen to the gear. If you are interested in purchasing another brand then Alan may be able to set this up if you give him advance warning.

Audio Service is also the agent for several other "very tasty" suppliers; Audio and Design Recording (Scamp), Klark Teknik, Tannoy, ASC two track machines from W. Germany, and Ampex tape.

Another service offered is going out to halls to demonstrate band equipment. Manufacturers dealt with are ElectroVoice for speakers, Turner amps, Yamaha backline, and mikes by PML, Beyer, Shure and AKG.

The company can also get hold of any other make of equipment for a small service charge,

AUDIO SERVICES

Trad, 149B, St. Albans Road, Watford, Herts. Tel: 92 4799/8.

Trad operates from a warehouse and deal with secondhand tape machines, anything from eight track up to 24 track, and other studio equipment.

They are agents for Sound Workshop consoles, Audicon echoplates and cable and Webber test tapes.

The firm repairs and services gear it has sold. Most of its customers are recording studios.

Tractor Music, Kenion Street, off Drake Street, Rochdale, Lancs, Tel: 0706 56287.

Tractor deal mostly in second hand gear for bands on the road and smaller studios. It even claims it will send someone to another shop if it cannot get hold of a certain piece of equipment, rather than trying to foist a product onto an unwilling customer.

They are agents for MM, Allen and Heath, RSD and Studiomaster amps and desks, MXR studio effects, ElectroVoice speakers, Gauss speakers, RCF, and Revox tape machines. On the smaller amp side Tractor can supply Marshall — both for sale and for hire. It has just supplied the Buzzcocks US tour. It has also just supplied Joy Division with a Marshall 1600 watt bass cabinet (sic) with four 15 inch Gauss speakers, and a Crown DC300 power amp.

Owner Chris Hewitt says that Tractor is now getting more involved in the small studio market, as well as working bands. "There's very little difference between a small carry-away studio desk and one that a band uses on the road," he explains.

Repairs on all types of microphone and amplifier, and reconing of loudspeakers can be done on the premises.

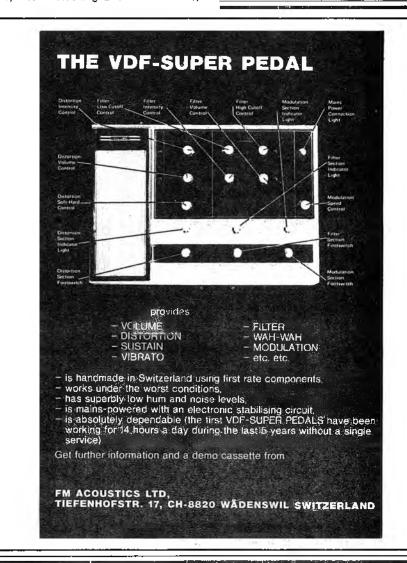
Audio Reinforcement Services, 216, Archway Rd, London N.6. Tel: (01) 341 1506

The shop has only been open for about two months and is already doing steady business. ARS's watchword is: "We don't want to sell anything that we wouldn't use ourselves" — and staff are on hand to give advice to bands who aren't yet sure what equipment they want to buy.

ARS is an agent for BSS — who make up-market crossovers — Formula Sound, MXR, Ashley, Klark Teknik and Static, Eela Audio (ARS claims to be the only dealer stocking Eela's new mixer),

Quad, Belden, Lectriflex, Neutric connectors, Beyer mikes, ATC and Coral speakers. Other brand names kept in stock are JBL, Calrec, Sennheiser, HH and Shure, and the shop hopes to sell Revox, Roland and Yamaha products in the near future. There will also be a few secondhand items in stock.

Speakers are reconed, and equipment bought at the shop can be serviced and repaired. ARS also builds its own PA speakers, very large bass and mid-range bins, and does special conversions for Quad 405s.

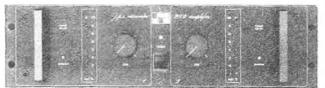


JPS SERIES 8000 **PROFESSIONAL** POWER AMPLIFIERS



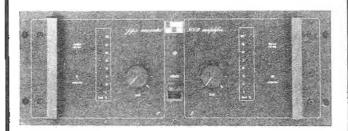
MODEL 1002

100w + 100w 4n£260.00 + VAT



MODEL 2002

200w + 200w 4n£325.00 + VAT



MODEL 3002

300w + 300w 4n£450.00 + VAT

FEATURES:

19" Rack Mounting — XLR Output Connectors — Switchable Fan Cooling - LED Output Displays - 2 Totally Separate Power Supplies — Thermal Protection (90 second recovery time) — Electronic Protection — 5-year Guarantee.

OTHER PRODUCTS include:

£576.00 + VAT 5002 500w + 500w 2n 8000 3-way stereo electronic crossover 8006 6-input stereo disc &

£149.50 + VAT

£370.00 + VATTape Mixer

DISTRIBUTORS:

REW Audio Visual, 114 Charing Cross Road, London, WC2. Tel: (01) 836-2372

Gloster Music Centre, 9 Market Parade, Gloucester, Tel: (0452) 33084

Severnside Audio & Lighting, Building 2, Portwall Lane, Redcliffe, Bristol. Tel: (0272) 23164

Atmosphere Lighting & Sound, 64 The Green, Aberdeen. Scotland, Tel: (0224) 572905

IPS ASSOCIATES

Belmont House, Steele Road, Park Royal, NW10 7AR Tel: (01) 961 1274 GFT OFF THE MOTORWAY AND GET IN TO



Special Offerson lingerland *temier* Marshall Main Stockist

See the latest instruments from World famous manufacturers including:

acoustic

Guirars Drums Premier Fender Gibson Slingerland L.E.M. Olympic Aria Tama Ovation | Grant Zyn **UFIP** Fylde Paiste Ibanez Zyldjian Yamaha Keyboard Landola Rhodes Yasuma Crumar Cordoba Wurlitzer Harmony Kawai Kimbara Multivox

Amps etc. Acoustic Traynor Maine Fender W.E.M. Cloud Custom JHS Shure Orange Trucker Effects Electro-

Harmonix. Schaller Bill Lawrence **HFX** Dimarzio



Columbus

Satellite

Forder RHIND MUSTIVER Gibson; की तहावारका

GUMATHOR | O DiMorzio Bremier Will

FREE DELIVERY

BEST CREDIT TERMS 10. DEPOSIT AND REPAYMENT OF UP TO 5 YEARS USUALLY

AVAILABLE. ACCESS AND BARCLAYCARD ARE WELCOME



MERCENSON OKYTOSIKEDRYDY YAMAHA

Southing Columbus Com

Well ([1]) Superior De America

To: GROOPS, 18 The Rushes, Derby Road, Loughborough, Leics.

Join the GROOPS GREAT DEAL CLUB, We will send you our regular special offers completely without obligation. Just complete and post this couple

am interested in

Electronic Organs Amps. etc.

Kevboard

Guitars Drums Other (Please indicate.

Name .

Address _

Telephone

P S We will not visit you without permission

1M6

Arturo is the man with the lead guitar in Pinpoint. The amp is a Vox AC30 Combo. One of them plays through the other and there's no prizes for guessing which way round it is.

Anyway our story starts at the Nashville in October. We decided that as Arturo needed an amp and we had one spare maybe it'd be an idea if the two of them got together. So we pitched up at the Nashville with an AC30 and a couple of Escort rehearsal amps.

Pinpoint were a little bit magic and Arturo said I like the amp and we said keep it and give us some nice things to say about it in an ad and he thought for a bit and then said OK because it's not so bad really which was roughly when

we switched on the tape recorder which we



left running.

...the first guitar Lever owned was a Vox Clubman... cost me seven pounds and it had a socket like a television aerial. It was ridiculous really... my brother played in groups years ago...taught me three chords and it just went from there... What other gear...did I have? All sorts.

A real mish mash...for a long time though I've had my eye on an AC30... preferably an old one although when I've played the new ones there really isn't that much difference...

well they haven't changed it in fifteen years... No it's the same circuitry...

all that's missing is a few kick marks...no well it'll get like that after a few gigs now I'm using it...

was that the first time you'd set up with it..? yeah...yeah it was...! was really pleased with the sound...really punchy...! use a Gretsch Roc Jet which is really an old guitar as well and it sounds really good... I think too many people are using the same guitar and amp setup and the sound is too similar in a lot of groups...the thing about an AC30 as well is that it's small...you don't get as much spread so the vocal mike and the drum mike don't pick up as much... the overall sound's not as mushy as it used to be...

how do you find working in the studio?.. depends on the producer...you can hear every single beat... every single note... the first time you're in a studio is the first time you really hear yourself... there's no way though you can sound as raw in a studio as you do live...no way...*

what's the most frustrating thing about playing live... touring?...getting to a gig at five and not going on stage 'til midnight...and having to kill time in a town you don't know with no money... most of mine goes on the motorway services... eating sometimes and playing Space Invaders... when you were doing the tour with the

Members did you have any hassles? ... None at all... we had a really great time... I think that the people who you do get like that...they think you don't deserve a soundcheck or whatever... have something seriously wrong with them... it's silly... everyone's a support band sometime....

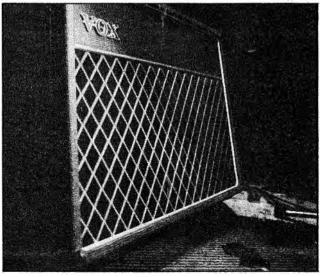
Dear Vox, Arturo seems to know something I don't. Send me a few more details please. Vox Limited, 32-34 Gordon House Road, London NWS 1NE. Tel: 01-485 4553.

Address IMO2A

Name .

*Hear the results of Pinpoint's studio experiences on their single 'In Richmond' on Albion. Circle 769 on Reader Service Card





BIG JIM SULLIVAN

pt2 from Tom Jones to the Rollers













In 1969, Big Jim Sullivan's career took on a new phase when he left the session world to work full-time with Tom Jones, Jim had played on all Tom's records up to that point.

"I remember the first entry of Tom Jones into the studio, this guy in blue jeans with his long pointed shoes and a nose to match! But when he sang the songs, he sang the shit out of it. But he was upset with the session musicians because he said we had not got enough balls. But we were inhibited by the producer who had a certain thing in his own mind but nine out of ten times he couldn't communicate it to us. It was hard to get any inclination of what he wanted and what happened on first session was that it got really confused. I remember that session well. But later we did "It's Not Unusual", and all the other things Tom did and then he got the big TV show. I did the pilot show, but not on guitar, actually on sitar, incorporated into a dance sequence, and it was there that he approached me to join him,"

At that time, Jim had just formed the begining of what eventually became Blue Mink. He wanted a gig but the others didn't, and perhaps partly as a reaction, he joined Tom Jones fulltime. And there was of course the financial aspect, "It meant more financially because I was getting paid whether I was doing anything or not, In the first year I got more than I would have got in sessions, but after that sessions went up and I might probably have got more in ses-

sions".

But the biggest change in Jim's circumstances had nothing to do with finances, rather it was a complete somersault in lifestyle. "I got caught up in the good life with Tom - luxury this, luxury that, big this, big that. When I went with Tom I'd been vegetarian for seven years, I hadn't smoked, I hadn't drunk. I was a clean living man into yoga and spiritual philosophy. Within two years with Tom, I was getting through a bottle of vodka a day, smoking 60 fags, and fucking everything in sight, It was completely one extreme to another. It wasn't pressure, it was exposure. Because although I'd lived well, I'd had two cars and a gardener and a nanny and all that, I was now caught up in a purely material

existence,"

It's important to consider that Jim Sullivan's session music existence had been relatively ordered and systematic, and he hadn't really travelled all that much. He was suddenly thrown into a disorganised existence where there were no rules except to follow the lead set by the superstar singer and indulge oneself. The band referred to their leader as "Ole King Cole". a lovely musician phrase which manages to be both an insult and a compliment both at the same time.

The first tour was Australia and my first gig with Tom, live, was at the Sydney Hilton. We were living on yachts and they threw garden parties for us. There was crumpet all over the place and as much booze as you liked wherever you went. Then we went on to Hawaii and it just carried on. From being an ordered and sensible musician, I was smack dab in the middle of the playboy life and it was something I'd never seen before. I'd never had before. Of course there were always girls and booze in my younger days, but never to the extent there was with Tom. Chicks would literally throw themselves at you. It was the case of pick one, especially for the first couple of years, When you are exposed to all that, it takes a really strong person to say no."

'However, I think I've benefited. I know now it's not the life I want or need, It's not my way of life, but I had to go through it to find out. Unfortunately my music suffered. I mean playing fucking 'Delilah' every night for four and a half years doesn't do much for your development. And Tom did virtually the same show every night. The other bad thing is it was so loud -not like Hendrix maybe, but an 'amped-up'' heavy rock rhythm section boosted up with a 40-piece orchestra and topped off with Tom Jones is loud! And yet we'd be playing away like this and Tom would keep turning round and shouting - turn it up! Because really that was his thing. He should never have become the great Las Vegas cabaret star. If he'd had a rock band behind him and sung that sort of material he'd have probably been one of the best singers around. The best gig I'd ever played with him was in Bermuda, when we were I think

on location on John Wavne's yacht. We went out for a drink in a club one night and there was John Rostell (out of the Shadows) on bass, Kenny Clare on drums and me. Tom said let's have a blow and we played all the old rock and roll 'Johnny Be numbers -Good, 'Sweet Little Sixteen', and all that. It went down a storm and it was definitely the best I'd ever heard him sing, because it was the only time I'd heard Tom Jones the singer. rather than Tom Jones the showman Tremendous That's where we should have been. But instead of that he's a multi-millionaire, so he should carel Nevertheless it's still a shame he's lost his ethnic feel for pseudo-showmanship. It's not the real Tom Jones.

Jim Sullivan's stint with Tom Jones lasted up to 1974. Although he had always got on well with Tom personally, there developed an acrimony between Jim and the backroom people, particularly Tom Jones's manager, Gordon Mills.

"Gordon was so powerful, so big, so wealthy in this business. And we had a conflict of character because I wasn't a yes man. I used to

sense that they weren't adding anything. And here was me who'd been on all Tom's records, who'd been with him four years, and he said 1 couldn't go to his dressing room, even though Tom had given me an open invitation. I suppose it sounds petty, but I didn't feel it that way, because I felt insulted. The only thing was that I'm sure Tom didn t mind me going in. He used to like having a beer and a chat with the lads. But perhaps at the time I was also annoyed with myself. I wasn't playing well. I'd let myself go as a musician."

Whatever the reason, Jim Sullivan left the Tom Jones entourage that night. Soon after he set up his own record label. Retreat Records, with Derek Lawrence. The first album was with Chas and Dave, and the label should have been a good outlet for Jim's personal taste, But when he did his first album for the label, he was persuaded into doing a vocal album, "It was a mistake because I was just itching to play, but Derek thought I should do a vocal album - Big Jim's Back, I didn't want to sing. It was the biggest embarrassment of my life, and the only thing worelaboration. A musician with something to prove to himself, his audience and his colleagues, can often play and write in too complex a fashion, and solo too much for too long. Although Jim Sullivan was aware that he was then playing below his capabilities, his reaction was not to recover his ability to play the simple things well, but instead to reach for the grandiose and the intricate comcept.

'I wanted to form a rock 'n' roll group that was completely diverse and ambiguous. I wanted to do with rock what Stravinsky did with classical music."

The result was a band called Tiger, a group which was the absolute opposite of the Tom Jones musical straight jacket, all flattened fifths, 17/8 time, weird song titles, and off the wall solos. The whole thing being topped off by having two front men vocalists. Because the reasons for Tiger being the way it was were partly subconscious, its aims quickly became obscure. In all the time with Tigert there was only ever one guy I ever talked to about it who had ever understood what it was about, Even I didn't know after a while

"Tiger was a failure, but I learned a lot about how to handle people; what it was like to be a group leader and handle personalities, to be a central point. Everyone wants you to make the first move, to count them in, tell them to stop, to say you can go and have a cup of tea," Although Jim was handling the personalities, musically he was not at first meting the extraordinary standards he was setting himself: "The things I really wanted to do didn't have enough come off, bec ause we didn't have enough time and I wasn't developed enough to expose myself at that point. I was trying to run before I could walk, I hadn't allowed myself enough time to get back after five years with Tom, I wasn't very good, I wasn't adept - if I'd spent a couple of years on my instrument I could have made it work. If I did it now, I could make it work now."

The sickener is that after a couple of years Tiger was beginning to work. And not just because Big Jim had regained his musical adeptness, but also because of changes in the musicians around him — another factor



disagree with him and it's as simple as that. He didn't like it." The showdown came on the last night of a season at the London Palladium.

"Johnny Spence the conductor came up and said to me that Gordon didn't want me to go into Tom's dressing room. So I went up to him and ask why not, and he said he didn't like me poncing off Tom. I couldn't believe it. There were so many hangers on, in the

thwhile on it is a Scotch rag. I should have done a whole album of them, I wanted to show off my ability, about which I developed quite a few hangups because I'd gone five years then without really practicing, developing myself on my instruments."

The outcome of a musician's need for self-expression, coupled with a sense of self-doubt, can often be a tendency toward indulgence and over-

Elliott Bros.

congratulates

sain

on the opening of their 24 tk. studio.

Thank you for your confidence

Elliott Bros. install & supply complete studio packages.

Elliott Bros.

LONDON W.1. 01-388 1833

Sound Lasers

Sound Lasers are a breakthrough in acoustic transducer technology, as far advanced over conventional loudspeaker systems as lasers are over lightbulbs. The secret is the resonant air column at the heart of each Sound-Lasers design. It controls every aspect of the sound, as no horn or cone ever could.

Sound Lasers produce sound that's super-clean and ultra-natural. They project the full sound throughout the whole room — every seat is a great seat. But they're smaller, lighter and simpler than ordinary speaker systems. That's why they're being designed into PAs from clubs to coliseums, used in amplification for instruments ranging from guitars to synthesizers, specified for recording studio monitors and every other professional application.

Are Sound Lasers designed through mathematical analysis, or laboratory tests, or computer simulations? All of these, of course, but none of them has the last word on a new Sound Lasers design. We make the final decision by listening and so should you!

Transylvania Power Company

260 Marshall Drive, Walnut Creek, California 94598 USA





NEWTONE MUSIC CENTRE

IARGEST STOCKIST
IN THE AREA,
OF **YAMAHA** GUITARS,
AMPLIFIERS AND DRUMS



CALL NOW!



TO GET THE BEST DEALS WHILE STOCKS LAST.

NEWTONE MUSIC CENTRE
64 MARKET STREET
NEWTON-LE-WILLOWS
MERSEYSIDE

TEL: (09252) 22514

which Jim is too polite to mention. The original two Tiger demo tracks feature a highly competent line up including lan Wallace on drums and the redoubtable Ray Fleck on guitar, but the different formulations of Tiger which appeared after the demos probably weren't at Jim's level. Although they were undoubtably good professionals, even an out-of-form Jim Sullivan after five years with Tom Jones is on a higher plane of musical expertise than most of us would obtain after five year sof solid study and practice. The sad thing is that after making two albums with inferior line ups, the recording of a third album, which sadly and inexplicably has never been released, found Jim supported by a collection of then up-and coming virtuoso with Simon Philips on drums, Percy Jones on bass, Maurice Pert on percussion, and Alan Parkes and Dave Lawson on key boards. "That was about as near as I could get to what I wanted to do at the begining. I spent so much time with the previous line up getting the material together, before we'd found Simon, Percy and Dave. But by then we had already booked studio time. So we rehearsed three out of the eight titles and all the rest were just done in the studio. EMI had kept going on about this album - we've got to have this album - and then when we did it they said they didn't know how to sell it, so it wasn't released."

Ah the wisdom of the record business! For the conceptualisation and playing of the music on that album is truly extraordinary, and guaranteed to blow the brains out of any *IMRW* reader. The standards are stunning, especially that of the then teenage Simon Philips, expertly reading highly complicated drum charts with great power and panache.

Yet even during the Tiger period, it must be said that Jim still flirted with situations which really didn't do him notably the iustice disasterous series of Bay City Roller's TV shows called Shang-A-Lang. Each week Jim would feature a classical guitar piece which was always rendered inaudible by screaming teeny boppers; there was a spot where Jim "taught" basic rudiments to the two Rollers guitarists who would gape openmouthed as Jim executed a simple scale and then explained to them what he'd just played; and became virtually the shows link man, by providing timely adlibs on the many occasions when the boys forgot their lines in the script. The only comment Jim will make about that episode is "it was a mistake".

Big Jim had reached a stage in his career and his life where it became important not to make any more mistakes. Most important of all, he needed time, time to himself to think, and to rediscover what he was really about as a musician.

"I was looking to put myself into a position where I could give myself the time I need to become a musician I have to be, and the person I want to be. And this means time and study. We all have faults. We are all soul searching. I have to do perhaps more than most because I have been to the extremes and I have been exposed."

What Jim needed was a situation which wasn't too demanding on his time and which didn't expose him again to the worst excess of the music business, which nevertheless provided a measure of financial security. The perfect



solution was presented with an offer from James Last. "James Last pays me enough money to work with him four months of the year to keep me the other eight, and this gives me time to myself to develop myself. And after all that is the core of music; if you are developed as a being then your music will develop." If the James Last situation was just what Jim

needed, then equally Big Jim Sullivan could have been tailored made for the James Last orchestra.

For to say James Last is prolific would be the ultimate understatement. He is a sort of one man K-Tel organisation, having made over 150 hit albums. Who else could you think of who can bang out two or three albums in one wekend? But this is what James Last can do with people like Jim around Musicians congregate in Munich or Hamburg on a Thursday or Friday night, and by Sunday night they will have recorded maybe. 30 or 40 tracks all done on the second or third take. And it's not just the actual wage packet that attracts Big Jim: 'I don't get too much out of the music itself, but I do out of the audiences. The reactions are tremendous, loyal and enthusiastic. He treats them so well, and he treats usvery well. I get bettertreatment in James Last on a months tour than I did with Tom Jones in the whole of five years, and I get more apreciation,'

The generosity of James Last to his orchestra is becoming almost legendary. For example Jim recalls a two-day

"I get better treatment in James Last on a months tour than I did with Tom Jones in five years"

stint spent in Ireland where all musicians are for both days in one of Ireland's finest restaurants, and the bill for two days ran into five figures! "So it's a good situation, I've got financial gain, appreciation and contact with the public, so I am as happy as a pig in shit".

Whether this current situation will prove to be only another stop gap, and where

Big Jim's deliberations about himself and his music will take him is difficult to pinpoint, but there is evidence that having time to himself is resulting not as it once might have done into developing a more complicated musical outlook, but instead a return to basics. He is particularly interested at the moment in an updating and reworking of the work of Django Reinhardt, His equipment matches the return to esentials. Big Jim once had a massive guitar collection, but he has disposed or given away virtually all of it. He uses almost solely one guitar - a custom built Gordon Smith. which is invariably put through a Roland jazz chorus. Unfortunately his most prized instrument, a twin neck custom built again by Gordon Smith - an instrument which Jim always described as "a master piece" was stolen at Heathrow and has never been recovered.

A retrospective view of Big Jim Sullivan's career then, finds a career of distinct phases, and a career whose only consistent patternperhaps has been one of jumping from one extreme to the other. From greasy rock and roller to nine to five session man; from stable suburbia to the indulaence of Tom Jones, from vacuous Las Vegas supper clubs to the intense jazz rock of Tiger; from the exhaustion of being band leader to the sinecure of the James Last orchestra. But his latest move, albeit a sinecure, is at least giving Jim the time and space to think about himself, his life and his music . For Jim Sullivan has the air of a man who has seen and done it all, and yet he is still looking for something. A happy medium between the past extremes perhaps, or something a bit deeper. For having time for reflection has at least made the search an active one, and maybe whatever he's looking for will eventually reveal itself to him, just as his extraordinary musical virtuosity and harmony with his instrument revealed himself to him that day at his sister's all those years ago. And perhaps, in the final analysis, his search, like the search of other great musiclans, is not so much for an explanation of the shifts in his career, but rather an explanation of what happened that day at his sister's which triggered it all off -an explanation of his talent.

Stan Shaw

HA FRI

DESPERATION STOCK DUMPING THRO 12 PRICE All prices include VAT



ARTIST AR100 AV, BK

Maple carved top with Mahogany Body, Maple Neck, Antique Violin or Black Finishes, Stylish Head and Tailpiece

RRP £237.75 **£118.88**



ARTIST AR300 AV, BK

Two Super 80 Tri-Sound Pickups, 22 Velvetouch Frets, Smooth Neck Heel Design, Pearloid square inlaid Fingerboard

RRP £310.00 **£155.00**



MUSICIAN 900 AV, DS, NT

Innovative Electric bass design, Versatile EQ-B Tone System, Two Super 4 Bass Pickups, Ash Mahogany combination Body, Straight Thru Rock Maple/Walnut Neck

RRP £375.00 **£187.50**



ARTWOOD AW20 ACOUSTIC

Select solid Sitta Spruce Tops, Hand-shaped Scalloped Bracing, Mahogany Back and Sides, New design Scratch Plate, Chrome Velvetune 18:1 ration Heads

RRP £140.00 **£70.00**

ONLY MUSICIAN QUALIFY FOR THIS OFFER!

These fantastic low prices are available on all Ibanez guitars. Half U.K. price available on ALL models. Not available for export —

Nicht erhältlich für Export

22 Chalton Street off Euston Road London NW | IJH Tel: 01-387 7626 58/60 Oldham Street off Piccadilly Manchester M4 I LE Tel: 061-236 6794 88 Chalton Street off Euston Road London NW1 1HJ Tel: 01-388 4094



1/2 PRICE All prices include VAT



THE RESERVE TO SERVE THE PARTY OF THE PARTY

Example ROYAL STAR 5 drum outfit, high gloss crome finish trim. Robust rugged construction. Tama super quality. RRP £573.40

£286.70

All Tama drums available at half price.

Not available for export — Nicht erhältlich für Export

SUCCESTANDLE SOLID ELECTRICS Example

S-300D

Mahogany Solid Body, Wide Fingerboard, Twin DiMarzio PAF Pickups, Guild No 10 Adjustamatic Bridge, Solid Brass Tailpiece. RRP £419.75

All Guild guitars available at half price.

Not available for export — Nicht erhältlich für Export

Circle 721 on Reader Service Card



EDDIE KING Complete pro centre for YAMAHA for South East Wales and Bristol area.

147A St Micheals Hill, Bristol. Tel. (0272) 37887.

It's ☆ YAMAHA ☆ Madness at

YAMAHA SYNTH'S

YAMAHA GUITARS



, tymyli

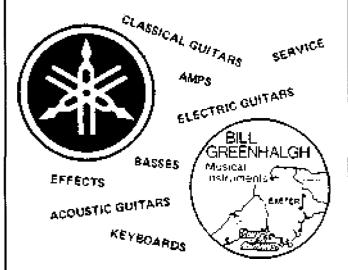


YAMAHA DRUMS

£100,000 of stock always available We'll match any music dealer's price on Yamaha gear

Phone John Ryan HESSY'S 051~236~1418 62 Stanley St., Liverpool

THE WESTCOUNTRY'S STOCKIST OF YAMAHA EQUIPMENT



CRAFTSMEN TO THE WORLD'S MUSICIANS SINCE 1887 RETAILERS OF QUALITY MUSICAL INSTRUMENTS SINCE 1947

BILL GREENHALGH & CO MUSICAL INSTRUMENTS 125/127 FORE STREET EXETER DEVON Tel: 0392-58487 24 HRS

Woodroffes

The largest stock of keyboards in the Midlands at low, low prices, including



SPECIAL OFFER

YAMAHA CP20 PIANO £545 YAMAHA CP30 PIANO £695 YAMAHA CS10

SYNTHESIZER £249 (unrepeatable)
YAMAHA SS30 STRINGED SYNTHESIZER £599

5-8A Dale End, Birmingham B4 7LN Tel: 021-236 4992/3

YAMAHA in ESSEX!!! It has to be

HONKY-TONK MUSIC

300, 302, & 333 LONDON ROAD, HADLEIGH, ESSEX.

GUITARS.

AMPLIFICATION... KEYBOARDS... DRUMS

SOUTHEND (0702) 553647

WESTERN ORGANS

Quite simply
the Biggest Dealers for
YAMAHA
throughout Hereford, Worcester,
Mid & North Wales.

BRANCHES AT:

30, BROOK ST. WREXHAM

TEL: 0778 265 308

53, FOREGATE ST., WORCESTER

12, MARKET ST., SHREWSBURY, SHROPS

TEL: 0743 6019

7, ST. OWEN ST., HEREFORD

TEL: 0432 50277



AMAZING HALF-PRICE OFFER
H/H DIGITAL ECHO UNIT

Featuring 6-switched echo effects built to the famous H/H quality standards, Brand new boxed

PRICE

R.R.P. £271.83

£136 (Plus £5 carr. anywhere in U.K.)

H/H Performer Series. Top part exchange allowances against this range. Ring the H/H Hot Line Weybridge 54877 for a quote. Send S.A.E. for full list.

PEAVEY PRICES PULVERISED

Peavey Backstage 30	£106	£84
Peavey Pacer	£196	£155
Peavey TNT	£242	£185
Peavey Deuce	£414	£310
Peavey Bass Combo	£414	£299
Peavey XR 600 PA	£414	£345
Peavey Bass Ton	£325	£245

Peavey Classic

45 watts 2x12"
speakers, reverb, phaserautomix, overdrive

R.R.P. £298



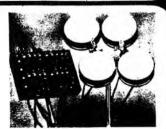
£230

KEYBOARDS LOWEST PRICES BIGGEST CHOICE

Kora MS10	€265	£199	Roland JP4	0.1800	[1295
Korg MS20 Korg MS50	£435 £399	£355 £350	Roland R\$505 Strings	£1299	£950
Korg Şigma Korg Lamda	£750 £999	£595 £825	Roland MP900 Piano	0240	r590
Korg 770 as new Korg Sequencer	£285	£225 £250	Roland SH1000 Used		E325
Korg Vocoder Yamaha CS5	£835 £265	£495 £199	Roland CR78 Rhythm Roland CR68	f 595	£425
Yamaha CS10 Yamaha CS30 Yamaha CS60	C375 C799 C1390	£295 £550 £1060	Rhythm Wass Synthesiser	F395 C230	f 295 (175
Yamana CS00 Yamana CP30 Roland SM7	£1050 £1069	C795 C699	Wasp Keybaard Controller		F95
Roland Pro-Mars Poland RS09	€1056	£795	Hohner Globetrotter Electronic		
Organ Strings	£531	0399	Piano	0268	0199

FOR COMPLETE KEYBOARD LIST SEND S.A.E.

UNBELIEVABLE OFFER 4 DRUM SYNTHESISER



£299

Hurry - Limited Stocks

Complete with 4 channel synthesiser control unit amazing sounds at an amazing price

- 100's Secondhand Bargains
- * All used gear guaranteed
- Part exchanges welcomed
- * Instant credit up to £500 14/16 High St., Addlestone, Surrey Tel: Weybridge 40139/54877

ABC

	MA	RKET	REPO	21		
	Shop name and address	Contact	YAMAHA MAF What is the best selling Yamaha product	RKET REPORT How do they compare with other manufacturers	best single selling point	Any criticism
	Axe Music 16 Mearsea Road, Colchester, Essex	Alan Grey	Yamaha SF 500	Excellent quality and price very good		No, Kemble are an excellent company, never any complaints
	Northern Sounds 41 Jane Street, Workington, Cumbria	Mr Holmes	Organs	More reliable our biggest seller by a long way	Value for money	Not really, the two smaller models haven't a roll top
	Musical Sounds 274 London Road, Sheffield	Tony	SG Electric guitars	for money	The name is so long established and such good quality	None
	Gig Sounds 85 Mitcham Road, Streatham, London SW16	Terry	AR gurtars	Very lavourably they come in very well set up	They're lovely to play and have such a good sound	
	Rose-Morris 81 Shallesbury Ave., London W1	Phil Beecham	Guitars	Better in work- manship	Ease of playing & very well set up	No
	John King 8 Richmond Road, Kingston-upon-Thames, Surrey	Graham	Drums	Very well for the price	General sturdi- ness of kit for the money	No
	Bradleys. 69a West Regent St , Glasgow	Mr McKenna	Acoustic guilars	First class	Quality	None
	Wisher (Derby) Ltd., 77/79 Osmaston Rd., Derby	Mark Hopkin	SS Series of guitars	Extremely well	Value for money	None
	Live Music & Piano Centre, 28 Fitzwällam St., Peterborough	Rick Devlin	Guilars SG2000 SF1000	Absolutely exc., always very well made	Consistency of quality	No. 1, just wish a British manufacturer had thought of it first
	Tempo Music 160 The Broadway, West Faling, Middlesex	Lawne Keys	Guitars	The same	The tinish	No — everything's line
Company of the Compan	Croydon Music Studios 40 Station Rd., Surrey	Herry Cheetham	Guitars	Slightly better than most	Appearance	No
	Stephen's Musical Instruments	Steve Sutherland	Electronic guitars	high quality	High quality	None
	Magnum Sound, 67 Stewarton St., Wishaw, Scolland	Bill	\$R10	Very favourably	Value for rnoney	Slow deliveries
	Wing Music, 15/15A London Road, Bromley, Kent	John Pickett	Acoustic gultars 335 Jumbo	Very favourably	Presentation	No
	Allen's Music Shop, 23/24 Broad Row, Gt Yarmouth	Eric Lund	\$G2000	Very favourably	Value for money	No
	Whitwams 70 High St., Winchester, Hants	Gary Robinson	Combos		Quality	No.
	Abbey Music Centre, 4/6 Market Place, Burton-on-Trent, Stalls.	Mr Dolman	Guitars	More than More ably	The Yangha pang	None
	Music Stop 106 School St., Wolverhampton	Tim	Keepbards	Better quality and easte reliable	fict and	P2200 Reen blowing p
	E. D. Brown 55 Darwen St., Błackburn, Lancs.	Sieve Utiley	a organs	the edinner right up to professional.	The occurry	No. A.
	John's Music 142 High St., Scunthorpe, S. Humberside	John Matthew	Synthesis	es, good value for money	Quality	really
	Newtone Music 64 Market St., Earlestown, Newton-le-Willows, Cheshire	Mr Gore	Guitars	The workman- ship is lirst	The looks and the quality, plus they have a lot of extras.	No
	Sound Gear 10 Southdown Rd., Gt. Yarmouth, Norfolk	Mike Easter	Drums		The quality for the price	The availability isn't as good as we'd like but its improving all the time.

		MAI	RKE	REPO	RT		
		Shop name and address	Contact	YAMAHA MAR What is the best selling Yamaha product	KET REPORT How do they compare with other manufacturers	best single selling point	Any criticism ~
		Sound Wave 86 Victoria Rd., Romford Essex	Alan	Acquisic guitars and bass guitars	Very well	Value for money	No
		Aock City 10 Mosley St., Newcastle-upon-Tyne	Pete Watson	CS5	Very favourably	Reliability	None
$\ $		Kitchens 27/31 Queen Victoria Street, Leeds	Michael Cooper	Jumbo guitars	As good as any	Reliability	Electronic products are too expensive, acoustic products are excellent
ľ	4	Jimmy Grant Music 53 Home St., Edinburgh	Phillip Hay	Guitars		prior for money	None
		McCormacks 33 Bath St., Glasgow	Mr McCormack	July guitars	Vert voui	Quality of tone	No. 4v, possibly amplifica- don last cover-priced
		Gordon Simpson 6 Stafford St., Edinburgh	Clifford	10	re sell twice mark as the	The artiful appearance	supplied so tout a stand
		Eddle Moors 679 Christchurch Road, Boscombe, Bournemouth	Mrs Dawkins	stans and woodwind		odejualiú	No.
Ţ		Bill Greenhalgh & Co 125-127 Fore St., Exeter Devon	Andy Greenhalgh	Guitars		High quality	Ng
		Andertons 5 Stoke Fields Guildford, Surrey	John Halke	New combo rand 112, 212 Mark 11	Very well made of reliable	diod value for money	None
I	West and supplied	London Synthesiser Centre 22 Challon St., London NW1	Will	Yamaha CS5 and CS80	They're at the top		No. Just the weight of the bigger ones. Like the CS80
I	94 - N. 164 N	A1 Music 88a Oxford St., Manchester	Tony Cooper	Guitars	Highly	Quality	None
		Eddie Kings Music 147a St Michaels Hill, Bristol	Eddie King	CS5 Synth, SF500 guitar	Extremely well on price, unbeatable on quality	Value for money	No
		Frank Hessey 62 Stanley St., Liverpool	Mr Hepworth	The CS5	Every bit as good if not better	Reliability	Synthesizer should have a standard volt output
		Kinglisher Music 20 Kings Road, Fleet, Hants,	Cathy Fisher	The drums	Excellent	Quality	Not a large enough range as yet
		Sound Pad 64 London Rd., Leicester	Phil Peli	Acoustic and electric guitars	Excellent quality	Good quality well made	Acoustic quitars could be flatter on the back where you put your thumbs
		Woodrottes 5/8a Dale End, Birmingham	Buzz	Keyboards	Better made and very reliable	Quality of the instruments	No .
		Seean Dee Music 25 Blackwell St., Kidderminster, Worcester	Shaun	Guitar & keyboards	Excellent	Excellent value for money	None, just praise
ļ		Allens Music Shop 23/24 Broad Row, Gt, Yarmouth	Mr Curtin	1400 Series organs	They are competitive	Reliability, quality of sound and appearance value for money	
		South Eastern Entertainments Agency 373/377 Lewisham High St., Lewisham, London SE13	Brian	We sell a lot of everything	Very favourable, better than mos		No .
		ABC Music 14/16 High St., Addlestone, Weybridge, Surrey	Dave	CS5 Synthesizer	Extremely reliable well made. Good value for money	money	l don't think so
		Viking Vision 169 Commercial Street, Letwick	Mr Bentley	Acoustic guitars	Very high quality & very economical in price	yActual finish and price of them	dThey don't do a cheap amp
Ш		Carlsbro Sound Centres, Mansfield, Nottingham and Sheffield	Malcolm Jennings	Keyboards	Very favourably price wise	Quality for price	Nothing major, the keyboard layout could be more reliable
		Modern Music 30 Castle Hill, Dudley, Worcestershire	Bob Nesh	Guitars	Excellent. Better than most	Reputation, standard of quality getting better all the time	None
:	annanananananana.	Honky Tonk Music 300/302 London Rd., Hadleigh, Essex	Pete Brewer	Guitars	Extremely well, very reliable	Consistency of the quality	Good

AUDIO CONSULTANT ENGINEERING

BEVERLEY STUDIO

2,000 sq. ft. of rehearsal space. Facilities include backline hire. Free refreshments, Games room and storage space. 1Kw P.A. supplied. inc. 12/4 mixer, wedges and side fills. Rates P.O.A.

ACE P.A. SALES
Large stocks of new and used equipment. Amps by R.S.D., B.G.W., Phase Linear etc. Speakers by J.B.L., A.T.C., Gauss etc. New and used Woodwork, complete P.A.s built to spec. Sure mics. at best prices in London. Full repairs and customising service including American amplifiers, most speakers reconed on our premises.

KILLERWATTS P.A. HIRE
Rigs available from 3K upwards. We offer world-wide
full touring service Including
P.A., Lighting, Backline Hire,
Transportation of equipment, crews and group personnel. Top quality equipment includes Soundcraft,
Eastmill, J.B.L., A.T.C., Electrovoice,

CODEC NO HASSLE NOISE REDUCTION SYSTEM



CODEC is an encoding/decoding linear dynamic filter (pat pend). Unlike compandor systems CODEC introduces no audible side effects or distortion, yet gives up to 25dB of noise reduction. The system has been in use in studios all over Great Britain and Europe for 2 years. You've probably heard about it on the grapevine. If you'd like to find out if it's as good as they say ring 0298 3756. The first thing that will amaze you is the price. CODEC is manufactured and sold only by: D. B. Electronics, 2 Ash Street, Buxton, Derbyshire. SK17 6LL.



EVERYMANS MUSIC

Bristols Yamaha Pro, Centre Special Pro, Centre Bargains Yamaha CP30 Piano with case £850.00 Yamaha SG2000 Guitar with case sunburst £475.00 Yamaha SF1000 Guitar with case £325.00 natural Yamaha G50 112 Combo £225.00 Yamaha B50 115 Bass Combo £275.00 Finance — Service Facilities — Part Exchange — Barclaycard - Access all at:

209 North Street, Bedminster, Bristol BS3 1JH Telephone: (0272) 661445

MODERN MUSIC

30 Castle Hill, Dudley, West Midlands. Tel: Dudley (0384) 55293



Yamaha stockist, extensive repair service and while-you-wait Shure microphone repairs.

Guitar specialists:- sales, repairs and modifications. ACCESS, BARCLAYCARD ETC.

16 TRACK STUDIO

PROFESSIONAL 2" TAPE MACHINE, EXCELLENT 24
INPUT MIDAS DESK (SWEEP EQ.)
STEREO ECHO, ADT, LOOP ECHOES, GRAPHIC, FLANGER,
COMPRESSORS, TANNOYS, QUADS,

NEUMANN, AKG, BEYER, CALREC MICS, TV LOUNGE.

Drums, Amps, piano, string synth, free to use.

2" tape, Wurlitzer Piano, ARP synths and musicians available for hire.

Many, many singles and LPs released to our credit. Used by major

Publishing and Record companies.

16 TRACK; from £13.00 per hour (Plus tape charge & V.A.T.)

Ring 01-636 1285 (affice) or 01-534 5472 (studio) 24 hours for details concerning recording.

YES – WE'VE GONE 16 TRACK

- Ampex MM1100
- Soundcraft Desk
- Effects Galore!

Eventide Harmoniser + D.D.L. Klark Teknik Graphics, Scamp Rack, Master Room – and more!

From £14 p.h. or £100 per day.

Phone Luton 414297 NOW!



TANOY. MONITORS

SOUND GREAT IN ANY LANGUAGE

Elliott Bros.

are pleased **SQIN** chose

TANOY BUCKINGHAMS

For a demonstration of any of the great range of Tannoy professional products ring 01-388 1833

Elliott Bros.

LONDON W.1.



announces a move to larger premises (not to mention improved stocks) at 281 HIGH STREET, UXBRIDGE

For further details or consultations with the good doctor PHONE UXBRIDGE 35076

Pete's Gig Shop

SHEET MUSIC SHEET MUSIC

Good news for all musicians

from Michael Peck



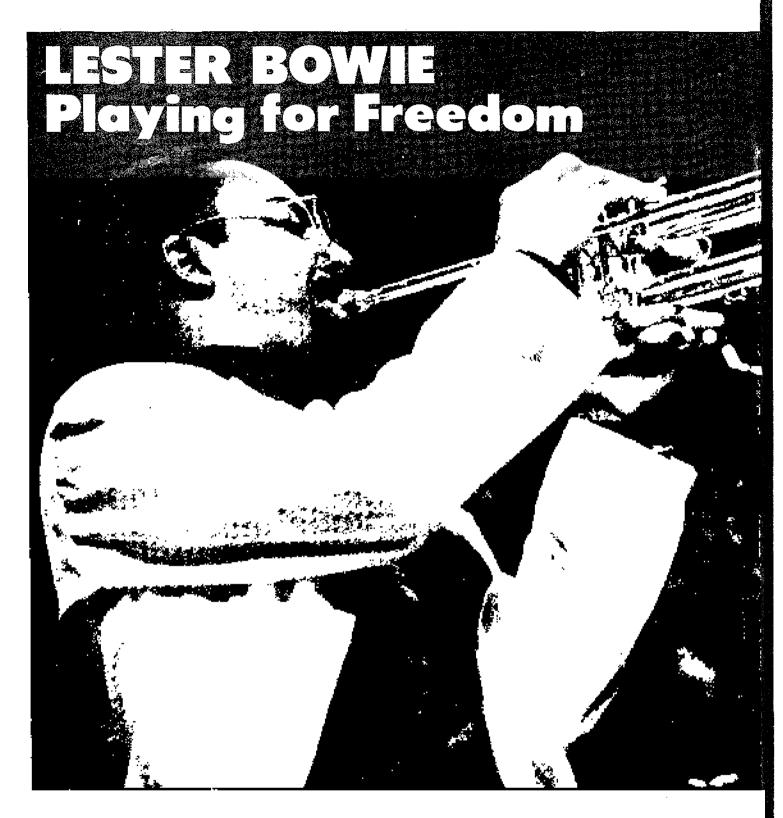
Increase your repetoire from our large

stocks of CURRENT POPS STANDARDS - ARTIST ALBUMS
Improve your technique from our
large

stocks of TUTOR BOOKS - JAZZ ROCK - CLASSICAL - GUITAR
STYLES - KEYBOARD STYLES INSTRUMENTAL BOOKS
Send for catalogue to:
MICHAEL PECK
1478 PERSHORE ROAD,
STIRCHLEY, BIRMINGHAM B30

or telephone

(021)4586460



The word "freedom" has certain connotations in jazz. When Ornette Coleman got out his plastic alto sax in the Fifties he liberated scores of young musicians from the idea that the only permissable music was that which followed chord patterns. Other players like Albert Ayler and Pharoah Sanders moved further away from Western concepts of melody and harmony, and percussionists such as Sunny Murray and Rashied Ali developed a way of playing that had more to do with waves of sound than conventional rhythms. Now musicians were free to play without being tied down by musical orthodoxy.

There was a problem with just seeing freedom in this way, though. The new "freedom" was in danger of becoming

the new "orthodoxy", whereby many players seemed as though they felt obliged to play in the new way all the time.

In Chicago, however, a group of musicians were exploring a different path — the collective known as the Association for the Advancement of Creative Musicians, or AACM. They too were free to reject musical rules and regulations, but were also free to explore different areas left untouched by many of their contemporaries.

The Art Ensemble of Chicago was one influential group to emerge from the AACM. They used a vast instrumentation, explored African and other ethnic musical areas and at times delved back into earlier periods of jazz history.

The group had a different interpretation of what the word "freedom" meant. As trumpet player Lester Bowie explained when the Art Ensemble came over to Britain to play a sell-out concert at London's Queen Elizabeth Hall recently: "When we say that we play free, it's that we're free to expand anything, or to transcend, not that we're just 'free' and that means cats can't play in tune and just go out and blow anything. It's about being free to go out and play a gospel song if you feel like it, being free to play something in time, or to play something with a mode like Coltrane. The music has to be extended to where there are none of these boundaries - jazz, rock and all these things because it's all the same thing."



Were the band actually reacting against much of the free jazz of the Sixties then? Bowie replied passionately: "We did react against it because we were offended by this. I mean we had been really working for years. You'd been developing your skills for years and all of the sudden the music was all uhhhhhh boogidyboogidy," Bowie wails and waves his fingers in the air. "You'd see cats that had been playing for two years. So we didn't believe in that in Chicago, we didn't follow that trend. We got Johnny Griffin, cats like that. Cats get scared when they come from New York to Chicago, they have to watch their step! It always has been that way.

"In Chicago we always believed in the music. All these guys in the AACM

weren't beginning musicians. They were guys that had years and years of experience. Cats like Richard Abrams had been working with Gene Ammons. It wasn't like a bunch of young cats, they'd been working from 17 to 60, big band cats, we had a wide spectrum. We had a common thing of wanting to play creative music, the main aim of the organisation is that."

An Art Ensemble concert illustrates the redundancy of the term "iazz" as a description of their music - the group prefer "Great Black Music" - and breaks down our preconceptions of what to expect from a live performance. At the Queen Elizabeth Hall they ran through a gamut of ideas, moods and emotions, drawing on a multitude of musical influences. To achieve their expansive vocabulary the group use instruments of every shape and description - Bowie estimates a total of two to three hundred which give them an almost infinite tonal range. Horn men Joseph Jarman and Roscoe Mitchell stood surrounded by tenor, soprano, alto, baritone and bass saxes, and bass clarinets, with drummer Don Moye and bassist Malachi Favors having access to scores of percussion instruments, many of them African.

The concert opened with a lengthy percussive section which developed into a cool bluesy tune featuring Bowie's incisive trumpet and Mitchell's bass sax. Other sections had the horns barping and belching like a traffic jam, a military march, another African percussive groove, a swaying and staggering drunken alto solo, and a remarkable seqment that had Jarman and Mitchell as the shock troops of a breathtaking aural assault, spearheading with searing flurries on twin soprano saxes. All this was rounded off with an outro reminiscent of a mid-Sixties Miles Davis theme tune, with Jarman thanking the audience and introducing the members of the group.

Lester explained the reasoning behind their global approach: "We went to a museum in Paris and most of the music was found in Africa. Since the oldest man was found there, it stands to reason maybe the music was bred there - the instruments, the scales.

"Scales have come up through the centuries, and they're all linked. The Chinese music, the Spanish, the European, all these musics are actually related, and that's why we say it should be Great Black Music. This is the link, it isn't like a bunch of separations, and by being that name gives us the respect that is due, because jazz means fuck-shit, it's not a very nice name for the only living music of the planet. We had a cat come up from Spain and he was sweating and he says." Bowie did an hilarious impersonation of an agitated Spaniard." The Music...it sounds like the south of Spain! How do you do it? Have you been to Spain before?' We says 'no, never been there!"

"At one time it used to take three months to get to the States instead of three hours on Concorde or three hundredths of a second by TV. The world has become that much smaller, so the music tends to kind of compact itself.

"As much as I like Indian music, it doesn't speak for England, and it doesn't speak for me as much as African music. which doesn't necessarily speak for everyone in Austria. Or as much as I like waltzes, the music from Vienna doesn't do everything for me. It needs to be more expressive than just these narrow areas. so we put them together, which is where they should have been in the first place."

The previous time the Art Ensemble were in England they played a concert at the Roundhouse, an informal venue with the audience virtually surrounding the stage. So how did Lester feel about playing "serious" concert halls

like the Queen Elizabeth?

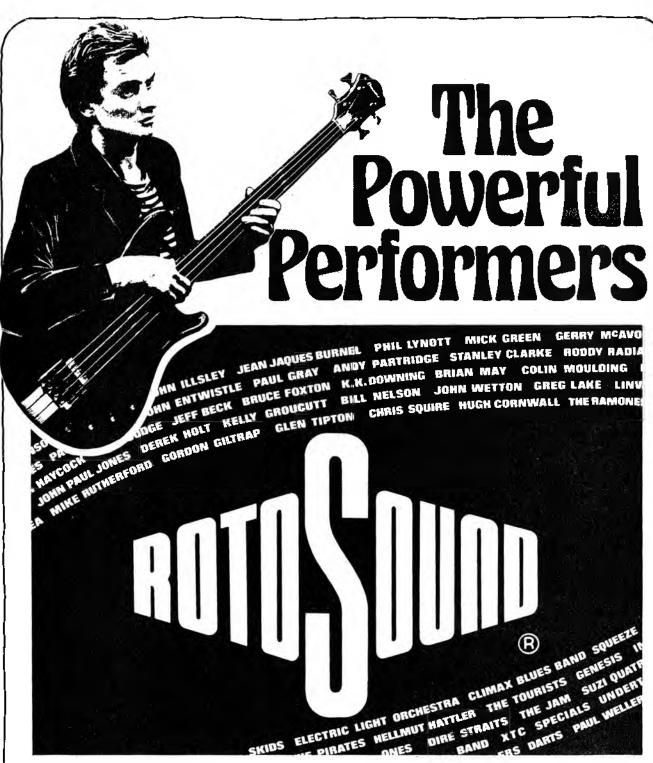
"I think we should play in places that serious music has been played in," he expained. "I mean music like we've been doing tonight. We enjoy playing a lot of places, but we feel, as messengers, we have to spread the music as much as possible. If there is a place where there's a good sound, a place where they're accustomed to hearing serious music, that's much better than having some bunch of drunks out there waiting for some free

"I'm not saving that we don't enjoy going out and sitting in somewhere, or playing with a rock band, because there's a place for that too." Bowie called out to Malachi Favors, who was in a corner putting away his African stage clothes. "Remember that time we played with that rock band in Norway? We played with one of those groups. I mean a LOUD pop group, all of a sudden Roscoe, Joseph and me was on horns. We would have wiped Blood Sweat and Tears and them cats out! People couldn't believe it, they had to keep the joint open another hour!"

With a name like the Art Ensemble of Chicago, you'd be forgiven for thinking that the group sit around with long faces intellectualising about music all day long. In a way the name is unfortunate - it does carry a certain air of pretension, and perhaps puts people off before they have even heard them play. In fact humour is an important weapon in their armoury, acting as a tension release valve and mocking social institutions, such as the military. One side of their album A Jackson InYour House, recorded during their sojourn in Paris about 10 years ago, is particularly hilarious, featuring shrieking laughter, an overblown waltz and a trustrated army officer on a parade ground shouting "get in line!" while "soldiers" Jarman, Mitchell and Bowie chase circles around him.

"All of us are army veterans," explained Lester. "Joseph made 81 parachute jumps. I was in the air police for years. Another cat was a medic during the Korean days. It's a kind of sad time and it's whatever you perceive it to be. And there's humour in it, because there's humour in anything, humour's part of life so the music is representative of life."

The group have had an image of being overtly political. I had been informed by three separate informed sources that they could be particularly heavy towards white journalists, although fortunately this turned out to be untrue in my case. I was further surprised when I asked Bowie if the



As well as **Sting of the Police** take a look at some of the other top bass guitarists and guitarists who carry exclusively either ROTOSOUND Swing Bass, Jazz Bass or our very popular range of Gauge

Selection sets from .006"-.014"

hy not n them!

Sole Manufacturers: JAMES HOW INDUSTRIES LIMITED 20 Upland Road, Bexleyheath, Kent, England.



use of African instruments was in any way a political decision.

"It's not a conscious political decision. It's a conscious musical decision," he answered.

Didn't the band have a political image? He agreed they had, but that the image had "mostly been put on us" by journalists. "We're an all black band. It was the Sixties, black power was in, so whack...we were political. It was easier for them to write about the politics than the music.

"If what we're doing is demonstrating unity or whatever, that may be political, but it's from the music. The music is first."

Although Bowie came to prominence in Chicago, his first musical experiences were in St Louis where he was brought up. His family's musical connection went back "to the days of slavery". His great grandfather played organ, his grandfather trombone and his father was a trumpet player and a high school band director and both his brothers are professional musicians, brother Joseph being a renowned trombone player who played with the Black Artists' Group, a collective similar to the AACM.

"I've been kind of blessed, because I'm really not that talented, actually. I just work hard and I've had really good instruction and known really good trumpet players," said Lester. "My old man had me studying with this cat named Enrico Carrione, the principal trumpet player with the St Louis Symphony, I was with him when I was nine, 10, 11. Then my ow man would sit down and do a lesson with me."

Bowie went on to study music at college in Missouri and Texas, and worked with bluesmen Albert King, Little Milton and Oliver Sain in St Louis. "These were the bands that were working all the time. Anyone who was interested in playing usualty ended up playing with one of those three along with various jazz gigs. I played a lot of different gigs...poker gigs, beer parties, talent shows, blues joints,

anything.

"When I was 13, 14, I knew a cat named Bobby Dansey who happened to live around the corner to me. Him and Miles (Davis) came up together, he was like the hippest trumpet player in St Louis. So I know a lot of cats like that. That sort of thing just doesn't happen any more. Look at Chicago — Bird, Rollins, you'd see them down the street all the time. But they dispersed all that, Mayor Daley just wiped all those joints out. That's why the AACM was formed, because there was like a big vacuum."

He moved to Chicago to record with Little Milton and Albert King and because his first wife, singer Fontella Bass, was signed to a record company based there. But it wasn't until a year later that he met members of the AACM and started experimenting with different musical approaches with them.

Bowie's varied musical influences and rigourous training have combined to make his one of the most distinctive trumpet voices in contemporary jazz, as individual as Miles Davis and Don Cherry. At times he will use a mute and at other times will squeeze extraordinary sounds out of the bell of his instrument, fluttering one moment and then swooping into a raspberry-like growl. If some readers are put off by his association with free music and imagine his playing to be a random sequence of squeals and burps, then they have got it wrong. Bowie's solos are rich in melodic costruction, and if you want an example of his playing in a more conventional setting then check out the beautiful New Directions album he recorded with Jack de Johnette, Eddie Gomez and John Abercrombie on ECM.

The instrument he uses is a Claude Gordon: "It's lightweight, which I like because I play really hard and need something not too heavy, and it has a large bore and a medium size bell. I use a Schilke mouthpiece. Schilke just accidentally make a nice mouthpiece — I say accidentally because even the instruments

aren't designed with us in mind, they're designed for cats who play classical music.

"Roscoe and Joseph play all Buffet instruments and they have to make changes, add extra braces for the way they play, strengthen something, angle it a little bit different."

At home Lester listens to virtually any type of music, but if he has a favourite it is bebop. "I think bebop is about as far as Western music goes, in scales, harmonics, inversions and all that business. I think Bird, did it, him and John Coltrane. I'm kind of a bebopper at heart because I carne up at that time when that was big."

The Art Ensemble have recorded two albums with the German label ECM in the past couple of years, a move that surprised me since I didn't think that the group really fitted in with the "contemporary mainstream" image of the label. But it turned out that they have an extremely good relationship with ECM boss and producer Manfred Eicher.

"Everyone was surprised, but, I mean, Manfred's cool!" said Lester. "But there are no surprises, nothing strange about it, our relationship is a straight man to man relationship. We're completely free to record anything we want to, he doesn't direct us and say 'you've got to do this' or 'make it sweet' or 'make it hard', he just tries to get the best sound for whatever we're trying to do, which for us is a very good relationship."

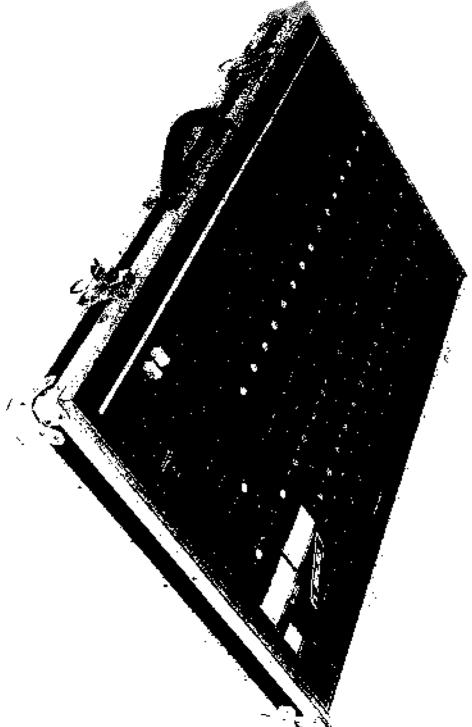
The "Nice Guys" album is a perfect example of Lester Bowie's concept of freedom. It opens with a reggae tune, goes through a short, quirky little piece, and then an extended track relying almost purely on percussion that manages to conjure up sounds ranging from an African village to a modern city. The second side is similarly varied, with a couple of pieces of free improvisation, one frantic and the other reflective and abstract, and a cool tune that recalls the atmosphere of Miles Davis' "Kind of Blue".

One last thought. Jazz is still very much a minority music, despite the excellence of much of what is being produced, but perhaps that's not surprising considering the way the music is discriminated against by radio and TV. Can any readers recall ever hearing the Art Ensemble of Chicago by just flicking on their radios? Despite this, Lester Bowie was optimistic—almost wildly so—about the future audience for "Great Black Music."

"I believe actually that this music can be more popular than pop music because I think that people are ready to hear something. A lot of record companies underestimate the audience, they think the audience is not together, they have to be informed and told what to do. But people are not crazy, people are university graduates and chemists and they can think. And then young people, 15, 16, they've heard all of this pop stuff and they're tired."

Somehow I can't quite imagine the new Art Ensemble release chasing the Jam up to the top of the album charts, But one can always dream...





Peature include

* Trible Middle Bass with 2 prequency 医垂尾遗传的

PA TULLDO CETT

* STEREO HEADPHONE MONITORING

* MULTICONS SOCIET AS STANDARD

IALANCED MIC INPUTS

* 16/8 VERSION AVAILABLE SHORTLY

Wykagyi Stn., New Rochelle, NY 10804, U.S.A. Tele: 914 636 8006 Canary Mixing Desks Ltd., 17 West Hill, SW18 London, England. Tel: 01 870 7722, Telex: 889 294 Contact CANARY P.O. Box C1004

What is it that lifts RCF speakers above the rest?
First and foremost, it's the sheet quality and perfection of the sound they

produce.
Then it's the know-how and skill that goes into their insmilacitite, thacking the the choose the first class materials used.
All of which makes RCB speakers quire All of which makes RCB speakers quire and of which makes RCB speakers quire.

Microphones

Part 8 Microphone Applications

To round off our series of articles on microphones, we shall consider the best ways of miking up various types of sound source and discuss the best microphone positions and what general types of microphone are likely to be best suited. We shall concern ourselves with microphone types that are likely to be available to bands on the road. in theatres and in smaller studio situations or home recording set-ups. In other words, microphones that readers of this magazine are likely to be familiar with and have access to rather than the top quality professional microphones to be found in large professional studios.

We will assume that those who are using such microphones as C414's, Neumanns, etc already know how to use them and are therefore unlikely to be reading this series of articles anyway! I will cover a fairly wide range of musical instruments which are likely to be encountered as well as voices and it will therefore be necessary to spread the subject matter over two or three months' issues. First however, some general tips.

In a live performance, it is invariably necessary to get the microphones as close as possible to the sound source so that the best possible ratio of wanted sound to unwanted ambient sounds is obtained. This will provide much better separation between channels at the mixing console and also reduce feedback from the loudspeaker system to a minimum practicable limit.

To do that, you will need to know where the sound actually comes from for each type of musical instrument you are likely to encounter and this is sometimes not quite as obvious as it might at first appear as we shall see later on. Also, subtle changes of tone can be produced by moving the microphone away from the apparent direct source of sound to some other position where a strong sound is nevertheless still available,

Close miking however often has its drawbacks in that all sorts of mechanical and electrical noises are picked up in

addition to the actual sound required. Sometimes this can be used to advantage - for instance, the clicking of a plectrum over the strings of an acoustic guitar or the scraping of a bow over the strings of a fiddle will often add intimacy and attack to the sound, but the rustle of the instrument against the musician's clothing or the accidental knocking of the resonant body of the instrument will also be picked up - as will even the slightest playing error.

From a technical point of view, microphones used for close miking often need to be capable of handling much greater sound pressure levels without overload and the input circuits to the mixer need much more headroom before onset of clipping in order to handle the higher level of signal being fed in. These latter considerations are particularly valid for close miking of lead vocals in rock music, for miking up loudspeaker cabinets associated with electric musical instrument amplifiers and for close miking of such instruments as trumpets, saxophones etc.

"Popping" or "blasting" is often another problem associated with close miking - especially on vocals and it is necessary to select microphones with effective "pop" filters for such applications. Often, vocal microphones are hand held by the singer in a live performance and this necessitates the selection of a microphone with particularly effective insulation against handling noise - and even when microphones are stand mounted, many stands offer virtually no anti-vibration properties.

When a rock band in particular is playing on a flimsy resonant stage, vibrations from the drum kit, bass guitar loudspeaker and foot tapping by the musicians will be transmitted straight into the microphone via the stand and so again, microphones with good mechanical isolation — or the use of one of the propriety anti-vibration couplings — is mandatory if any degree of quality or adequate control over the system is to be obtain

When reinforcing live performance sound, it is usually essential to mike each individual instrument with a separate microphone, as group miking necessitates a much greater source-to-microphone distance, which in turn requires more system gain, which in turn causes feedback. There are the odd exceptions to this and it is sometimes possible to mike up a small brass section for example using a single microphone due to the sheer acoustic power of these instruments. Similarly, a pair of tom-toms or bongos or tabla drums can often be dealt with using a single mike, and a single overhead mike of the right type will often be sufficient to cover all the cymbals on a drum kit - although the hi-hat should be covered separately.

It is worth mentioning that the current trend in live performance sound is to direct inject whenever possible. This involves plugging the instruments - or their amplifiers as appropriate-straight into the main mixing console with the obvious advantage of total isolation of each instrument, virtual freedom from feedback problems, and freedom from the disciplines of having to stand in one position in front of a microphone all night! Transducer type pick-ups are available for most acoustic instruments including acoustic guitars, fiddles, saxophones, trumpets, flutes, etc to enable these instruments to be DI'd, and many back-line amplifiers are available with an output jack fitted for this purpose usually marked 'line out' on the back panel of the amp to enable electric guitars, keyboard instruments, etc to be Dl'd.

Special pick-ups are available for upright and concert grand pianos and so it is possible to end up using microphones only for voices and percussion — although to my ears, these pick-ups or transducers never sound as good as using a good quality microphone. Whereas in a live performance situation the availability of sufficient system gain before feedback is the overriding concern, in the studio, where there are no high

powered loudspeakers in the immediate vicinity of the microphones, there is more scope for artistic use of microphones.

However, there are still several reasons for keeping microphone gain levels within reasonable limits, including poor signal-to-noise ratio due to the increased noise levels of the mixer circuits when operated at high gain and poor separation between the various baung sources when microphones are too sensitive. However, within these limitations, there is far more room for manoeuvre than is the case. in live performance sound.

In the extreme case, and given a reasonable acoustic environment, a superb quality stereo recording can be made of an entire symphony orchestra using a single crossed pair of suitable microphones. In fact, it is the acoustic environment in which a recording is made that will largely dictate the working distances that can generally be used and which can easily make or break the success of a session. In a hard, reflective room, where reverberation is likely to be excessive, close miking once again becomes essential in order to achieve a reasonable ratio between the wanted sound of each instrument and the ambient sound level of reverberent energy, while in a room that is acoustically dead, much greater working distances are possible.

Another important factor is ambient noise - passing traffic, heating appliances, extraneous voices, etc., and if you are forced to record in situations where such noises are present, then again, close miking becomes the answer so that you get more of the sounds you want and less of those that you don't. The isolation of particularly loud instruments - such as drum kits, bass guitars and brass sections, which are likely to swamp quieter types of instruments can be another problem and these are best dealt with by placing such instruments inside acoustically isolated booths or by using multi-track recording techniques so that such instruments can be recorded separately and mixed down later.

As stated earlier, the forego-

ing is intended to provide a few general tips and not a complete guide to microphone practices. It is only by personal experience that you will instinctively know which mike to use, where to place it for a given effect and how to take account of the prevailing acoustic environment for any type of instrument or situation. In the remainder of this article we shall consider a selection of different instruments and how these are best dealt with in general terms, and more will be given in next month's issue.

Ken Dibble



1. Solo Voice

Choose a cardioid dynamic, capacitor or ribbon microphone with effective 'pop' filter, good mechanical isolation, high SPL capability without overload and with a rising frequency response over the mid and upper frequencies.

Some singers prefer a mike with a pronounced proximity effect to enhance the low frequencies when used close up while others prefer a more natural sound. Suitable mikes are: Shure Unidyne B; Unidyne 3; Unidyne 4; Unisphere A; Unisphere 1; SM57; SM58; AKG C451/CK5, D300 series, D1200; D2000; D170; Beyer M260, M500, M88.



2. Grouped Vocals

Similar to (1) above but pop filter, high SPL and proximity effect considerations are not important as microphones are usually placed further from the source. Rising mid-band response however is often useful in providing better definition and clarity. Suitable mikes: Shure Unidyne 3; Unidyne 4; SM57; SM81; AKG C451/CK1 or CK1s; C501; D300 series; D202; Beyer M160; M69; M88, M201.



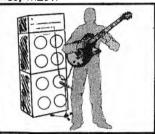
3. Acoustic Guitar

Whilst the prime source of sound output is obviously the sound hole, it should be remembered that a considerable amount of sound emanates from the instrument top as well. Miking directly over the sound hole tends to produce excessive - and often muffled-bass and is also prone to low frequency howlround or feedback. If you particularly want the full tonal quality available at the sound hole, then the microphone is best placed about 30cm from the strings so that these effects are minimised.

Miking from the bridge with the microphone closer in and angled towards the sound hole will produce a sharper sound altogether, but my own preference is to mike fairly close in with the head of the mike in line with the top of the neck, again, angled towards the sound hole. This position will provide a good balance between the full resonance of the instrument and good treble definition but without the boominess of miking the sound hale. It will also pick up the transient sounds of the strings being plucked, but care must be taken to prevent feed-back from reflections off the instrument top.

Alternatively, a small capacitor mike can be clipped into the sound hole itself. Choose a microphone that is not too bulky to get in the way of the player's hands, with a smooth response and without a proximity effect characteristic.

Pop filters are superfluous for this application and we are not dealing with high SPL's. A good quality, wideband cardioid of the dynamic, ribbon or capacitor type should be suitable such as the Shure Unidyne 3; Unidyne 4; SM57; SM81, AKG C451/CK1 or CK1s if a presence boost is preferred; D202; D224; C501 or C567 clipped inside the sound hole, Beyer M160; M69: M201.

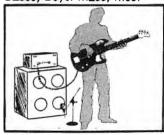


4. Amplified Electric Guitar

Use a good quality dynamic cardioid with high SPL capability and good mechanical isolation. A wide frequency response in this situation can be detrimental as this will tend to accentuate the hisses and hums that come from most musical instrument amplifiers and in any event, there is little output from an electric six string below 80Hz or above 8KHz.

A microphone with a bass roll-off characteristic is best as this will 'clean up' the bottom end and a top response to 12KHz will be more than adequate. This is best mounted on a small but sturdy stand and placed on the central axis of one of the loudspeaker cones in the cabinet at a distance of 10cm to 15cm.

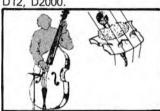
Do not place the mike on the central axis of the loudspeaker baffle panel unless this coincides with a cone centre as well, as this will cause peculiar phase cancellation effects at certain frequencies. Suitable mikes include Shure Unidyne B, Unidyne 3, Unidyne 4, SM57, AKG 300 series, D1200, D2000, Beyer M260, M69.



Amplified Bass Guitar Use a good quality dynamic cardioid with high SPL

capability, good mechanical isolation and particularly good low frequency performance. In this situation it is better to place the microphone at a slightly greater distance from the loudspeaker — say 15cm to 25cm and to mike on the central axis of the loudspeaker baffle panel whether or not this coincides with the central axis of a loudspeaker cone.

This is because the cabinet front will assist considerably in producing the low frequency notes and unlike the electric six string, the wavelengths here are much too long for phase cancellations to cause any problems. Suitable mikes are Shure 556S; Unidyne 4; AKG D12, D2000.



6. Double Bass

There are two basic methods of dealing with this instrument. One is to place a microphone with similar characteristics to those given for the electric bass (except that a high SPL capability is not necessary) on a short but sturdy stand about 10cm away from the strings just above the bridge. Any of the four microphones listed for the electric bass are suitable for this method, and the AKG D200 and D202 can be added to the list.

The alternative is to wrap the microphone in a piece of foam rubber and wedge it firmly in the cutaway in the base of the bridge itself. This position gives better "punch" due to the presence of more reflections off the belly of the instrument.

The general microphone characteristics remain the same, but the physical shape of the Shure 556S and AKG D12 render them unsuitable for mounting in this way so we are left with the Shure Unidyne 4, and AKG D200, D202, or D2000. Also, at a lower price, for stand or bridge mounting, the AKG D190 is quite good, although a little prone to handling noise.

(To be continued next month)

Help!

On 29th April at Streatham. Colin White (lead guitarist with Metro) had both his car - a green Capri - and his 1960 Fender Strat stolen. He couldn't care less about the car but he desperately needs the guitar back. It is white with a Burns maple neck and trem arm, serial number 81705. Since Colin's on tour at present all information is being taken by Daylight Robbery Management on (01) 836 5220. Incidentally the Capri is green, serial number HGW 702H and hasn't got a trem arm.

Sight and Sound

Here's an interesting offer for all you strutting poseurs out there. Cambridge's Spaceward Studios are offering a day's session with their video gear for £40

There is a catch, of course. To use the video gear you also have to book in for a day's work in the 16-track recording studio, at £140 plus VAT.

For more details contact Gary on (0223) 64263 between midday and midnight.

Moore or Less?

Looking for a guitar hero to worship now that heavy metal is blitzkrieging the nation? Well what about Gary Moore, ex-Skid Row, Colosseum and Thin Lizzy axeman? Gaz is back on the road again with his own band called G Force, featuring vocalist Willy Dee, ex-Lizzy stand-in drummer Mark Nauseef, and ex-Tony Williams Lifetime bassist Tony Newton. The band is touring with Whitesnake during June, so get out your faded denims and cardboard cut-out quitars...

Bracknell Jazz

Bracknell Jazz Festival is what you might call a civilised event. It takes place in the grounds of a country house, with artists playing in wood-panelled rooms and under a large marquee, and generally has an excellent line-up of jazz talent appearing over its three days.

This year looks like being no exception, judging from the bill. Booked so far are: Friday July 4: Georgie Fame and the Blue Flames, Naiad, and Lauis Moholo, Elton Dean Wheeler Tentet playing this



Reel Time

What enables you to use a top London recording studio for half the normal cost? A bloody miracle, you may think! But you can stop dreaming now, and put your hard earned shekels to some good use. A new company called ReelTime has thought up a scheme whereby it liases between 20 major London recording studios with unbooked or "dead" time, and any group that wishes to book cheaper studio time.

It is the brainchild of Richard Ames, a freelance tour manager who has organised life on the road for Cockney Rebel, Fleetwood Mac, the Grateful Dead, Cars, Kate Bush, Wings and their ilk.

Richard explains: "Our basic aim is to offer the same facilities that are available to a major band for half price at short notice. This will enable small bands without record company support to go into a top studio and make a top quality recording at an economic price. Obviously this facility is not only available to small bands - musicians who are already in famous bands will be able to take advantage of ReelTime, recording their own ideas in a good studio without needing a huge outlay.

Allowing groups in at half price during "dead" time will generate more business for the studios and enable high standards of recording to be maintained, even during the current recession. Groups will be able to put out more product while keeping within the same budget.'

The system will work like this — the artist phones ReelTime with the amount of time wanted and technical requirements and Richard will book them into the most suitable of the 20 top studios he has on his books.

Richard also has a large number of contacts in the business and can organise rehearsal time, instrument hire and professional session musicians.

ReelTime's phone number is (01) 248 3222.

Rocket 88, featuring an amazing line-up of Bob Hall, lan Stewart, George Green, Alexis Korner, Jack Bruce, Danny Adler, Colin Hodkinson, Charlie Watts, Don Weller, John Picard, Colin Smith, Hall Singer and tap dancer Will Gains.

Saturday, July 5: Pat Metheny Band, Jan Carr's Nucleus, London Jazz Composer's Orchestra, Diaghilev Rhythm Band, Kyte/Keddie Sextet, Spirit Level, Dave Leibman Quintet, Andrew Cyrille

Quintet, and Eddie Prevost and Keith Rowe

Sunday, July 6: Sheila Jordan with Steve Kuhn, Harvie Schwartz, Bob Moses, T'n'T (Keith Tippet and Stan Tracey), Buddy Tate, Max Roach Quartet, Kenny Burrell Trio, Turning Point with Neil Ardley and Allan Holdsworth, Koffman Quintet. Berkshire Youth Jazz Orchestra, Talisker, Pendulum, Mike Cooper and Joanna Pyne, Pete Hall, Roger Turner, and the Tony Coe and Kenny

year's specially commissioned niece.

Also, a top American act was due to be added to the bill as we went to press.

Advance tickets cost £11.50 for the weekend, £9 for Saturday and Sunday, £3 for Friday only and £5.50 for Saturday or Sunday only, available from Jazz Festival, South Hill Park Arts Centre, Bracknell, Berkshire.

Reductions are available for members of the JCS or Musicians' Union, and tickets on the door will be slightly more expensive. Ring Bracknell (0344) 27272 for details.

Steep Steinway

The highest price ever paid at an auction for a musical instrument has been recorded at Sothebys in New York, An unidentified New York banker shelled out \$390,000 for a Steinway "Alma-Tadema" grand piano in March.

Arte & Oficio

Information is beginning to spread across Europe about a Portugese rock band called "Arte & Oficio". They have recently been supporting Joe Jackson on some of his southern dates and may well be coming north in the not too. distant future. Their first album "Faces" was a strange brew of medium-heavy rock with a Brazilian rhythm section. Sounds strange at first, but it could well cause a trend in the same way that reggae did a few years back.



They will have a new album out in the late summer but since the distribution details are not settled yet its release in the UK hangs in the balance.

As far as we know they are the first Puerto-rock band to seriously move into the Euro market, well worth searching out. Their fresh approach to rock definitely deserves some attention.

Cheapo Cheapo Records

With album prices soaring above the five quid mark, it's about time record companies started looking at new ways of selling music to the out-of-pocket punter.

One interesting development has been Safari Records' "Alternative Play" disc — Sheep Farming in Barnet, by Toyah, which featured six tracks on a seven inch for £1.50. That works out at the equivalent of one album side for little more than the price of a single.

Another variation on the same theme arrived in the office this month — the Do-It-Yourself mini-album. The record has been produced by a band called Tracks, from Bishops Stortford in Essex, and contains more than 20 minutes of music on a 12 inch disc at 45rpm. The band have had 250 copies pressed and sell them for two pounds each at their weekly Sunday night gig at the Triad Leisure Centre, Bishops Stortford.

Drummer Roger Odell said: "We think it's a bit of a first. Considering there is a playing time of nearly 25 minutes and that it is a very small edition, we feel the price is very fair."

Tracks play a classy brand of jazz-rock and are obviously influenced by Mahavishnu and Return to Forever. All the members — Roger Odell (drums), Bill Sharpe (keyboards), Keith Winter (guitar), and Martin Elliot (bass), play in other more commercial bands or do session work and get together as Tracks to play more satisfying material.

The mini-album cost them roughtly £570, including recording time and pressing and sleeve costs, something that should be within the reach of many bands with a local following and friendly bank manager.

Copies of the record can be obtained from 1, The Chase, Bishops Stortford, Herts.

Knebworth Details

Masochists' Corner: your chance to get burn cramp sitting in a damp field hemmed in by thousands doing the same, and feeling sick because of the

grotty grease-sodden rip offburgers that are congealing in your stomach and you can't even get to the urine pits 'cause they're two miles away and someone's just fallen in and there's a 300 yard queue anyway and the wind is blowing the sound in the opposite direction which is just as well 'cause it's only bloody Lindisfarne on stage...

Yes, we're talking about Knebworth '80. Some bright sparks have decided to revive the festival following the liquidation of the promoters of last year's two Led Zeppelin bashes. The new promoters are a consortium of Capital Radio, Andy Hudson Promotions and JL Catering, a subsidiary of Allied Breweries.

Anyway, the line up this year is: The Beachboys, Mike Oldfield, Elkie Brooks, Lindisfarne, the Blues Band, and special guests - whatever that means - Santana. The Great Day is June 21 and tickets cost, wait for it, £9 each, available by mail from: Capital Knebworth '80, PO Box 30, 66 Hammersmith Road, London W14 0PA. Also over the counter from Capital Radio's Euston HQ, and HMV, Virgin and Harlequin record shops. And the best of British . . .

The Earth Explodes

Ever wondered what the sound of the Earth being demolished is like? Or an exploding galaxy ... or the sound of an intergalactic fleet going into warp factor nine?

Apparently all of these imaginary noises can be generated from the rose-wallpapered studio situated in the home of Cardiff lad Steve

Howell. The studio is decked out with ARP, Wasp and Crumar synths, as well as various sequencers, processors, tape machines and mixers, and Steve has recorded music and effects for eight plays here, including a production of "The Hitchhiker's Guide to the Galaxy". If you need any electronic music or effects for your play/film/radio or TV jingle or whatever then you may consider giving Steve a ring on Cardiff 616261.



Johnny Mars 7th Sun

Rising Sun

Drummer Les Warner has taken over from John White with 7th Sun, the backing band for hot harp player Johnny Mars. Les has previously played with the Bishops and Streetpreacher.

Spoils

Why is a band like this only playing in local pubs? Promoters bloody well wake up! We're talking about Spoils, a four-piece band who come from St Albans and Hemel Hempstead in Hertfordshire. If their live performances are anything as good as their demo tape then they deserve a far wider audience. They play some tight, imaginative songs with juicy chunks of Ernie

Isleyish guitar — particularly impressive is the song "I'm Just Waiting" — and they name Steely Dan as an influence.

The line-up is Martin Brown (lead guitar and vocals), Keith Champan (drums), Martin 'Benny' Benson (guitar and vocals), and Gary Williams (bass), and they can be contacted on Hemel Hempstead 51067.

Going, Going, Gone

Remember in our April edition we told you about auctions for secondhand instruments and gear? Well, unfortunately the idea has been scotched following a disappointing turnout for the third auction, held at the Clarendon pub in Hammersmith Broadway in April.

Organiser David Style said: "It seems that the rock and roll public are not really into auctions, they prefer to go into a shop, It would probably work if you could sell new equipment at a discount and guarantee it."

There were only about 100 people at the auction, which meant there were quite a few bargains to be had. Some examples - an HH VS Musician 212 reverb combo went for £105 - normally it would sell at something like £220; an Orange Reverb Master had to be withdrawn because a minimum bid of £50 could not be raised: an Arbiter twin neck guitar with case sold for £120; a 1930s National Steel Guitar in perfect condition went for £200; a Futurama Hagstrom quitar fetched £20; and a Gibson Firebird was sold for £150.

There were also a few new instruments up for sale — a Kramer 450G aluminium neck guitar, normally retailing at £475, was snapped up for £120; and a Musicman Stingray Two guitar, recommended retail at £370, sold for £150. We suspect the reason why there were not that many people in attendance was that few knew about it. Perhaps some hard-nosed entrepreneur would like to take over the idea.

Welsh Spaceman Steve Howell



BUZZ MUSIC

65 Widemarsh street, Hereford. Telephone: Hereford 55961



65 and 32-34 Widemarsh Street, Hereford, Tel. (0432) 55961

Backline (0432) 55971

As one of the leading provincial music shops, we offer the full range of backline equipment for the ambitious or professional musician. Competitive prices, backed by meticulous after sales together add up to the best service available. Our staff are all respected working musicians, and understand the problems likely to be encountered on the road. As specialists in their own fields, they can advise without bias or predjudice.

they can advise without bias or predjudic Guitars & Amplification: Colin Summers Drums & Percussion; Robbie Dobson Keyboards: Andrew Thomas

Professional Sales (0432) 51831

Specifically created to service the needs of the professional or commercial user. Soundgate Professional sales offers sales and service to Hire companies, touring bands, recording studios, broadcast companies, theatres, and local authorities. Full details are available on request.

Professional P.A. & Studio Sales: Mark Thompson Multitrack & Recording Equipment: Leslie Penning

Service

We have unrivalled experience in the maintenance, repair and instaliations or sound equipment. Servicing & Repairs: Alan Kitchen

CUSTOMERS

BANDS

Airwaves

Edgar Broughton Band

Max Boyce

Blue

Rocky Burnett Blitz Bros.

The Beat

Dave Cartwright

City Boys

Dangerous Girls

The Dodgers

Dexy's Midnight Runners

Diamond Head Def Leopard Julie Felix

Eko & The Bunnymen

Groundation Genesis Gangsters Roy Harper Steve Hillage Hawkwind Hitmen

Headboys Live Wire Loose Change

Muscles
Martha & The Muffi

Martha & The Muffins Mean St. Dealers

PRODUCERS

Malcolm Cecil Pat Moran John Acott Daves Charles Peter Gage Muff Lang
Bob Lamb
Alan Black
Muff Murfin
Paul Cobbald
Ben Holland
Dave Goodman
Bill Nelson
Geoff Haslem
Bill Drummond
Bill House

P.A. COMPANIES

Bell Sound Hire
Steele Pulse P.A.
Hi-Jack Productions
Hi-Life Productions
Malcolm Hill Associates
Powerhouse P.A.
Swn Ogwen P.A.
Ampec Services (Eire)
Borg Hire
Planet P.A.
Wigwam Acoustics
New Music
Night Shift
The Pretenders
Pirates
Lagy Pop

Pirates
Iggy Pop
Rush (Canada)
Splitz Enz
Sex Pistols
The Searchers
Showaddywaddy
Steele Pulse
The Selecter
Sniff 'n' the Tears

Split Rivet

Hire (0432) 52016

As the leading provincial studio hire company, our lists are amongst the most comprehensive in the country, and our service second to none. Full details are in our hire brochure, available on request.

Studio & Backline Hire: Jill Currie P.A. & Tour Hire: Tom Oliver Mobile Studio Hire: Leslie Penning

Manufacture (0432) 51278

Our Sister Company, Sound Enclosures, manufactures professional flight cases and loudspeaker enclosures to the most demanding standards.

Sales Manager: Cliff Campbell Production Manager: Mick Hoyles

Backup (0432) 55961

In the communications, industry, backup is vital. We have a fleet of six vehicles on the road, and make bi-weekly deliveries and collections to London, Birmingham, South Wales, Manchester and the North, Additionally, Red Star and Securicor delivery is readily available for urgent mail order sales or repairs.

Despatch Manager: Yasmin Scott Transport Manager: Charlie Caldwell Accounts: Helen Savidge

Our customer list below names some of our recent customers. We take pride in the fact that many were begining their careers when we met them, as our service and attention to detail is based upon the needs of our customers rather than their reputation.

Skids
Simple Minds
Teardrop Explodes
The Tribesmen
Sean Tyler
Tremeloes
UB40
Roy Wood

STUDIOS

Kevin Westlake

BRMB
Bandstand
Chapel Lane
Manor Studios
Modello Studio
123 Studio Cardiff
Mountain Studio
The Old Smithy
Mobile One
Rook Studio
Rockfield Studio
Horizon
Sinewaye Studio

Sinewave Studio Concert Recording Studio Liverpool

COMMERCIAL

NAIM Audio
Nexo Distribution (Paris)
Allen & Heath
Zoot Horn
Octogrange Ltd.
AMEK
Ampec Services (Eire)
Turnkey
Ericks of Bradford
Guy Computer Services
Essex Music
Kelsey Acoustics
Mick Johnson Music
Oxford Lights



DIBBLE'S P.A. COLUMN

The acoustic conditions at the DeMontfort Hall are rather more live than those usually found in a theatre type of venue. This is largely due to the fact that this is a multipurpose type of half with hard wooden flooring, hard reflective walls and many large windows. For sporting events, displays and dancing, the floor is cleared - while for concerts, rows of plastic seats are put out, including the balcony, the hall capacity is 2,560 seats for a concert and all seats were sold for this, the first concert of the Gerry Rafferty "Snakes and Ladders" tour. Both acts were touring with a line up of distinguished musicians - in most cases with a long association with the artists. Richard and Linda Thompson. for example, had half of Richard's old band, Fairport Convention, including Simon Nicol on lead guitar and Dave Mattacks on drums, with another folk stalwart John Kirkpatrick on melodion and concertina. Gerry Rafferty's band comprised session musicians used for the new album - also entitled Snakes and Ladders, many of whom had worked on earlier albums and tours. These included Richard Brunton on guitars, Julian Litman on second guitar, mandolin, piano accordion and harmonica, Pete Zorn on bass, the amazing Raphael Ravenscroft on saxophones and flute, Liam Genockey on drums, lan Lynn, keyboards and Graham Preskett on more keyboards and violin. Messers Lynn, Littman and Preskett also contributed to the vocal effort.

The Rafferty band were really together with very tight rhythm section throughout the whole concert and gave a superb performance despite this being the first of an 11 date UK tour. The set included some magic virtuoso performances by various members of the band - especially from Raphael who on more than one occasion drew spontaneous appreciation from the audience for some of his sax breaks. Unfortunately, the same cannot be said for Richard and Linda Thompson and their band, who were anything but together, and the act just did not gell at all despite some very good individual contributions from Simon Nicol and John

GERRY RAFFERTY/Richard

and Linda Thompson

Venue: Leicester DeMontfort Hall
Hire Company: Concert Sound Ltd,
London



Kirkpatrick, Having been an enthusiastic follower of the Fairport Convention/Fotheringay / Morrison / Albion Country Band / Steeleye Span/Richard and Linda Thompson "set" for more years than I care to remember, I must admit to considerable disappointment at this particular performance - which was not helped by a poor sound mix and a just adequate sound system. It was not until Gerry Rafferty's studio producer Hugh Murphy - who had not been in front of a desk on the road for over two years took over the Midas 34-channel eight-group stereo desk that the sound started to come together and by the fourth or fifth number the sound was reasonably good, although totally lacking in definition. It was virtually impossible to make out the words in many instances. Sound pressure level hovered around the 100dB(A) mark. The live acoustic condition of the hall will not have helped the sound and could account for some of the lack of definition. The audience however seemed quite content with what they heard, so maybe I am being over critical.

The system was a fairly standard Midas/Martin rig, using top quality professional components throughout and sensibly rigged. The Midas 34/8/2 PR series desk has four auxiliary circuits and a full jackfield, to which were connected two Eventide H910 Harmonisers used on the vocals, a Roland 304 Chorus Echo, a DBX 160 two-channel limiter patched one channel on bass

and one on lead guitars, and a Lexicon 92DDL used mainly on Raphael's saxophone and other solos. Room EQ was provided by two Klark Teknik DN27 ½rd octave graphics and a three-way Brook Siran Systems crossover with limiters on all three bands fed the multiway to the stage. The power amplifiers were mainly RSD 800B's and 800C's with Midas 1Kw. four-channel "blocks", feeding the side fill monitors.

The main loudspeaker system consisted of six Martin Audio 115 bass bins, four Martin MH212 "Philishave" midrange horns, six Electrovoice radial horns with JBL 2440 compression drive units, three JBL 2345 horns with 2420 compression drivers and four JBL 2402 "bullets" to each side. The monitor desk was another Midas PR series unit, this time 24-channel eight-group and was feeding a total of 10 Martin Audio LE200 1 x 15 floor monitor loudspeakers, a pair of side fill systems based on Martin components and a separate monitoring system for the keyboards "bay" consisting of two 2 x 15 cabinets with horn and JBL 2440's driven twoway active. A fairly conventional, top quality mike line-up was used, with Shure SM58's for all vocals, SM57's on sax. flute, all backline speaker cabinets, snare drum and tomtoms, Calrec 1000 series capacitor mikes were used on hi-hat and cymbals, an AKG D12 on the bass drum, and the fiddle and all keyboards were Dl'ed.

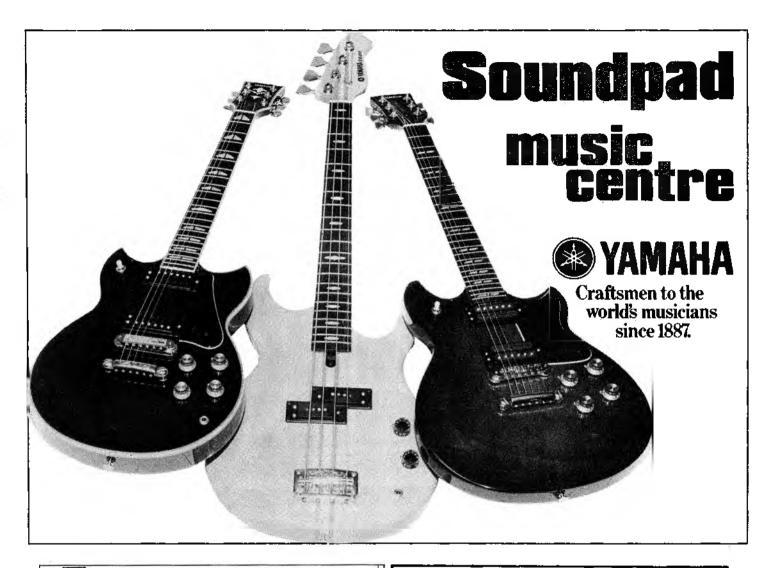
Gerry Rafferty played an

Ovation Adamus acoustic for most of the concert, alternating with a Les Paul Custom for certain numbers. His backline amplification was provided by two Roland JC120 2 x 12 combos, Richard Brunton played a variety of guitars through a Mesa Boogie combo, a high-frequency Leslie cabinet and an Echoplex unit for additional effects while Julian Littman seemed to spend most of his guitar playing time on a Fender Telecaster fed through another Roland JC120 combo. His mandolin was also electric and was also using the Roland amp, while the accordion and harmonical were miked. Graham Preskett played a miked up grand piano, a Roland string synthesizer and a Polymoog - all fed straight to the PA desk, I did not notice how his fiddle was amplified. lan Lynn's keyboards section consisted of a Hammond C3 organ with Leslie 122 cabinet, a Prophet V synth, a Wurlitzer electric piano and a Minimoog, the last three being fed through an Acoustic 271 stack and a Music Man HD134/10 combo. Bassman Pete Zorn played one of the new Wal Pro-Bass guitars through a Fender Bassman amp and cabinet, and Liam Genocky's drums were Tama with a mixture of Paiste and Zildjian cymbals. All the backline equipment was hired from The Music Bank, Lon-

As I have said, the sound was poor for Richard and Linda Thompson's 45-minute set due mainly to poor mixing. It improved considerably for Gerry Rafferty due to a much tighter band and a sound engineer who obviously knew what he wanted and how to get it. But even then, sound quality was not as good as it should have been considering the fact that all equipment was to all intents and purposes the best available, 100dB(A) seemed to be the maximum comfortable working level of the system before the sound became harsh, but this was quite adequate for the music and the hall - the hard acoustical qualities of which probably accounted for some at least of the poor intelligibility and general lack of definition. But even allowing for these factors, I would have expected betterunder the circumstances.

FREEDMANS 627-631 HIGH RD, 01-539 0288 LEYTONSTONE, LONDON E11.

	KEYBOA	RD DEPT.					
KORG SYNTHESIZERS		STRING SYNTHESIZERS	<u> </u>				
MS 10 MS 20		Solina £ 495.00 Multiman String/piano/brass £ 550.00	DD Washi DD Washi		E 239.00 D	Antoria 12 str EKO Ranger 12 str	
VC 10 Vecoder	, £531.00 C	Sisme£ 380.00	D Wash	bura D25	125.00 D	EKO Ranger 6 str	£ 68.00 D
MS 50 ExpanderSQ 10 Sequencer	. £339.00 C	Pienet T£ 225.00	Fend D Fand		E 232.00 D E 178.00 D	Hokada 12 str	
MS 03 Sig Processor	. £140.00 B	Eurotec£ 255.00	DO Tama	a TK5 1	242.00 D	CLASSICS	
MS 02 Interface	. £102.00 B	Jan Pianotone £ 245.00 Crumar Roadrecer £ 299.00	DD Ovati		E 138.00 D E 218.00 D	B&M Ronda	£44.00 D
P 4 4 note poly		Globetroiter	O O Ovati	ion Elec Matrix	C 00.8PF 3	Hertz	
Promars	. £749.00 D	Sharma 981£ 394.00	OF Maxy	ion Elec Artist		Hokada	£ 70.00 D
Paraphonic 505 poly Vocoder +	£799.00 D	Sharma D770£417.00 Sharma 3200RX£599.00	OF Yarry	eha FG 335	£ 97.00 D	Fender FC 20\	
SVC Rack Vocoder	£466.00 C	RHYTHM UNITS	Yamy	wha FG 340	£ 135.00 D	Hokada	€ 111.00 D
SPC Rack-P/volts synth	£392.00 C	Roland Or Rhythm programable £89.56 Roland CR 68£275.00	OA Fand	der Strat R/N L/T Black	£ 302.00 D	Yairi Concert used	£ 110.00 D
CSQ 100 Digi Sequencer	£380.00 C	Roland CR 78£ 396.04	OB Shair	tsbury LP	£ 165.00 D	COUNTRY GEAR	
SH 2000			OB Yam	naha SG 1000 + case naha SG 2000 + case	£ 375.00 D	Ibanez Artiste Banjo + case Antoria Custom Banjo	£395.00 D
		Newport £ 43.00	OA Yam	naha SF series in stock	P.O.A. D	Epiphone Banjo + case	£159.00 Q
		BASS PEDALS Boogie Bass with sust£ 132.00	Cime OB ACO	or Strat	£ 115.00 D	Antoria DX75 Banjo Lorenzo Banjo	£ 49.00 D
24		9 14m	Guile	d D40		Antoria DX60 Banjo	£ 100.00 D
STOP PRESS ROLAN	D SH 09 I	atest synth with large spec will	T Guild	d F40	6 379.00 D 6 286 00 D	Fiddle Outfit	€ 32.00 C
be in stock by publicat Usual price £299 OUR	ion date.	and a special state of the	Epip	thone PR725	£ 199,00 D	Harmony Flat Back Mangoline	
Usual price £299 OUR	PRICE £2	245 + £5,00 P&P.	Wesh	hburn Dreadnought D15hburn Grand Concert F15	F 63 00 D	Portuguese Flat Back Mandoline .	£ 34.00 C
:		11.0	Wash	hburn Dreadnought D25hburn D60 sw	£ 125.00 D	Harmony Flat Back Mandolina Showbud Padal Steel	£ 29.00 C
	SOUND	ROOM		neurn Dea sw	£ 218.00 D		
GA 60 Book Amp Combo	£ 376 60 F	VS Bassamp Combo	0 F 0 D				
GB 50 R&P Bass Combo	. £ 319.00 F	Studio 50 Combo € 188.00	0 E	1 4 UD 1000 * * *	EFF		
JC 50 Combo	. £ 198.00 F	PRO 100 PA speakerseach £ 174.00 PRO 150 PA speakerseach £ 204.00		LAND BOSS PEDALS	£ 33.91 A	Wah Weh	£20.84 A
JC BD Combo	£ 369.00 F	Performer Head 150W Mostet£ 276.00	DE Tou	chwsh	£41.80 A	Tremolo	£ 19.10 A
JC 200 Amp Head	. £ 465.00 F	Performer 212 combo 150W£ 392.00 Performer 410 combo 150W£ 458.00	OF Over	phic Eq 6 band	£ 38.00 A	Supa Tonebender	£23.63 A
MARSHALL		Super Sixty combo 60W£ 308.00	gir Com	np Sustain	£38.90 A	Super Weh Fuzz	£27.50 A
M/Vol Head Valve 100 Watts	£ 241.00 E	Ltd ed Power Baby 150W£ 477.00 Bass Machine head 250W£ 303.00	OE Choi	rus mono	£55.00 A	Octidivider	£32.20 A
Comp Bass Combo 100 Watt Country Combo 100 Watts	£ 375.00 F	Bass Machine combo£ 467.00	ŭr Spec	rus Stereo mains	£33.00 A	Gigster Rhythm Unit	
4x12 Cab si or st 100 Watts	, £189.00 F	12 into 2 mixer£ 381.00	nn Grep	phic 10 band mains	£82.00 A	Eurotec Micro Phaser	£29.40 A
4x12 Cab si or st 120 Watts	. £198.00 F	PRO SOUND GEAR HH 16 in 2 mixer XLR£ 680.00	K1014	4 Keyboard Mixer	£50.00 A	Eurotec Reverb Unit Mains Korg Guitar Synth	
CARLSBRO		MM 12 in 2 mixer£ 290.00	OE TUB	30 Elec Tuner	£45.00 A	Schaller Volume Pedal	£17.55 A
Stingray S/Lead Combo	£ 252,00 F £ 158,00 F	MM Submix£ 128.00 V150L Mos Fet amp£ 279.00		20 Elec Tuner 5oct		DE MARZIO PICKUPS, DE ARM	£26.50 A
Martin PA Amp	. £188.00 E	V200 Mos Fet 100W x 2 chan £ 344.00	OF COF	LORSOUND		BILL LAWRENCE, BARCUS BERRY,	BIG DISCOUNTS
Stiripray Bass Combo	., £245.00 F	V500 Mos Fet 250W x 2 chan £ 482.00 V800 Mos Fet 400W x 2 chan £ 607.00		Mah		ECHO UNITS	
K 100R Lead Combo	£199.00 E	Fi case for 2x S500D£ 247,00	OF Wan	Swell	£22.85 A	Roland RE301	£449.00 C
K 50R Lead ComboK 50B Combo	. £173.00 E	Flact Xquer 7/3 way active £ 188 0	imut an	ibo Pedals		Evans EP50	£125.00 B
PA 100 Reverb Amp	£175.00 E	Roland 201 space Echo£ 395.00	OD Toni	ebender	£20.84 A	Evans EP100	£175.00 H
Redmere Soloist Combo + Pedal .		Roland 301 space Echo£ 449.00 HH Digital Effects Module£ 172.00				Trong Copy Cot I I I I I I I I I I I I I I I I I I I	257.500
8 120 Bess Amp Reverb Lead Amp 100 Watts	., £175.00 E £193.00 E	FOLAND RACK SIP 300 Guitar pre amp £ 144.00			DRUM	CELLAR	
FENDER		SIP 301 Bass ore amp£ 159.00	0-C Max	win Funky Kit inc Stands	£ 228.00 E	8 inch	
Pro Reverb		SPA 120 Power amp£173.00 SBF 325 Stereo Flanger£222,00		win Stage Kit 5 drums + Stands win 8"+10"Conc Toms + Stand	£ 285.00 E £ 44.50 R	10 inch	£ 31.00 A
HH		SDD 320 Dimension D,£ 227.0	OC Mex	twip 12"+13" Conc Tom + Stand	£ 64.00 B	14 inch proportion proportion and	£ 44.00 A
Micro Combo 30 Watts	., £191.00 F	SVC 350 Vocoder	OC Mexi OC Tam	win 14"+16" Conc Toms + Stand	£ 94.00 B £342.00 E	Rototom Bars	£ 54.00 A
VS Musician Head	£207.00 D	Multi Flack € 150.00	DF Pear	1 Inov 7 dr + Iron	£ 520.00 E	Adaptors	£ 6.50 A
VS Bass Amp Heed	£ 174.00 D		OD Roge	ers Landoner 5 dr	£ 590,00 E	PAISTE CYMBALS 20% OFF	
V\$ Musician Combo			Lud: Pren	wig Rock 5 dr nier 5 dr SN 24" 18" 14" 13"	£ 546.00 E £ 430 DO E	WFIP 2YN TOSCO ZILDJIAN King Congas tibradass	LOW PRICE
SHURE	MICHO	PHONES MM (PACE)	Ртеп	mier 5 dr SN 22" 15" 14" 13" mier 6 dr SN 24" 18" 16" 14" 13"	€ 469.00 E	Chinese Gang 20 inch	£170.00 F
SM 58 Pro Lo imo	£ 70.00 A	MM95 Lo imp Card £64.60	UA 21XK	O, Beautys etc from	£ 554.00 E £ 102.00 F	Synare III	£129.00 B
SM 57 Pro Lo imp SB5D Unisphere 1 Dual imp	£ 55.90 A £ 50.76 A	MM91 Low imp Card £44.50	OA 100	NEW & S/HAND STANDS BLONDE CASES ALL SIZES		Synare Sensor	£95.00 A
5450 Unidyne 3 Dual imp	£ 45.50 A	MM5 Low imp Omni g38,00	OA LOT	TS OF LATIN PERCUSSION		JHS Synth Drum + Stand Musicaid 2 drum SDS Combo	£346.00 C
PE 588 Unis + case Hi imp 588 SA Unis B Hi imp	£ 34.00 A	ST 220 Stand	. RO1	TOTOMS	£19.06.4	Musicaid 4 drum SOS 3	£614.00 C
515 SA Unidyne Hi	. £21.00 Å	ST 201/e1 Stand	0 F				
D12 Lo imp	£ 84.50 A	ST 210/2 Fold + Boom £32.65	a F	ВА	RGAIN	BASEMENT	į
D1200E Lo imp	£ 57.50 A	SCH 211 Boom Arm		Bass Guitar Avon	£ 52.00 0	Roland AP2 Phaser	£ 35.00 A
D202E Lo imp	€ 85.00 A	Other types evailable in stock from £ 14.00	OA S/H	I Ibanez Tele Bass	£ 48.00 ()	Top Gear Funky Fater	£ 15.00 A
M 260 N(C)S Lo imp	£ 68.50 A	AKG & Shure windshields, goose necks etc.	S/H	Gibson Marauder	£ 210,00 D	Jen Motor Phaser	£ 42.00 A
M 400 N(C) Lo imp	. £ 61.00 A	Beldon cable XLR's jacks line	Pess	vay PA 2+12 +Peizos pair	£198.00 F	Yamaha Cols + Mix 150W	£ 485.00 F
Cables extra for Beyer	£7.60 A	Shure Lo to Hi reversable transforms £15.50	OA eru	m Aggressor Cols pair	£ 208.00 F	S/H Roost 100W 6 Ch Mix Amp	£ 139.00 F
		Gaffa tape per roll£3.75	5 A Kusi	tom 35 Watt Bass combo	£149.00 D	Roland SH7	£ 650.00 D
		GALLERY	Blac	m Copycat Echo Unit		Leslia 760 Tone cab	£395.00 F
		Avon Maraudar copy	OD Hola	and Soss Flanger mains	£ 69.00 A	Leslie 145 Tone cab	€ 275.00 F
Westbury Track 2 Bass	. £165.00 O	Cimar SG copy £98.00	OD Role	and Jet Phaser	£ 45.00 A	Roland \$H1000	£ 226,00 B
Shaftsbury Rick copy	£199.00 D	Antoria Strat + FREE CASE £220.00	OD Roll	and Clean Sustain	£ 30.00 A	Keynote Consort	£ 625.00 F
Maya fretless bass	£173.00 D	CMI L/H Strat £ 127.00	0 D		E 8	0 E	
Krammér DMZ 5000 bass + case	£449.00 m	Craftsman Stret + case	OD BA	ALL OPPER OUT		_	
Krammer 650B Bass + case	£465.00 D	Weshburn Felcon £ 275.00	0 D 1917	AIL ORDER (UK N			
Yamaha BB800 Bass + case Yamaha BB1200 Bass + case	£256.00 D	Shergold Masquarader £ 190.00	മാദവ	ld A=£2.00 B=£3.50	0 C=£!	5.00 D=£10.00 E=£	15.00
banez ST 55	£ 190 00 B	Antoria LP 3p/u £182.00 Antoria LP £170.00	02 F=	= call for a quote.			
Ibanez Artist S/ Acc + case	£293.00 D	Westpury Dituxe	OR DL	none credit card nur	nber f	or immediate deens	atch
		Martiner DMZ 1000 hat fin 1 case £486.0	OD '''	neques etc. payable			CGII.
HIRE	Acc	8ARCLAYCARD	<u> </u>	redues err. hayanie	יט רופ	EUMANS LIU.	
		1004		REEDMANS PROM		LL II EMS ARE:	
PURCHASE		VISA		stock at press date			
			Inc	clusive of VAT Ful	ly quai	ranteed.	
EXPORT A	ND P	ART EXCHANGE		pen:- 9.30am - 6.00			
	,	THE EXCHANGE	OF	heri - aranatu - p.nn	րու Ե	ioseo i nursaays.	





RECORDING EQUIPMENT + P.A. SALES SERVICE + HIRE DEPTS. — BOTH FULLY EQUIPPED AND COMPREHENSIVE MAINTENANCE INSTALLA-TION DEPT. OR SALES INSTALLATION AFTER SALES BACK-UP CONSULTANCY ADVICE FAST TURNAROUND

Revox and Teac Service Centre, Hire Dept. — for all requirements

Call out maintenance by arrangement

TAPE TO TAPE DUPLICATION
REEL TO REEL - CASSETTE - VIDEO
PRO. TAPE COPYING
SAME DAY SERVICE

TOP LEVEL THROUGHOUT

TASCAM — BOSE — REVOX — TEAC — STUDER — NEUMANN — P.S.E. LTD. — MXR — RSD — EMT — DBX — SOUNDCRAFT — NEAL — MCI — MM— ALICE — EVENTIDE — ALLEN AND HEATH — BRENELL — YAMAHA — SESCOM — FURMAN — REBIS — AMPEX TAPE + ACCESSORIES, ETC. TANNOY — JBL — LOCKWOOD — AURATONE — BEYER — AKG — SHURE — QUAD — ROLAND — ORBAN — KLARK TECHNIC

Music Lab. A.P.R.S. Exhibition - Stand 120

Music Laboratory, 72-74 Eversholt St., London N.W.1 Tel. 01-388-5392

DRUM DEPT NOW OPEN!

ROGERS DRUMS NOW IN STOCK

Fantastic savings on all kits and hardware. Londoner V outfit, list price £950 our price £720!
Complete with all Memrilok hardware, stands, supreme B.D. pedal, H.H. pedal.

CITY ELECTRONICS
65 Market Street
Torquay

THE MARK III SERIES

Finally... Amps as contemporary as your music!

The Peavey Mark III
Series is, without question, the most advanced and most versatile line of instrument amplification systems on today's market. Until you've experienced playing through a system with the performance and llexibility of these new amplifiers, you can't amplifiers, you can't appreciate all the possibilities of playing an electric instrument.

THE MUSICIAN

- 200 Watts RMS @ 1% THD, 4 Ohms

- THD, 4 Ohms

 Two channels with pre and post on each
 Individual channel equalization

 Six-band graphic equalizer with In/out switches on each channel

 AUTOMIX function selects either or both
- selects either or both channels with remote footswitch
- Channel LED indicators
 Phase with color and rate
- controls
- Master reverb
 Input preamp, send and return
- Preamp and line outputs
 Power amp input

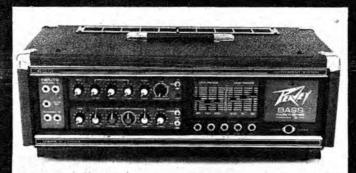
THE BASS

- 200 Watts RMS @ 1% THD, 4 Ohms
 Two channels with pre and post gain on each channel
 Individual channel equalization
 Six hand graphic
- Six-band graphic equalizer with in/out switches on each channel

 AUTOMIX function
- selects either or both channels with remote footswitch Bi-amping capability with variable crossover
- points
 "DDT" compression
 circuit with LED
 indicator and in/out
- switchPARAMID and mid shift equalization

 Channel LED indicators
- · Preamp and line outputs
- Power amp input









THE STANDARD

- 130 Watts RMS @ 1% THD, 4 Ohms
 Two channels with pre and post gain on each
- Low, mid and high equalization
- equalization
 PARAMID and mid shift
- controls

 AUTOMIX function selects either or both channels with remote footswitch
- LED channel indicators
 Master reverb
 Preamp and line outputs
 Power amp input

THE CENTURION

- 130 Watts RMS @ 1%
 THD, 4 Ohms
 Two channels with pre
- and post gain on each channel
 Individual channel equalization
- equalization

 Parametric equalization

 AUTOMIX function
 selects either or both
 channels with remote
 footswitch

 LED channel indicators

 "DDT" compression
 circuit with LED
 indicator and in/out
 switch

- Preamp and line outputs
 Power amp input

These features give you an indication of the Mark III Series' versatility and performance, but specs and features mean little unless you can plug-in and experience for yourself. See your Peavey dealer for a demonstration, he'll show you why unbelievable values are still a reality with Peavey. Peavey.



PEAVEY ELECTRONICS 711 A Street Meridian, MS 39301

"The Company That's Doing It."



It's Finger-Pickin' Good

Musicians Only is sponsoring the best country-picking, be exhibiting the goodies and answering the questions. blues-bashing, finger-plucking, chord-bending, bottlenecking show in town. Guitar '80.

lot happening. Traditional luthiers, big-name electronic wizards and new-comers to the fretted string scene will

And prominent guitarists'll be on hand to demonstrate their skills and the virtues of their various instruments. For surrogate Segovias or angry axemen there's a whole So whether you're on your way to intergalactic stardom or still posing with an old tennis racket, boogle along to:

> The Kensington Town Hall* 4-6 June 1980 10a.m.-8p.m.**

> > Daily admission £1



*Hornton Street, opposite Kensington High Street Underground **Closing 6pm on last day









During our history as a guitar maker, the CF Martin Company has developed designs that have evolved into our most popular musical instruments. We now offer to you the results of our developments through the CF MARTIN CUSTOM SHOP. By selecting any of our tested options and appointments, you can design your own personal Martin Guitar.

The custom guitar shown is just such an instrument. We have combined our craftsmanship with the owner's preferences for OM body design, 45 top inlay, CF Martin headstock inlay, scalloped braces, M-38 tinted top, snowflake inlay, V-shaped neck, and matching headstock, neck and body binding.



If you're interested in a Custom Martin. Guitar see an authorized Martin Dealer or call us in Nazareth at 215-759-2837. Ask for THE CUSTOM SHOP. We'll be happy to discuss your design, other options, and quote a delivery date.

ISTOM CF MARTIN & COMPANY



MARTIN & SIGMA GUITARS ARE THE OFFICIAL GUITARS OF OPRYLAND U.S.A.



Sometimes it's the little things that count.

In today's electronic music, some devices can change your sounds radically. You can get a guitar to sound like an organ; or a keyboard to sound like steel drums. But what happens when you need your guitar to sound like a guitar? Did you ever feel that your sound was lifeless and dull? This

Did you ever feel that your sound was lifeless and dull? This is because your pickup is loaded by the amplifiers input. Loading causes a loss of highs and lows. If you play an acoustic instrument with a contact-type pickup you are probably experiencing this. If you are running long wires on stage, or are using several effects devices, consider the following alternatives.

The new MXR Micro Amp is a bi-fet operational amplifier with a high input impedance, which eliminates the effects of loading on an instruments' pickups. It has a low output impedance so it can drive a wide range of amplifiers, and a gain control so you can adjust the gain from unity (output level equal to input level) to 26 dB, or twenty times the input level.

If you play an electric piano or electric guitar with a low output level, now you can boost the output without changing the characteristic sound of your instrument.

The MXR Micro Amp was designed to preserve the full bandwidth produced by any instrument and pickup, (freq. resp. 12Hz-25kHZ) without adding any coloration of its own. Using the Micro Amp, you control how your sound is modified, if at all. Your sounds' tonal qualities are not predetermined by the effects of pickup loading. If you are currently using another preamp in conjunction with your instrument's pickups, the MXR Micro Amp will perform better with more transparency and less noise.

The MXR Noise Gate Line Driver was developed to solve the problems of background noise and hum that occur in live performance. This unit is particularly useful when using

many effects devices. In the front of a signal chain, the Noise Gate Line Driver, provides a buffer to preserve the proper line level for successive devices and amplification. At the end of the chain, it is used to "gate-out" unwanted noise leaving only clean signal. The threshold level, is adjustable allowing the unit to discriminate between program material and unwanted noise. In addition, the Noise Gate Line Driver provides a convenient high/low impedance interface for direct signal taps (i.e., live recording/PA).

Both the Noise Gate Line Driver and the new Micro Amp are ruggedly constructed, designed for long battery life, and backed by MXR's long term commitment and experience in providing the finest electronic devices for the music industry.

So, in the light of the many different modification devices available today; if musical accuracy is important to you, see your MXR dealer. Sometimes it's the little things that count.

Rose-Morris & Co., Ltd. 32-34 Gordon House Road, London NW15 1NE. Tel: 01-267 5151





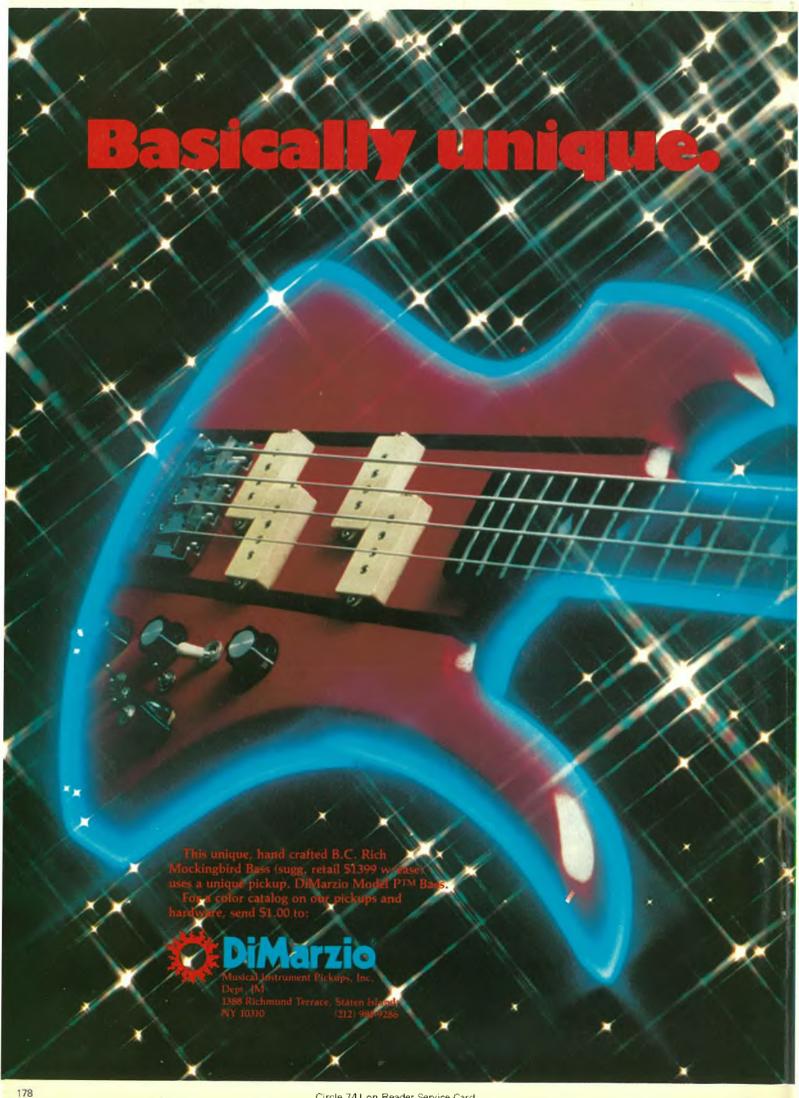


Hear the quality see the price

The Maxwin Rock 805, £317 the kit.

Pearl Music Ltd., Unit 5, 29-35 North Acton Road, London NW10. Tel: (01) 961 6644







THE PRODIGY

The Moog Prodigy is, in our opinion, the best value performance oriented synthesiser currently available. Superbly designed and engineered, the Prodigy features all the requirements of a lead line synthesiser regardless of cost, come and try one at our store, we are always in stock and our price is the lowest in the country.

	R.R.P.	Argent's	Roland RE201 echo/reverb	506.00	370.00
	£	£	Roland CE2 mono chorus	63.00	47.00
Roland Jupiter 4 programmable polyphonic	1,810.00	1,325.00	Roland RE301 chorus/echo/sos/reverb	633.00	465.00
Roland Promars Programmable Monophonic	1.057.00	775.00	Roland DM1 delay machine	155.00	99.00
Roland Vocoder plus choirs and strings	1,315.00	965.00	Roland cube 40 compact combo 40W	240	176.00
Roland RS505 paraphonic synth/strings/bass	1,229.00	899.00	Roland cube 60 compact combo 60W	288.00	212.00
Roland RS202 strings/brass	740.00	395.00	Roland cube 60B bass combo 60W	303.00	222.00
Roland MP600 piano with graphic equalizer	740.00	545.00			
Roland RS09 organ strings	531.00	389.00	ROLAND RACK STUDIO EFFECTS		
Roland \$A09 organ/piano	499.00	365.00	Roland SPC 355 pitch/voltage synthesizer	491.00	359.00
Roland SH2 two oscillators and sub-osc	559.00	409.00	Roland SVC 350 vocoder	584.00	427.00
Roland SH09 one oscillator and sub-osc	299.00	219.00	Roland SDD dimension D	283.00	207.00
Roland VK1 combo organ 9 drawbars and			Roland SPA 240 2x120w stereo power amp	351.00	257.00
Chorus/VIB	850.00	622.00	Roland SPA 120 2x60w stereo power amp	217.00	159.00
Roland CR78 programmable computythym	505.00	369.00	Roland SBF 325 stereo flanger	279.00	204.00
Roland CR68 compurythym	340.00	249.00	Roland S1P 307 bass pre-amp	199.00	146.00
Roland DR55 Doctor Rythym programmable	89.00	66.00	Roland S1P 300 guitar pre-amp	180.00	132.00
Roland CSQ100 digital sequencer	478.00	349.00	Roland SRE 555 chorus echo	622.00	455.00
Roland MC8 micro-composer	4,816.00	2,875.00	Roland SEQ 331 31 band equalizer	255.00	194.00
Roland KM60 6into2 stereo mixer	224.00	165.00	Roland SEQ 315 2x15 band equalizer	300.00	219.00
Roland 100m studio system 5 module system	1,323.00	975.00	Roland SMX 880 8 line mixer	199.00	146.00
Roland CE1 stereo chorus	154.00	113.00	Roland SPH 323 stereo phaser	249.00	182.00

Allow us also to quote you on the excellent range of "jazz chorus" amplifiers and any other equipment you may require. Our service department exists for the benefit of all our customers and can maintain and modify your equipment as and when you may require.

Call at our store for a friendly and professional demonstration of any of the products listed.

20 Denmark Street, London WC2H 8NA Telephone: 01-240 0084/5





SD-400 SIGNAL DELAY

The KORG new Signal Delay model SD-400 and SD-200 are coming your way soon. And now they're bringing you a natural sounding echo effect to electric guitar and keyboard, with signal delay.

The SD-400/200 features BBD (bucket brigade) circuitry basically, these delay units give versatile echo effects. Undistorted noise-free sound quality is maintained by compander noise rejection and wide dynamic range amp design with input level LED peak indication. The SD-400 offers spectacular "swell" and "double track" effects. So while you're thinking about what you want, see and try it at your local dealers.

SD-200 SIGNAL DELAY

For details, please ask: CANADA: ERIKSON MUSIC REG'D 7750 Route Transcanadienn St-Laurent, Qué, H4T 1A5

FRANCE: GAMME 17, Rue Laperouse, 93500 Pantin. GERMANY: GOTTHOLD MEYER KG, 3550 Marburg 1.
HOLLAND: MILESTONE B.V. Postbus 207, 3330 AE Zwijndrecht.
ITALY: CGD MESSAGGERIE MUSICAL! SPA via M.F. Guintiliano,

SWITZERLAND: MUSIK-MEYER AG. Musikinstrumente en gros. Mühlehaldenstrasse 16 8953 Dietikon. U.K. and EIRE: ROSE MORRIS & CO., LTD. 32, Gordon House Road,

U.S.A.; UNICORD 89 Frost Street, Westbury, New York, N.Y. 11590.

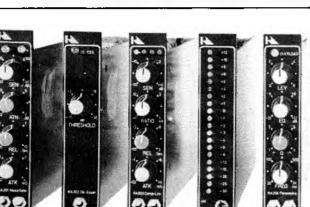
Outstanding S/N ratio, prolessional specs, and remote voltage control capability.



Echa with built-in reverb for

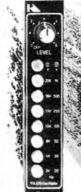
D-400 & SD-200 varied effects. Add a Natural Sounding Echo Effect

is Audio,Kinver Street,Stourbridge, West Midlands 5AB,England.Telephone:Brierley Hill (0384)71865













Send for details of the RA200 Series Noise Gate De-Esser, Compressor-Limiter, LED Meter, Parametric Equaliser, Timer, RIAA Disc Preamp, Oscillator, ADT/Delay, Modulator and Mixer



FD&H MUSIC

138-140 Charing Cross Road, London WC2H 0LD

Felephone: 01-836 4766

■ MUSIC & MUSICAL INSTRUMENTS

LONDON SHERGOLD AGENTS*

Shergold Custom Masquerader£209	Gibson LP custom£455
Shergold Meteor Deluxe£193	Gibson LP deluxe£399
Shergold Masquerader 12 string£231	Gibson E335TD pro£529
Shergold Marathon Bass£231	Gibson LP55£382
Shergold 8 string bass£295	Gibson The SG£299
Shergold double necks from£462	Gibson The Paul£299

+ Fender strats & Tele precision bass jazz bass musicmaster mustaro most colours. As well as a large selection of Kawai - Ibanez Guild – Westbury – Mugen – Yamaha – Rickenbacker – Mighty Mite * Mighty Mite - Dimarzio - Gibson - Accessories *

BRASS & WOODWIND

The fabulous range of Yanagasawa saxophones now in stock second hand flutes from £45 + ceramic flutes in G (with tutor book) £19

VERY SPECIAL OFFER LIMITED SUPPLY ELKHART ALL WOOD CLARINET OUTFITS * £150 *

> Elkhart Ebonite/Wood outfits * £130 *

Dozens of attractive deals in Olds - Selmer - Armstrong Corton - Benge - Conn - Yamaha Blessing – Getzen – B&H

WHEN ANSWERING TO THIS AD PLEASE OUOTE DEPT IM/FD&H

Complete range brass & woodwind accessories in our showroom

Access - Barclaycard - Credit facilities - Cheques - Cash EVEN?



124 SHAFTESBURY AVENUE **LONDON W1V 7DJ** Phone: 01-437 2458

VAT Regn. No. 222 5295 82

GIBSONS+GIBSONS+GIBSONS+GIBSONS

Gibson LP Custom + case£455
Gibson LP Deluxe + case£399
Gibson LP Standard + case£425
Gibson LP Firebrand + case£305
Gibson the Paul + case£299
Gibson the SG + case£299
Gibson RD artist + case£528
Gibson ES 335 TD + case£518
Gibson ES 335 Pro + case£530
Gibson ES 345 TD stereo + case£610
Gibson RD bass + case£460
ACOUSTICS
Gibson J200 + case£535
Gibson J45 + case£375
Gibson Hummingbird + case£460
The second secon

ACOUSTIC ELECTRICS
Gibson 175cc + case£568
Gibson 175D + case
Gibson Birdland + case£1027
Gibson Super 400 + caseP.O.A.
Gibson Johnny Smith + caseP.O.A.
Gibson L5C + caseP.O.A.
Gibson Howard RobertsP.O.A.
+ all Gibson Accessories

ALL **GIBSONS** LISTED **ARE** IN STOCK NOW!

★ Fender + Ovation + Ibanez + Mugen Rickenbacker + Yamaha + Kawai + Guild Westbury + Wal + Aria etc., etc., etc.

WE SPECIALISE IN EXPORTS!!

+ AMPS BY H/H + Marshall + Zoom Yamaha + Park + Carlsbro + Music Man + Peavey

+ DRUMS Tama + Hamma + Maxwin Premier + Sonor + Rogers + Gretsch etc., etc.

^{*} Barclay Card + Access + Credit Facilities + we buy Good Gear *

ENCOUNTER THE SOUND OF





Elka organs are among the finest portable organs available on the market today because of many years experience in catering for the professional musician. For further information on these organs please contact:

FLKA-CIRLA

3/5 FOURTH AVENUE, BLUEBRIDGE INDUSTRIAL ESTATE, HALSTEAD, ESSEX' PHONE 07874 5325

Circle 778 on Reader Service Card

CELESTION SPEAKERS NOW OPTIONAL FACTORY EQUIPMENT ON THESE RANDALL AMPLIFIERS.







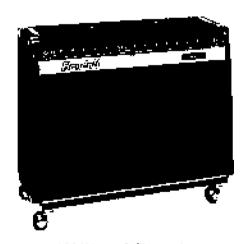
120 Watts, 2 Channels Switchable, Reverb.

RG-60-112 C



60 Watts, 1-12" Celestion Speaker, Reverb.

RG-120-212 C



120 Watts, 2 Channels, 2-12" Celestion Speakers, Reverb.

Write for free short form catalog or send \$1.00 for complete loose leaf catalog with detailed specifications.

Randall

RANDALL NSTRUVENTS, N.C.

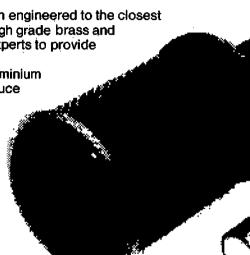
1132 DURYEA, IRVINE, CALIF. 92714 P.O. BOX 10936, SANTA ANA, CALIF. 92711

Calrec design and manufacture microphones that provide the valuable 'ears' for your professional recordings.

We at Calrec have invested fifteen years in the research, development and perfection of the condenser principle.

Calrec microphones are precision engineered to the closest tolerances. Manufactured from only high grade brass and stainless steel. Hand assembled by experts to provide strength and reliability.

Calrec capsules have a light, aluminium coated, polyester diaphragm-to produce a smooth virtually flat frequency response, together with an excellent transient response.



Calrec microphones. Comprising condenser studio/broadcast range and the new Soundfield 4 dimensional microphone. Offering recording sensitivity

with immunity to heat, damp and mechanical shock.

We make the most of our microphones so you can too...

The Who



Calrec Audio Limited, Hangingroyd Lane, Hebden Bridge. West Yorkshire, HX7 7DD. England. Tel (0422) 842159/842119. Telex 51311 Answer Back Relays G Attention Calrec.

Listen to the guys who make Zildjian talk.



Is there a serious drummer who doesn't play Zildjian? We doubt it. Nothing responds like Zildjian. Nothing comes as close to the sound you're after.

And because no one else listens as closely to the beat of the music world, no one brings out new

ideas as often as Zildjian. Listen to the guys who make Zildjian talk

They say it all.

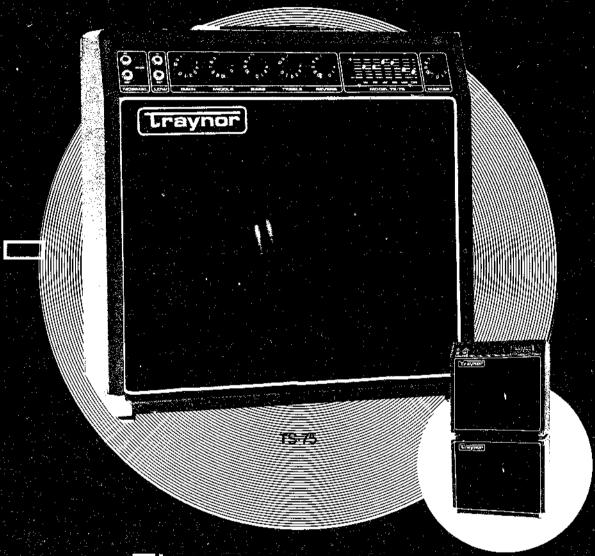


Cymbals and Gongs by

Boosey & Hawkes (Musical Instruments) Ltd., Deansbrook Road, Edgware, Middlesex HA8 9BB ENGLAND Tel: 01-952 7711 Telex: 923 300

Premier Drum Co. Ltd., Blaby Road, Wigston, Leicester LES 2DF ENGLAND Tel: 0533 773121 Rose-Morris & Co. Ltd., 32-34 Gordon House Road, London NW5 1NE ENGLAND Tel: 01-262 5151

Thin Lizzy



There is a rend among today's professional guitarists to look

The TS-75 answers that need and provides a wide range of professional features like footswitch-ac Line Output, dual l speaker with an 80 ounce magnet, 3-inch voicecoil and cast frame.

But the most prof compare the 1 and v

errormance AL

IF YOU

MANCE

YOU SHOULD FEATURE TRAYNOR

YORKVILLE SOUND, 80 MIDWEST RD., SCARBOROUGH, ONTARIO. CANADA M1F 49.2 OR CALL (416) 751-8481

U.K. Agent: Mr. Rex Bray, 20 Poplar Avenue, Heacham, Mirfalk England

Circle 851 on Reader Service Card



JIIIAC R

INSCOTLAND

Gain Acoustics are proud to announce that they have just been appointed sole TEAC dealers for the north of Scotland

Full 4 track demonstration studio opening soon 11 WHORTERBANK DUNDEE (O382) 611476





wave speaker enclosures :

- Revolutionary designs developed to give super-smooth wide range response.
 Constructed from high density materials for years of trouble free use, and superior acoustic properties.
 Treated with chlorinated rubber to withstand atmospheric changes.
 Covered in heavy duty vyside or a new tough hard wearing black textured paint to resist the roughest of treatment.
 Sinished with the control of t

- roughest of treatment.

 5. Finished with flight adging to protect your investment.

 6. Loaded with top quality driver units for performance and power.

 7. Tuned, to deliver unsurpassed dispersion characteristics for maximum sound penetration.

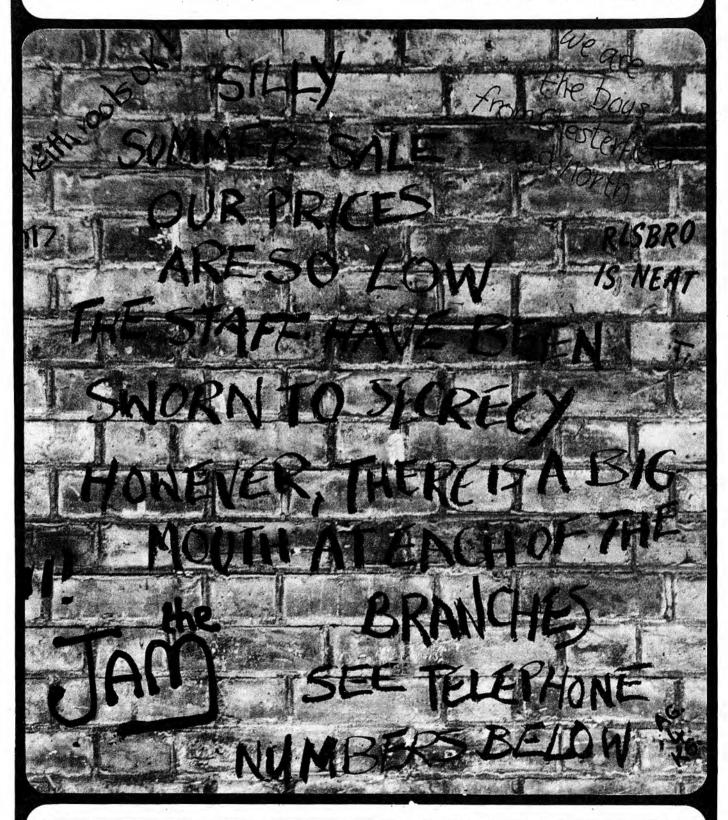
 8. Fitted with deschable lide or fixed grills to protect your WAVE gear in transit.

 9. Litted with great difficulty by our weak, under-neurished, under-paid apprentices to our upstairs showsoom for inspection.

 10. All WAVE gear is put through rispoous tests before leaving the factory to ensure the ultimata-in performance, reliability and quality.
- 2 S /
- 1. WAVE "TOP" 2 x 12" 160 WATT HIGH RANGE.
- 2. WAVE "FLOATING CUBE" 15" 250 WATT MID RANGE.
- 3. WAVE "SIDE PORT" 15" 250 WATT BASS RANGE.
- 4. WAVE "DEEP THROAT" 15" 250 WATT ULTRA BASS RANGE
- 5. WAVE "SIDE FILLS" 180 WATT FULL RANGE MONITOR.
- 6. WAVE "CLIP TOGETHER" 12" 80 WATT WEDGE MONITOR.
- 7. ALLEN & HEATH SR20 20 CHANNEL DESK.
- 8. ALLEN & HEATH 16 CHANNEL DESK.
- 9. ALLEN & HEATH 12 CHANNEL DESK.
- 10. A.K.G. MICROPHONES.

Send for WAVE Newsletter and free £50 voucher

CARLSBRO BOUND CENTRES LTD



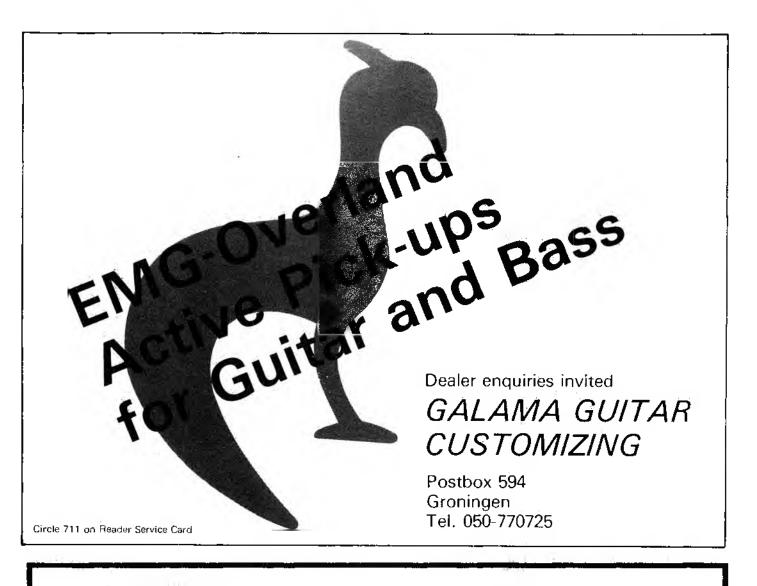
182°184 Chesterfield Road North
MANSFIELD
Telephone 0623 26199 26976

39 Radford Road, Hyson Green NOTTINGHAM Telephone 704820 13 Berkley Precinct
SHEFFIELD
Telephone 0742 663862

Registered in England No. 1084986

VAT Registration No. 116 2430 11

Directors S H Mercer S Mercer K Woodcock



SQIN studios realise there's no place in a new studio for second best-

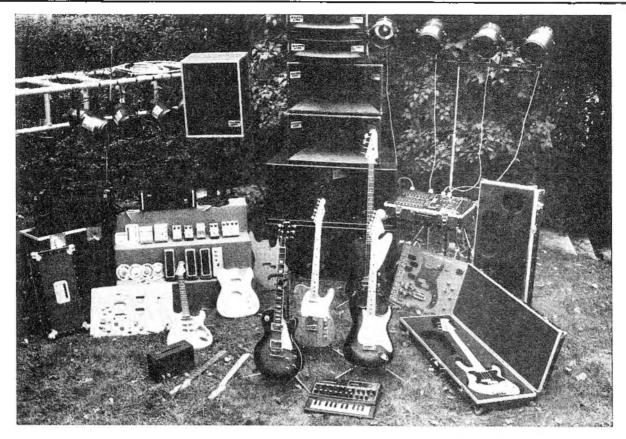


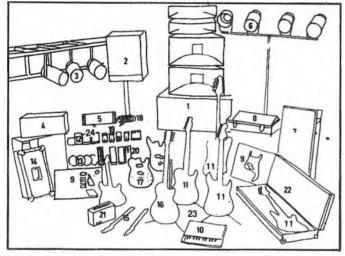
that's why they go

With all our best wishes for your new venture

MCI (PROFESSIONAL STUDIO EQUIPMENT) LTD.

MCI House, 54-56 Stanhope Street, London NW1 3EX, Tel: 01-388 7867. Tx: 261116.





Mega pamhögtalare för dej som behöver lite tyngre utrustning (3-väg system) bas mellan diskant från 700 watt användningsområden in och utomhus ljudanläggning samt konsertbruk när högre effekt är nödvändigt linns även många andra typer som medhörningar, diskotekhögtalare m.m.

Sound Side stage pa högtalare innehåller 1 st Electrovoice 15+4 st Piezo diskant byggd av lameliträ med aluminiumlist lätt att transportera och tar liten plats på scen p.g.a. sin storlek användningsområden inomhus sånganläggning och diskotek 3,300:-

Ljusanläggningar med 300 watt eller 1000 watts lampor 8, och flera typer av ställningar från enkla stativ till tryckluft

manövrerade ljuston komplett med flightcase och mixer med massor av förinställda effekter kan också skötas manuelit.

7. Rainbow Flightcases ett måste för dej som turnerar och 14, är rädd om din utrustning finnes för alla instrument till-

22, verkat av plastlaminerad plywood kantlist och metallbeslag samt stötabsorberande skumgummifyllning inuti.

Sound Side stereo slutsteg som ger 350 watt sinus per kanal vid 4 ohm belastning mycket robust konstruktion lämplig för turnébruk 6.400:

Mighty Mite gitarrdelar stort sortiment som omfattar allt 15, från minsta skruv stall mikrofoner plectrumskydd kropp

hals till hela gitarrer.

Wasp synthesizer lättvikt batteridriven 2 occilatorer med inbyggd högtalare massor med ljudvariationer kan även anslutas till förstärkare. 2.500:-

16. Camel Les Paul limmad hals humbucking mikrofoner 2 st.

1.995:

Camel stratocaster av Fender type 1.995: --. Fresher Telecaster av Fender type 1,435:-Fresher Thunderbird bas av Gibson type med 1 mikrofon 2.485: Fresher bas av Fender type med inbyggd förförstärkare

Populära modeller av hög kvalitet finnes i olika utförande. Handtag lås hornbeslag gångjärn hjul samma som an-vändes till Rainbow flightcases finnes även i lösa delar.

Straplock system ett sinnrikt snabblås för fastsättning av axelband till gitarr eller bas som gör att axelbandet inte åker av och man tappar instrumentet lättmonterad.

Heavy Duty gummikabel med kraftiga teleproppar av mässing finnes rak eller spiral i 7 eller 8 mm tjocklek.

Guyatone effektpedaler Rolly Box phase shifter 355: —.
Driving Box compressor 300: —. Cross Over Box auto wah 290:—. Equalizer Box graphic equalizer 435:—. Zoom Box distortion 295:—. Moving Box flanger 620:—.
Sound Side effektpedaler Swell (volympedal) 140:—.
Wah Wah 250:—. Wah Swell 295:—. Fuss (distortion)

265: -. Wah Fuss 330: -

Batteriförstärkare att användas i bussen, bakom scen, som stämförstärkare eller hemma för nybörjare 395:-

23 Hamilton gitarrstativ för både acustik som el, instrument lätt hopfällbar ett säkert sätt att förvara instrumenten på scen eller hemma betydligt stabilare än andra typer av stativ 195:-

24 Grover mekanik för gitarr och bas av högsta kvalitet från USA finnes i ofika modeller och utföranden speciellt

lämplig för Gibson typ gitarrer. Det här är bara en liten del av vad som finns i vår butik vi har del mesta för musiker och orkestrar och är specialiserade när det gäller gitarrer basar förstärkare trummor klaviaturinstrument ljud och ljusanläggningar så om ni har några frågor eller önskemål ring gärna 08/42 15 20 vi leve-

rerar över hela landet. Ovanstående märkta med * har vi också i våran uthyrningsavdelning. Tel. 08/43 60 93 tillsammans med massor av instrument förstärkare ljud ljus och discotekanlägg-

ningar.



GÖTGATAN 32 · STOCKHOLM · TEL. 42 1520

Annons 26

John Goodsall & Washburn "Amazing guitar... The Falcon gives me the sound I want." John Goodsall, the much-respected lead guitarist with stylish 'Brand X', has been playing a Washburn Falcon for over a year and, in his own words, "loves it". For the group's distinctive brand of jazz rock and John's own striking approach to guitar Sound, he's decided that there's really nothing to touch the Falcon. Like so many top musicians, John has discovered that for attack, control and overall performance his Washburn Falcon is better than other great names in guitars. Soar on the Wings of washburn An Age Old Tradition Takes Flight Brodr. Jorgensen (UK) Ltd., Great West Trading Estate, 983 Great West Road, Bren ford, Middx. TW8 9DN. Tel: 01-568 4578. Please send me details of Washburn guitars. I enclose 30p to cover Postage and Packaging. (Mail coupon to above address) . Address .

Cirola 755 on Roader Service Card

SESSIONMUSIC

Main Agents, Distributors for H/H Carlsbro THP Marshal! JBL Teal

Peavev Gibson Fender **Epiphone**

ibanez Rickenbacker

Drums by Premier, Tama, Ludwig & Yamaha

Ovation Moog Rolany Honner Kore Yamaha

Disco Division

Citronic

Musicman

TK Disco Sound

Pulsar

Optikinetks

Ballymena

Tel: 38502/38998 81-93 York St.

Le Maitre Cobalt Blue JBL

Belfast

Tel: 41792 73 Broughshane St.

Disco Installation Service L/Derry

Tel: 46796 169 Spencer Road.

Get it together with Sesco

SM-1A D.I. Box Designed for use either direct from guitar pick-up, or to interface between amplifier output and speakers, where the characteristic sound of your amplifier is prefered. Features low-pass filter switch and low impedance balanced output.

SM-2 D.I. Box

Price £41,17 including VAT.

An active unit for high impedance instruments such as organs and

synthesisers. Virtually indestruct-

able, professional quality with

custom-designed transformer.

Price £43.91 including VAT.

CT-1A Cable Tester

Test your cables before each performance with the handy Sescom cable tester. Pin-point faults in jack or XLR leads. Built into a strong, die-cast box. Price £32.32 including VAT.

An economically priced direct box for interfacing between guitar and amplifier, Sturdily constructed for professional use. Price £36.73 including VAT.

TR-122 In-Line Transformer A useful High to Low impedance matching transformer, with Jack and XLR connectors. Price £16.12 including VAT.

For full catalogue of these and our large selection of in-line transformers, phone or write: Atlantex Music Ltd., 34 Bancroft, Hitchin, Herts SG5 1LA. Telephone: 0462 31511 Telex: 826967



THINKING OF MICROPHONES: WHAT GOES IN SHOULD COME OUT.
THAT MAKES SENSE!

You may have heard in Montreux or at some of the other top line concerts what Boney M., Rod Stewart, Bob Seger, Yes or Journey sound like with ELECTRO-VOICE? Like Boney M., Rod Stewart, Bob Seger. Yes or Journey of course. ELECTRO-VOICE microphones reproduce precisely what each singer puts into his voice or each musician it to his instrument. No wonder, therefore, that our microphones are so highly acclaimed.

All that sounds good, but better still put it to a test at your music dealer. Or ask for further information from Gulton Europe Ltd., Electro-Veice Division, Maple Works, Old Shoreham Road, HOVE BN3 7EY.



Telephone: Brighton (0273) 23329 Telex: 87680 Gulton G.

KEITH MONKS PRODUCTS

KEITH MONKS (AMDIO) LIMITED Produces what is probably the most complete range of microphone stands generally available, the world over. Designed and made to very high technical standard, they are readily accepted in so many fields - international radio and television, major sound studios, public address systems, local radio and many more. **ORDER FORM**

MS/M-BA/M Available in Chrome, Black, Blue, White, Grev and Yellow. Price inc. VAT

MS/M.....£28.75 BA/M....£16.10 SC/1 Side Clamp. Black only Price inclusive of VAT....£6.21

U.K. Customers only. SIGNATURE..... Tel. No.:..... ...SC/1 Side clamp........@ £6.21..... Access facilities available. TOTAL inc. VAT £...

Fully illustrated catalogue available on request (range includes microphone stands, boom arms, cable drum, goose necks etc.)

Also available (not illustrated) Fully adjustable Drum Boom, Black only for use with MSM Chrome stands. ..£16,10 Both prices inclusive of VAT.

Sole distributor in the UK KEJTH MONKS (AMDIO) LTD., 26-28 Reading Road South, Fleet, Aldershot, Hampshire. ENGLAND. Telephone: (02514) 20568/9 Telex: 858606

Full details in US from: Keith Monks (U.S.) Inc., 652, Glenbrook Road, Stamford, Conn. 06906. U.S.A. Tel: 203 348 4969 Telex: 230 64 3678

RHYTHM HOUSE

22 MIDDLE HILLGATE, STOCKPORT Tel:- 061 - 480 - 7371

PERFORMER RANGE NOW IN STOCK

Blows Your Mind

FULL HIM CONCERT P.A. SYSTEM STOCKED

Makes Your Ears Bleed

2 FLOORS OF NEW AND USED GUITARS AND AMPS

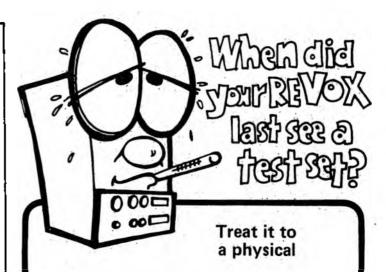
Climb The Stairs To View Our Wares

PEARL AND PREMIER NEW AND USED DRUMS IN STOCK

Roll Up For A Bargain

TOP PART/EX BEST PRICES H.P. AVAILABLE

> Barclaycard and Access WELCOME.



Free while-you-wait service checkout.

Up to 112 measurements taken on any Revox equipment

regardless of age or origin.
Free computer print out; "Your machines performance". 3 pages of technical data, as measured including 6 frequency response graphs, noise x talk, Wow/Flutter etc. Complete Revox range of equipment and accessories on demo, including some new additions to the Revox range. Mikes, Mixers, Monitors, Cue Boxes etc. on show. Revox museum, a selection of Studer Revox machines from the early 1960 E36 to the latest Studer A80.

All this plus informal talks on all aspects of sound recording and reproduction - but please, if you're bringing your machine ring for an appointment slot!

eulipion audio

Hi-Fi Equipment Specialists, 81 Wilmslow Road, Rusholme, Manchester M14 55U Telephone: 061 225 4448

EAB.80

Eight years of specialist design activity have been concentrated on providing a sound tonality recognizable to the conventional planist, with a non-linear touch response which gives a good instinctive link to dynamic control.

Genuine one-man portability is obtained for a Six Octave instrument which has four intermixable Voices plus extra Electronic Effects of Tremolo, Multi-string detuning, and Phasing.

U.K. manufacture and direct distribution to Retailers gives a considerable saving over the imported products similarly aimed at serious Piano simulation.

For further information contact us at the address below or call in for a demonstration (please check show room opening hours by telephone)



Throughout the seventies a number of manufacturers made use of Clef advanced electronic piano circuitry, whilst the Company concentrated on successfully expanding the home construction market for high quality six and 7 % Octave Instruments.

Enthusiastic demand from Professional Pianists resulted in pilot production, and for the Eighties Clef intend to increase the availability of a range of both Stage and Domestic Pianos to the discerning Musician.

The Clef-Kit range will continue and we are always pleased to discuss our designer backed service for those who would prefer to build their own high class instrument.

M.R.R.P. £670

ELEF PRODUCTS (ELECTRONICS) LIMITED 44A BRAMHALL LANE SOUTH, BRAMHALL, CHESHIRE, SK7 1AH. 061-439 3297



A very good and highly competative product

*Simon Baker

48 STANDARD VARIATIONS AVAILABLE STUDIO STANDARD SPECIFICATIONS 12 · 2 £324.00 +VAT 16 - 2 £376.50 + VAT THE SERIES FIVE RANGE FROM:

September Sound Equipment

THE OLD ORCHARD, ANTROBUS, NORTHWICH. CHESHIRE Tel: 0606 891033

*reviewing the series five in the Gear Guide Nov / Dec 79

DYNACORD THE FACTS

Description

Uses

DRS-78	Digital Delay line. Used either rack mounted or free standing (flight case available). Perhaps the most sophisticated delay line available to the musician anywhere in the world.	Use for creative effects, echo reverberation. ADT etc. Providing hall reverb, ambience etc. Cancelling hall reverb. For high quality PA systems and as creative musicians tool.
TAM 19	Time Axis Manipulation unit. Used either rack mounted or freestanding. Offering creative effects and mona/stereo conversion.	Stereo flanging, stereo phasing, stereo pitch shifting, double tracking, mono/stereo conversion and stereo spacesound simulation. PA and back line application.
A2000-2	Twin channel stereo PA power amp. Output 2 x 250 watts RMS. 19" rack mounted. LED overland indication. A1001, 2 x 150 watt version available.	Professional PA systems. Permanent installations.
ST-I 78	Studio type interface unit copable of occepting both balanced and unbalanced lines.	Used to match and interface equipment to provide full balanced output. Advantages include minimum interference and signal loss on long cable runs, matching for recording equipment and elimination of earth hum loops.
MC 1200 MIXER	Professional 12 channel mixer with three outputs. Left, right and monitor. Four band equalisation on each input channel. Full echo send, pan facilities.	Master mixing stage use, master mixing studio use, monitor mixing, sub group mixing.
MOSQUITO SPEAKERS	Compact loudspeaker enclosures with eight full range Dynacord speakers in each cabinet. Vanes provided for directional sound throw.	Monitoring, small format PA use. On stage monitoring with vanes for directional sound.
MOSQUITO S SPEAKERS	Compact speaker enclosures capable of handling 220 watts rms per cabinet. Eight drivers and two Peizo horns.	Professional PA front lines. Usually used with two cabinets each side. Full bass sound with high power handling but extreme portability.

DYNACORD IN GREAT BRITAIN

All of the Dynacord products shown here are now available in Great Britain. Beyer Dynamic UK are the exclusive UK distributors for Dynacord and they operate a full spares and service back up operation.

You can see and try Dynacord products all over the UK and the special team of Dynacord/Beyer engineers are now advising hire companies and PA companies on the full potential of Dynacord products.

For the 1980s Dynacord are offering the UK a

specially selected range of professional equipment: all designed for high quality rack and PA use.

In 1980 Dynacord are providing the power for the Olympic games. They are also giving British musicians power to project.

For further information contact:

Beyer Dynamic (GB) Ltd., I Clair Road, Haywards, Heath, Sussex RA16 3DP. Tel: (0444) 51003. or Dynacord Siemensstrasse 41-43, 8440 Straubing, West Germany.

Tel: (09421) 3101



Visit us at APRS Stand No. 30 and see the DYNACORD DIGITALS.



TOP LINE BACK LINE

Carlsbro offer the professional musician a new high in backline power performance, quality and technological sophistication.

Ouite simply they are the finest amplifiers

of their type on the market.

LED status indicators which show you immediately which modes you have selected, two types of sustain, digital channel switching for greater control and a remote foot switch for the ultimate in out front control are just a few of the features you'll appreciate.

The Carlsbro Stingray Lead 150 provides power plus. The amp module was recently rated by International Musician and Recording World as giving around 180 watts. This output is complemented by the extremely advanced tone control circuit. Parametric equalisation of channel one means players can tightly shape their sound and accutronic reverb is selectable on either channel.

The highly advanced 150 watt Stingray Bass is designed to solve those difficult bass amplification problems without huge racks of amps. Available in both amp only and combo forms, the Stingray has unique Carlsbro Band Pass Filters' for instant selection of a particular sound. Wide ranging tone controls allow you



For more intermation on our Back Line range please contact Carlsbrd Sales Ltd., Lowmoor Road Industrial Estate Kirkby-in-Ashfield, Notts., U.K. Tel: 0623-753902. Telex: 377472.



146 CLAPHAM HIGH STREET. LONDON SW4 01-622 1228

- LUXURIOUS SUROUNDINGS
- 46 TRACK RECORDING STUDIO
- TRIDENT TSM CONSOLE
- JBL MONITORING
- LARGE STUDIO CAPACITY
- BAR FACILITIES
- CAR PARK
- VERY COMPETITIVE RATES

NEW EXCITING 64-PAGE Hot off the press comes this new BELL Catalogue, Packed with exciting instruments and profusely illustrated with actual photographs. It contains absolutely the latest — model after model of all types and makes of Guitars, Pickups, Amplifiers, Echo Units, Microphones, Accessories, Disco Units, etc. Wonderful cash bargains or easy terms. CALL OR WRITE FOR YOUR FREE GUITAR CATALOGUE

Schalles machine heads

How can you tell a high-quality machine head? Look at what brand machine head the leading guitar manufacturers are using on their top line guitars. We're sure you will find that Schalter makes them.

The Schaller reputation has been built on creative engineering, closer tolerance, care in handling, better buffing, and a high-quality chrome finish that is a good reflection of our name.



Schaller Electronic Pfinzingstrasse 2, 8501 Feucht, West Germany

WHY DO THE ELECTRIC LIGHT ORCHESTRA



TODAY!

Callers Welcome, Phone 01-399 1166. Open all day Saturday.

MUSICAL INSTRUMENTS LTD.
Dept. 96 57/159 EWELL ROAD
SURBITON, SURREY KT6 6AR

LONDON RETAIL OUTLET

LONDON RETA¦L CUTLET ROD ARGENT KEYBOARD 20 Denmark Street, Landon WC2 Always use two of our instruments on stage?
BECAUSE they need the **AUTHENTIC** sounds of real instruments.

NOVATRON

Write to the original manufacturers:-

STREETLY
ELECTRONICS LTD

Gives you the choice of many sounds. String sections, Male & Female Choirs, Church Organ, Flutes, Oboe, Cello etc. etc.

48 TAPE SETS AVAILABLE
and more to come!
ALL NOVATRON TAPES FITTHE MELLOTRON 400

338, ALDRIDGE ROAD, STREETLY, SUTTON COLDFIELD. B74 2DT. Tel: (021) 353-3171 Telex: STREL 338024 BIRCOM G.

<u>Premier</u>

Abgestimmte Schlagzeug-und Trommelsätze erhältlich von:

Chas. E. Foote Ltd., 17 Golden Square, London W.1. Tel. 01-437 1811.



PETE'S GUITARS

VINTAGE GUITARS, BANJOS, MANDOLINS

1756 University Ave. St. Paul, Minn. 55104

(612) 647-00**53**



YOUR GROUP ON Video Cassette Demos from £100

Now you can put your group in the proper perspective, make those Record Company A&R men turn their heads.

Capture your image as well as your sound.HIRE us to record you in full colour on a V.H.S. Video Cassette. The ultimate in promotion.

In the - Studio - Live Shows - Practice Sessions & mobile venues.

Also any personal event.

Prices begin at £100 for your own exclusive T.V. Production.

contact Martin Marston Loudwater Television Service Phone:- High Wycombe 39291

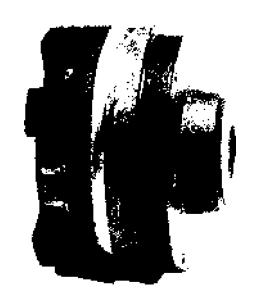


ADAM KALL

NOW HAS **EMILAR**COMPRESSION DRIVERS

Adam Hall I.M. Supplies Ltd
Unit 3 Carlton Court, Grainger Rd.
Southend on Sea, Essex. SS 2 5BZ.

(0702) 613292 Telex 995029



Send 30p in stamps for illustrated catalogues



AVON ASSEMBLY MUSIC. 25 Claverton Buildings, Widcombe, Bath 0225 22894

EC. IR. MA. RS Spec ERS. EK. GA D.B.W.
H.Ac.Sil.PA.PSG S/hand, M.RC.C B
Premier, Traynor, Sonor, Carlsbro, Gibson.

BEDFORDSHIRE

MR MUSIC 90/92 Bromham Road, Bedford. Bedford 50861/2 A EC.O.IR.SYN.G.D.S.S/Mnd.RS.K. ERS.EK.B.W.L.H.Ac.SFI.SM.PA. PSG.C8.Oi.

BIRMINGHAM

MICHAEL PECK. THE SHEET MUSIC SPECIALISTS 1478 Pershore Road, Stirchley, Birmingham B30. Tel: 021 458 6480 K. EK. Syn. RS. S. ERS. S/Hnd. A. G.S. (Gibson. Rotosound Spec...) T. (D.K.G.) Ac. SM. PA.

YARDLEYS.
Snow Hill, Birmingham.
21 Colmore Row, Birmingham B3
021 236 7441
G.A.D.B.W.S. Di.PA. RS. Ma- Aria; H.H.,
Sonor, Ludgwig, Premier.
JONES & CROSSLAND LTD.
6-8 Smallbrook, Queensway, Birmingham
021 643 4655/6/7.
CB.RCn.O.IR. Syn.G.A.D.S.S/Hnd.
RS.ERS.EK.B.W.Ac.M.SM.PA.

BRISTOL

BIGGLES MUSIC 85 West Street, Did Market, Bristol. 0272 552147 A.G. S.RCn.IR. S/Hnd.MA.RS. ERS.EK.M.PA.Cb.T.HP & PX.

BROWNS OF BRISTOL 5 Union Street, Bristol. 0272 23646 Wem Copycat EC. RC, IR.G. A(MA Custom Sound) D(Premier MA). S. S/Hnd. RS. ERS. B(MA Conn). W SFI (Mandolins, bouzoukies). M. PA.

BUCKINGHAMSHIRE YEOMAN MUSIC.

33 Cambridge Road, Aylesbury, Bucks. 0296 85549 O. main agents for Thomas, Wellson, Viscount, National Panasonic, Syn. G. A. D. S. S/Hnd. MA. RS, ERS. K. B. W. T.

CAMBRIDGESHIRE

CAMBRIDGE ROCK 44 Newnham Road, Cambridge 0223 65093

EC.RCn,IR.G.A.S.S/Hnd.MA.RS. ERS. H.M.RC.PA+CBPA.

CHESHIRE

CUSTOM AMPLIFICATION 45 Nantwich Road, Crewe 0270 4779 46 Hope Street, Hanley Stoke-on-Trent (0782) 266897 G.A.D.K.S.D.L.

COVENTRY

COVENTRY MUSIC CENTRE
3-4 Whitefriers St., Coventry,
0203 58671
(EC. RCn. O.) Syn. G. A. D. S. S/Hnd. MA.
RS. Spec, Ers. EK. K. B. L. H. T. M. RC. SM.
PA. CB. Ot.

CUMBRIA

J.P. DIAS (CARLISLE) LTD
149-153 Botchergate, Carlisle.
0228 22369/28700
EC. O. Syn.G. A. D. K. B. W. S. D.
Ac. PA. RS. ERS. EK. T. M.S.M.P. Ma; Hammond, Boosey & Hawkes, Premier, H. H., Farfisa, Gibson.
NORTHERN SOUNDS
113 Duke Street, Barrow in Furness.
0229 27100
41 Jane Street, Workington.
0300 4797
15 Botchergate, Carlisle.
0228 39945
EC. RCo. O., SYN. G. A. D. S. S/Hnd.
MA, RS. Spec. EPS. EK, K. L. SFI. T. M.
RC. SM. PA. CD. D.

DERBYSHIRE

WISHER (DERBY) LTD 77-79 Osmaston Road, Derby 0332 48156 EC. RC. IR. Syn G.A.D.S. S/Hnd. RCN. KBWL. RC. PA. Di. Main Agents: Premer, HH. Carlsbro, Peavey. Ampeg, Custom sound. Musicman, Yamaha, Gibson, Fander, Slingerland, Tama, Pearl, Ludwig.

DORSET

COAST MUSIC

296 Charminster Road Bournemouth Dorset 0202 522613 Spec. American Guiters, G.A.D.S.MA.RS.M.PA.CB.Ek.S/hnd.

THE GIG SHOP (Micro-Music) 802b Christchurch Road, Boscombe. Bournemouth 102023 30260 Dorset Peavey Soundhouse G.A.D.S. S/Hand, MA, RIS, RCN, M. PA,

HAMPSHIRE

BECKETTS MUSIC 2/3 Gibbs Rd., (Beside ABC Cinema) Scuthampton 0703 24827. C.A.D.S, S/hnd R.S. B.W. AC, M. SM

Kinglisher (1994), Company

Telecomms, 189, North End, Partsmouth (0705) 60036. EC. RCN. IR. SYN. G.A.D.S. S/hnd. RS. K.L. H.M. Rc. SM. DA. Di. Ma: H.H., Fender, Ludwig.

HEREFORD

BUZZ MUSIC, 65 Widemarsh St., Hereford. 0432 55961 EC. RCn. IR. Ryn. G. A. D. S. S/Hnd. RS. ERS. EK. L. H. M. RC. PA. CD. Peerl, RSD, MM Ludwig, Gretch, Roland. Gibson, Fender and everything else wor th heving!!

HERTFORDSHIRE

MR MUSIC 24 Bridge St., Hemelhempstead. Tel: (0442) 81812 A. EC. O. IR. SYN. G. D. S. S/hand. RS. K. ERS. EK. B.W.L.H. Ac. SFI. SM. PA. PSG. CR. Di.

HUMBERSIDE

JOHHNY PAT'S MUSIC PLACE

118 Holderness Roed.

Hull HU9 2EA

Hull 23702

News + S/H Group Geer Plus

Repair Service - Discos

NORTHERN IRELAND

CRYMBLES (IRELAND) 67-71 Dublin Street Belfast. 0232 26818 G.A.O.K.B.W.S.DI.Ac.RS.SM.

MODERN MUSIC CENTRES Wright's Arcade, Newtownards, Tel: 10247) 814657 and at; Ards Shopping Centre, Newtownards, Tel: 10247I 817965 EC. IR, SYN. G.A D.S. S. Hnd. RS. ERS. B.W.L.AC.T.M.R.C SM.PA.PSG.CB.DI. SESSION MUSIC
(Sports and Music Ni Ltdl
73:75 Broughshane Street, Ballymena,
0266 (41792
81 93 York Street, Baffast,
0232 38502
Sassion Music, 189 Spencer Road,
Londonerry
0504 48796
G.A.D.K.PALS.PSG.M.ERS, MA. Gibson,
Moog, H.H. Carlsbro, J.B.L., Citronic, W.
Ac.T.

KENT

MOSS MUSIC LTD. 67 Canterbury St., Gillingham. Medway (1634) 576381 G.A.D.S.RS.ERS.PA.B.W.T.M.Dr. Ma: Carlsbro, Dean, Markley, Peavey, Shergold, Project

KENNARDS

B6 BB Mouthgate Contentions Kenn 0227 60331 ECO IMSyn GADS Had RS Spec ERS EK K BYN L HAC T M RC SM PA D 34 hour answer phone source

KENNARDS

19 New Bent Ashlers Kant 0233 23276 O Syo G A D S 5 Most EK M B % T M SM PA

LANCASHIRE

BARRATTS 1 Meadow Street, Preston 0772 55628 IR, SYN.RS.ERS.EK.G.A.D.B.W. S.DIL.H.PA.M.P.



Ragent St. Showrooms, Regent St. Coppus. Chorley, Lanes 0257 791846. G A D Di L PA RS

H W AUDIO 174 St Georges Rd., Bolton BL2 18A 0204 385199 EC. RCN. S/hnd. RS. ERS, L.H. M. Rc. SM. PA. CB. Di. Ma.: AKG, JBL. CCT.

LEEDS

SCHEERERS B Merrian Centre, Leeds 2 0532 449592 G, EC, A. WB, S. D. ERS, RS, HH Agents IR, S/Ind, M, PA

LEICESTERSHIRE

GETA GREAT DEAL AT



Head Office: 18 The Rushes, Derby Road, Loughborough, Leics. Tel: Loughborough (0509) 218020

THE SOUND PAD MUSIC CENTRE LTD. 64 London Road, Leicester. 0533 555202/21041 EC. RCn. SyN. G. A. D. S. S/Shnd. MA ERS. EK. L. M. Di. CENTRAL MUSIC LTD. 12 New Bond Street Leicester. Tet: 538681.

THE DRUMMERS DRUM SHOP
Main agents for: Premier, Sonor, Gretsch,
Rogers, Pearl and Latin Percussion. Avedis
Zildjian and Paiste Cymbal Centre. Many
other brands of drums and cymbals in stock
Repair Service.

CUSACK'S MUSIC 33 Braunstone Gate, Leicester. 0533 548517 CB.PA.G.A.ERS.DI.H.

sound pad

Music Centre Ltd.

64, London Road, Leicester, Phone: Liecester (05533) 20760 21041

Yahama, Orange, Custorn Sound, Pearl, Maine, Music Man, Martin Guitars, M/M, H/H, Rofand, Ibanez, Kramer, Hagstrom, Citronic, Sound-Out, Ice, Optikinetics, wurlitzer, Tama, Altec, Cloud, Pulsar, Fender, Rogers, Rhodes, Rickenbacker, Peavey, Marshall, Premier, Electro Harmonicx, Wenn, Carlsboro, Ludwig, Paiste, Zildjian, Bayer, Shure, MXR, Zyn, Grut, Kramer, Arp, Mong, AKG, Color Sound, Fai, Korg, Vox, Remo, Ampeg.

LOUGHBOROUGH MUSIC CENTRE, 18 The Rushes, Loughborough, Leicester, 0509 30398
6.C.O.IR. SYN.G.A.D.S.S/Hnd.Me.RS, ERS.EK.K.B.W.L.H.AcT,M.SM.Di.

SUPERMOUSE MUSIC, 233 Melton Road, Leicester, 0533 63830 IR, SYN, G. A. D. S. S/Hnd, MA, RS, Spec, ERS, EK, K, B. L. H, T, M, RC, SM, PA, CB, Di

LIVERPOOL

HESSY'S MUSIC CENTRE

62 Stanley St., Liverpool 1 051-236-1418 G,A,D,K.B.W.Di.L.RS.

LONDON

STEPHEN DELFT

CITY OF LONDON MUSIC STORE,
17 Eldon Street, E.C.2.
(75 yards Liverpool St. Station)
O1 588-4849
EC. SYN, G. A. D. S., S/Hnd, B. W. Ac. SFI,
PSG, RS. ERS, M. SM (Albums), PA.
F D & H MUSIC
138 - 140 Charing Cross Road, London
WC2H OLD
Tel: O1 836 4766
EC. Syn, G. A. S. S/Hnd, MA. (HH, Maine,
Ibanaz, Peavey, Music Man, Guild, Glibson,
Electroharmonix), RS. Spoe, ERS, EK, K. B.
W SFI, T. M. RC, SM, PA, PSG, DI.

242 Cable Street, E1
01 790 7028
G.A. SFI. CB., 24 Hrs. RS.
F & H PERCUSSION LTD.
131 Wapping High Street, London E1.
01 481 3704
01 488 3530
Percussion Hire and Repair Specialist. Also amplification and instrument hire.
GRANGEWOOD ORGANS (J80)
445/7 High Street, North, Manor Park, London E12
01 472-5107/4690
EC. SYN. D. S.S./Hnd. MA. RS. ERS. EK. K.
L. T. M. FA. Di. Spec. A. O. G.



CHASE CENTRE

22 Chalton Stree London NW1 01 387 7 49

LÇIO IR SVNIG A S/hnd MAIRS SUN SVNI ERS EKIK HIT MIRC PAICH

GIGSOUNDS LTD (01) 769 5681 Ludwig Centre Music 'All

85 + 104 Mitcham Lane, Streatham, SW16 EC SYN G. A. D. S. S/Hand, MA. ERS. EK. H. M. RC. SM. PA. CD. Main Agents Marshall, Peavey, Kramer, Ovation, Yamaha. MAURICE PLACQUET 358-360 Uxbridge Rd., Shepherds Bush, London W12. 01 749 1204/0859 G. A. D. B.W. S. Ac.PA. RS. P.

MAURICE PLACQUET HIRE 69 Jeddo Road, Shephard & Bush, London W12. 01 749 3232

NORTH LONDON ORGAN STUDIO, (North London Group Geer) 809-811 High Road, Tottenham, N17. 01 808 0388 EC. RCn. O'. SYN. G. A. D. S. S/Hnd. MA, RS. EK. T. M. SM. PA. PSG. Di.

PERCUSSION SERVICES, 289-299 Borough High Street, SE1, 01-407-4962 The Pércussion Centre of Europe, Percussion Inporters and Distributors. Percussion Manufacturers, Sales and Hiring

PERCUSSION SERVICES.
289-299 Borough High Streedt, SEI.
01. 407 4952. 403 1056.
The Percussion Centre of Euruope.
Percussion Importers and Distributors.
Percussion Manufacturers, Sales and Hiring.
IR. D. S'Hind. MA. RS. Spec. T. SM. CD.
Main agents for Remo. Ludwig, Premier,
Sonor, Duraline heads, Chaindrive pedals.
Custom slicks.

PERCUSSION SERVICES, 17-23 Vale Royal, off Yorkway, Kings Cross, N7

IR. D. S/Hnd. MA. RS. Spec. T. SM. CD. Main Agents for, Remo, Ludwig, Premier. Custom sticks.

DAVE SIMMS MUSIC CENTRE 1-5 The Grove, Ealing W5. 01 580 0520 Spec.G.A.PA. S/Hnd.Di.L.D.

ROSE-MORRIS (RETAIL) LTD., 81-83 Shaftsbury Avenue, London W1. 01-437 2211 EC. O. SYN.G. A. D. S. S./Hnd. RS. ERS. EK. K. B. W. SFI. M. PA. PSG.

PERCUSSION SOUNDS 405 David Welk, David Lane, Besford, Nottinghard, 0802 701054 D. S./Ind. MA. RS. Spec. T. RC... Main Agents for Premier, Stingaland, Ludwig, Yarnaha, Sonor and Paiste.

MANCHESTER

BARRATTS

IR. SYN. RS. ERS. EK. G.A.D. B.W. S. Di. L.H. PA. MP. Ma.: King, Getzen, Benge, Marigaux, DeFord.

8a Öxford Street, Manchester M 15 QA. 061 236 0542 IR. RS. B. W. H. SM.

BARRATTS
72-74 Oxford Street, Manchester
051 236 0052
IR. SYN. RS. ERS. EK. G.A.D. B.W. S. Di.
L.H. P.A. M.D. Ma.: King, Getzen, Benge,
Marigaux, DeFord.



NORFOLK

NORWICH SOUND SYSTEMS 80 Prince of Wales Road, Norwich Norwich 811989 H.E.RS.RS.S/Hnd.S.D.A.G.SYN. EC.DI.AC.PA.M.MA:-Treynor Peerl, Gibson, Star Dealer, Yamaha and Disco Sound (in MA). Carlabro, Custom Sound. Fender, Haze.



HARDY-SMITH MUSIC CENTRE, 2, A. Outram St., Sutton In Ashfield.
Tel: Mansfield 56242
EC. O. SYN. G. A. D. S. S/hnd. Rs. K. B. W. Ac. SFI. T. M. SM. PA. Di, Ma: Farfisa, Premier, Boosev & Hawkes, Korg.

NOTTINGHAMSHIRE

CLEMENTS PIANOS LTD. 21-23 Derby Roed, Nottingham. 0602 47912 G.A.D.P.B.W.S.SM.RS.

> PERCUSSION SOUNDS 405 David Walk, David Lane, Besford, Nottingham. 0602 701054 D. S./Hnd. MA. RS. Spec. T. RC. Main Agents for Premier. Slingaland, Ludwig, Yamaha, Sonor and Paiste.

PERCUSSION SOUNDS 405 David Walk, David Lane, Basford, Nottingham. 0602 701054 D. S. Hind, MA. RS., Spec, T. RC. Main Agenta for Premier, Slingsland, Ludwig, Yamaha, Sonor and Paiste.

SCOTLAND

BRADLEYS MUSIC LTD. 89a West Régent St., Glesgow. 041 332 1830 EC.BCN., MA,RS, Spec.G.A.D.B.S PA,S/Hnd.T.M.P.

C.B. MILLER & CO. LTD. 2 Queengate Arcade, Inverness, Scotland, Inverness 33374 G.A. D. S. EC. O. IR. S/Hnd. RS. ERS. EK. K. B. W. Di. M. T. Ac.

SHROPSHIRE

TELFORD MUSICAL
7 Bell Street, Wallington, Telford,
Stropshire.
0952 55310
RC O. SYN. G.A.D. S. S/Hnd. MA Yamaha.*
GRisson, Elgán, Boosey & Hawkes RS. ERS.
EK. K.B.W.H.Ac.SFI. M. RC. SM. CO.

STAFFORDSHIRE

LANGDONS ELECTRIC MUSIC 27 Victorie Street, Wolverhampton. 0902 27251 Ec. RCn. Syn. G. A. D. S. S./Hnd, RS. ERS. L. PA. D. Gibeon Star dealer, Maine, Custom USA. Custom amplification.

SUFFOLK

MORLINGS LTD.
House of Music,
149-151 London Road North,
Lowestoft, Suffolk.
Lowestoft, 65491-713143
EC. O. IR. SYN. G. D. S. S/Hnd. MA; Aria,
Premier, Meine, Kawai, RS. ERS. K. B. W. L,
H. AC. SFI, SM. P. SG. DI,

SURREY

ANDERTONS SUPERSTORES, 5 Stokefields, Guildford, Surrey (Group Gear) 0483 38212

end - 73b North Street, Guildford (Classical.

ABC MUSIC
14/16 High Street, Addlestone, Surrey,
0932 40139/54897
96 High Street, Esher,
78 66198
EC. RCn.O.(R. Syn.G. A. D. S. S./Hnd.
MA.RS. Spec.ERS. EK. K. B. W. L. H.
Ac.SFI. T. M. RC. SM. PA. PSG. CB. Di.
58 Surbiton Rd, Kingston. (01) 548 9877
SPEC. Di IL. & AMPI.

CROYDON MUSIC STUDIOS 40 Station Road, West Croydon, Surrey, 01 688 0828 G.A.D.S.S/Hnd.RS.B.W.Ac,SFI, M.SM.MA. (Premier, MXR)

John King's

B Richmond Road, Kingston D1 545-9100/9124 O.IR. SYN.G. A. D. S. S/Hnd. MA (HH). RS Spec. EK, B. W. L. H. Ac, T. M. RC. PA. Di.

SUSSEX

CASS MUSIC 29 South Street, Eastbourne, East Sussex 0323 37273 ER. RCn. G. A. D. S. \$/Hnd. MA. RS. Spec. ERS. EK. K. B. W. SRI. T. M. RC. PA. PSG. CD.

SOUTHERN MUSIC

194 Church Rd. Hove

0273 733387/774536 EC.RCn.IR Syn.G.A.\$ S/nnd MA.R\$ Spec. IG.A) ER\$ EK.L H SFI.M RC PA.CB.Di

TYNE AND WEAR

MUSIC MAKER
30 Dean Road, Westoe, South Shields.
0832 561349
EC. RCn. O. IR. SYN. G. A. D. S. S/Hnd.
MA. RS. Spec. ERS. EK. K. B. W. L. H.
AC. SFI. M. RC. SM. PA. CB.
Giannini, ATC.

WHITE SOUND
3 Albion Place, Sunderland, Tyne & Wear.
Tel: 0783 78058.
EC. RCN. SYN. G. AD. S. S/hnd. RS. ERS.
EK. K. L. H. SFI. M. RC. PA. PSG. DI.
Main agetns for Allen & Heath, HH, MM,
Vitavox, Peavey, Roland, Mega, Boss,
Washburn, Kramer, Maine, Heze.
Specializes: Carlsbro, Rickentbacker, Ibanez.
Fender, Gibson, Tama, Ludwig, Premier,
ATC, JBL & Gauss.

WALES

MUSIC CENTRE ABERDARE 13c Cenon Street, Aberdare, Mid Glamorgen. Aberdare 874141 O.G.A.RS.S.SM.M.K.SYN.ERS.

PETER NOBLE LTD.

11 Station Road, Lianishen, Cardiff.
0222 753911

EC. SYN.G.K.B.D.P.W.S.Di.L.S/Hnd.
M.Spec.PA. ERS. Moog.
Yamaha and Pearl pro centre.

SOUNDWAVE MUSIC CENTRE 51 Gwent Square, Cwmbran, Gwent, Wales 06333 2501

SFI. TM. RC. SM. PA. CB. DI. EC. O. IR. SYN. G. A. D. SS/Hnd RS. ERS. EK. B. H. Ac.MA. EC. RCN. PSG. CB. Music Man. Glbson, Star Dealer. John Birch.

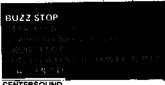
SOUNDWAVE MUSIC CENTRE 51 Gwent Square, Cwmbran, Gwent, Wales.

Wates.
08333 2501
SFI. T.M. RC, SM, PA, CB, DI, EC, Q, IR,
SYN, G, A. D, S, S, Mnd, RS, ERS, EK, B,
H. Ac, MA, Music Men, Gibson, Star Dealer
John Birch.

BERT VEALE (MUSICAL) LTD. B New St., Neath, Glem. Neath 2825 EC. RCN. O. SYN. MA. RS. MA. RS. Spec. EK. G.A.D. K. B.W. S. DILL. AC. SFI. PA. PSG. S/Hnd.T. M. SM. P.

PSG.S/Hnd.T.M.SM.P. Peavey. Carlebro. Custom Sound. Laney. Fender, Gibson. Kawai. Galanti. Pramier. Olympic. Beverley. Pearl. Tama.

WARWICKSHIRE



CENTERSOUND 5 Albert Street, Rugby, Warwickshire. 0788 74566 RB, SYN. G. A. D. S. S/Hnd. MA. RS, ERS, EK. L. H. M. RC, SM. PA. Di.

S.A.RENTON LIMITED
25 High Street, Learnington Spa,
Warwickshire.
Tel: Learnington 26703
A. S. S/Hnd. RS. W. SFI. M. SM. Early
Hand made Inst.

WORCESTERSHIRE

WORCESTER MUSIC CENTRE
3-5 Bull Entry, Worcester, Worcester
(0905) 20279
EC. O. G. A. D. S. S/Hnd. MA. Fender,
Gibson, Premier, Yamaha. RS. Spec. ERS.
EK, K, L. H. T. M. SM. PA. Di. RCN. Syn.
Custom Sound, Baldwin.

ROCK SHOP 201-203, Stourbridge Rd, Holly Hall, Dudley. Tel: (0384) 74700 EC. G.A. Dr. STR. S/hnd. M.a: ARia, Marshall, Carlsbro, Fender, Gisbon Star Dealer, Lab, Premier, Park, Rosetti, Antoria, EMI Music, ERS (BR. W. Ac. Toorder) SFI, T.M.

YORKSHIRE

JIGSAW SOUND CENTRE 2 Station Road. Ossett, W Yorks (0924) 277981 Fender, Gibson, Vox., Carlsbro, Musicman, WEM, Custom, Pearl, Rogers, Area agents for MM equipment

THE ORGAN CENTRE
4b + 4c Commercial Struat. Herrogete,
Yorks,
0423 504754
RCn. O. IR. SYN. G. A. D. S. S/Hnd. MA.
RS. Spec, ERS, EK. K. B. W. L. H. AC. T.
M. RC. SM. PA. PSG, CB. Di.

KEY FOR DEALER GUIDE Electric Keyboards Kevboards Echo Chamber Brass Woodwind RCn Re-Coning Organs Lighting Instrument Rental Synthesizers SYN. Accordions Ac SFI Guitars Special Fretted Inst. Amplifiers Tuition â Mikes Drums Strings Reconditioning S/Hnd. Second Hand SM PA PSG Sheet Music Main Agents Repair Service Public Address AS Pedal Steel Guitars Specialists Spe Custom Building Electronic Repairs Disco



BEDFORDSHIRE

QUEST STUDIO 721 Windmill Road, Luton, Bedfordshire. Tel: (0582) 414297

16T. Cap 8, from £100 p/d. D. rf. R-R. CP, R-C, Dc, Ba. d-t, Piano. M. S. Ac. ba. SM. Eventide effects. Master room, stereo reverb Klark-Teknik Graphics, Audio and Design, Compressor Limiters.

BERKSHIRE

STARTLING STUDIOS: Pitten Hurst Part; London Rd., Sunninghill Tel: Ascot; 21184

BIRMINGHAM

ZELLA RECORDING STUDIOS Walker Hall, Ampton Road, Edgbaston, Birmingham B15 2UJ 021 456 0645 8T £15 p/h{10am.-10pm.after 10pm and Sundays £20 p/h.}Cap 35, tf. R-R. R-C. R-Cr. d-t. CP. Ka{Bechstein, Chappell babygrand), DC. OTC. M. S. SM ba.

BRISTOL

THE FACILITY
The Providence Meeting Room
145 Whitehall Road, Whitehall, Bristol
102721 552213
16T Cap20, D. TF, R-R. 1St, CP, Ka, R-C,
Mix, DC, d-t, M, S, ba, SM, Individual
Cuotes, Yamaha Electric and Acoustic
Grands, Synth CS80 available.

MUSHROOM STUDIOS 18 West Mall, Clifton, Bristol, 0272 35994 8T £10.50 p/h Cap 17, R-R-C-Cr CP DBX D Ke Disc Pressing, Accommodition 6 bedrooms, self-catering.

SOUND CONCEPTION 86 Ashley Road, Montpeller, Bristol 6 0272 564721

8T £10p/h, £85p/d, Cap 10, tf, R-R, R-C, dt, CP, Ka, (Bechstein Grand Piano) SM,

CAMBRIDGESHIRE

SPACEWARD RECORDING STUDIOS
19 Victoria Street, Cambridge
Tel: (0223) 64263 24 hours
18T from £140 p/d. £14 p/h. 2T £12 p/h.
Video recording. D. tl. R-R. R-C. C-C. CP.
Ka. Dc. d-I, no DTC. Ac. SM production, arrangement, location and live recording and PA in Europe ba.

COVENTRY

HORIZON STUDIOS
Horizon House, Coventry CV3 6QS
Tel: (0203) 21000

16T, £25 p/h CAP.20. D-C, Iba, R-R, R-C, Ka. SM, Iba, SPEC, rates by day. Shortly going 24T.: Rates to remain the same.

DEVON

ANNOUNCEMENT P.A. HIRE 14 Swen St., Torquey, Devon 060428 278

8T(1" Leevers-Rich) £8 p/h., £60 p/d. (includes tape allowence) no OTC, R-R-C-Cr. Cp. Mix. Pro P.A. Hire to 4Kw.

BLAZE RECORDING STUDIO, 23 Belgrave Road, Torquay, Devon. 0803 22833

8T £5.50 p/h D. CP. RC. Mix. DC. M. S. Ac free in hotel. SM.

GLOUCESTERSHIRE

MILLSTREAM RECORDING STUDIOS Varnon Place, Cheltenham. Tel: 0242 43243 16T £16.00. no OTC. Cap. 6 mus £160 p/d). D. tf. R-R. R-C. CP. Ka. M. S. SM. ba. AC. ba.

TELECOMMS, 189 London Rd., North End, Portsmouth, Hanls. Tel: (0705) 60036 Ask for Mike. ME, Di. T & C. PA-CM.

HEREFORD

CHAPE LANE STUDIO
Hámpton Bishop, Hareford.
0432 73430/73437
247 226 p/h. 167 620 p/h. 8hr. day: Cap
18. R-R. CP, RC, M. S, AC.
ARP Omni and Yahama CP30 Elect. Piano,
Mikes – AKG, Bayer, Neuman, Amelt mixing
conpole 28 into 24 24T Lyrec, Steuder 27
Master Revox, Sony, etc.

MODELLO SOUND, Eardisley, Herefordshire (on Powya boarder) 054 46 538/0568 4845 87 £50p/d (10 hrs), Cap 8 TF. R-R. R-C. SM. AC (bs) SM Master room reverb, Quad/Tannoy, DBX, Paino, Organ, Drums, Fazer, Flenger, ADT etc.

THE STUDIO Llancloudy, South Herefordshire.
098 1873 (contact Frank Boggie)
67, £18 p/h. D. T-F. R-R. 1 St. KA. RC. Mix, R-Cr. M. S. BA. Selection of guitars and drums, PV, emps for use in studio. No charge Chitton mixing deak.

HUDDERSFIELD SEPTEMBER SOUND STUDIOS 38 Knowl Road Golcar, Huddersfield, HD7 4AN. 0484-65895/6

16T, Cap 45 £20 p/h., p/d ba D, R-R, R-Cr, R-C ba CP, M. S. vs Ac. ba. SM. ba Oba. Ka Drums

HUMBERSIDE

FAIRVIEW MUSIC, Willerby, Hull, N. Humberside. 0482 653116 87, £10 p/h Cap 10, p/d. tf, R-R, CP, Ka. RC. dt, M. S. SM.

LANCASHIRE

CARGO RECORDING STUDIO Kenyon St. Rochdale Lancs. 0706 824420 16T - £15p/h./£130 p.day. 8T - £8p/h / £70 p.day. 10 hour day 10% for cash 1 hr. free set up time. CASTLE RECORDING STUDIO 93 Castle Hitl Road, Hindley, Wigan, Lanca. 0942 58777 8T. Cap 20, £10p/h, R-R. Cp. Ke. R-C. D-T. S. VS. Ac(ba), SM(ba), Mix. LIVERPOOL.

AMAZON RECORDING STUDIO, Stopgate Lane, Simonawood, Liverpool L33 4YA 061-646 6444

St2.

1.) 24T E27 p/h Daily Rate Cap35. D. t-F.
R-R. CP. Ka. (Yamaha C580, Polymoog,
ARPOMNI III, Steinway, Hammond C3I R-C.
Mix. d-t. MS. AC. tba. SM.
2.) 8T £75 p/d Cap10 t-F. R-R. CP. Ka. las
above) R-C. Mix. d-t. MS. AC. tba. SM.
AUGUST SOUND STUDIOS
16 Benson Street, Liverpool 1.
051 708 0006

16T p/d neg. 8T £10.50 £86 p/d (inc spool & tape) Cep 8, tf. R-R. R-C. CP. Ke. (Bechstein Pieno, Hernmond organ, Moog Synth.) NO OTC M-S. AC be. SM. LONDON

CONCERT RECORDING STUDIO 20 St. Mary's Rd.,
Huyton, Liverpool L36 5SS 061-489 2990, 051-489 7967
8T, £8.40 p/h, £80 p/d, Cap 5, O.Y.C. Ka Broadwood concert grand plane, SM, RR, RC, Itam Revox Mxr. Rebis Quad, Kef Orban AKG, etc.

ARCHIPELAGO STUDIO,

1 Moreton Terrace Mews South, Pirelico,
London SW1.

10 1834 9303

8T £7 p/h Cep 15. t-f. R-R. 1 St. Ka. RC.
Mix. M. S. be. SM.

Ampex 6T, Revox 877 mixing down, Allen &
Heath 16 into 8 mixer all effects, space echo
Reverb, compression, graphics, ADT, Full

ALVIC STUDIO
13 All Saints Road, Wimbledon, SW19.
01-542 5698
4T Cap. 8£8.00 p/h. be, rt, R-R, CP R-C
Pieno, M.S.SM. ba. Drums. Ampa
8ASING ST & ISLAND MOBILE STUDIOS
8-10 8esing St., London W11.
01 229 1228

Studio 1 £52 p.h. up to 6pm. £60 p.h. after 6, weekends and public holidays.
Studio 2 24T MCI JH 500 series console with computer £60 p.h. 10em to 6pm. £70 p.h.

BMS STUDIO
145 Wardour St.,
London W1. Tel: 734 5784/5572
8T £25. DBX noise reduction.
Acoustically treated studio and large control room. Full production and copying facilities. Session musicians available.
8.T.W. RECORDING STUDIO.

125 Myddleton Road, Wood Green, London N22. 01 888 6655/449 6110 4T £7.50 p/h. 8T £11.00 (black booking £10.) tf. R-R. ka. dt. M. S. SM. DBX noise reduction, Alice 12-48 desk. Tannov and Auratone monitors. MXR digital delay.

DECIBEL STUDIOS
19 Stemford Hill, London N18
01 802-7868
24T £27 p/h. p/d neg. Cap 20 D. tf. (1
Ampex 1 Studen) R-R. CP. Ke (Yamaha
Grand and Synth). R-C. d-t. Q. OTC. £2.
M.S. Icf. Ac ba. SM.

PATHWAY STUDIOS 2A Grosvenor Avenue, London N5 01-359 0970 8T (10 p/h, Cap 6, R-R, CP, R-C d-L

DICK JAMES MUSIC
James House, 5 Theobalds Road WC1 X8SE
(01) 242 6886
2ST 24T Cap30, £55 p/h 46T mix/rec, £75
p/h (no OTC). Remix £45 p/h, D. 1-F. R-R.
CP. Ke (Steinway) R-C Mix R-Cr. Comp.
Mix. DT. Q. OTC £10 p/h, MS. Actiba) SM.
(bba).
DUFFY'S RECORDING STUDIO.

131A Anarley Road, Crystal Palace, London SE20. 01-778 0450 01-701 2064 8T Cap 8 £8 p/h. R-R. RC. Mix. R-Cr. Druma, synths, piano, amp, DDT varispeed, 16T into 8 mixer. ½" Box. E. ELEPHANT RECORDING STUDIOS

IBIA Long Lane, London SE1
Tel: Nos: 373 S573 & 403 3505
8T £6.50 p/h or £35 p6hrs (exc. tape hire)
£50 per 8 hours, everything includes Cap8,
rt. (Brenell 8-track — Revox/Teac 2T), R-R.
Cp. Ka. (Piano String syn), R-C. M. S. SM.
ba.

FAST BUCK STUDIÓS,
Lamb House, Church Street, London W4.
Q1-994-3921
8T Cep 10 £8 p/h. £80 p/d. D. T-F, R-R, 15t.
CP, KA. RC, Mix, R-Cr. DC, d-t. M. S. VS. BA.
SM, Desk-Sound Technics, Brenell Miest
track, Revox.—AKG, Beyer mikes, tennoy
speakers, graphics, drum machine tape and
elect. Elka string mechine, synths, guitars,
drums, perking, seay access.
FREERANGE STUDIO,

22 Tavistock St., W.C.2. Tel: 836 7608 24T. £24 p/h. (6 firs £19 p/h.) CAP 30 I-f. R-R, CP. Ka.: (Grand Pianol R-C, Mix, d-L MS, FcF, VS, the, Ac, the, SM.

MS. FcF. VS. tha, Ac. tha. SM.
GOOSEBERRY STUDIOS
GOOSEBERRY "ONE"
2 Hillside Road, SW2
(01) 674 0548

(01) 674 0548 24T £30 p/h (Bl. Bks, Neg.). Cap40. D-Mix. B.R. CP. R.C. d.L. MS. SM. tba, Ka (Hammond organ, Yamaha grand).

GOOSEBERRY "TWO"
19 Gerrard Street, W1
(01) 437 6255 and 734 2257
16T £16 p/h. Cap15. D. R.-R. CP. Mix. R-C.
Ka. (Grand, Roland SH2000 syn. Hammond).
HEART AND SOUL RECORDING

169 Hainautt Rd, E.11. Tet: 558 3344 8T-24T. E8-C18 p/h. p/d NEG, R-R, R-C, CP, Ka, DC, tba, NO O, T, C, AC, SM, £1.15 per

Track.

KONK STUDIOS.
Kinks Production Ltd,
84-86 Tottenham Lane, Hornsey
London NB.
01 340 7873/340 4757
24T. Cap. 36. F40 p/h between 6 after six weekends £6 O.T. p/h. Kneve Necan
Computer, neve Console. D. R-R, 1St. Ka.
RC. Mix. Neve Necan Comp. Mix. (£10 p/h.

MARGRITTE MUSIC 15 Holloway Lane, Hermondeworth, West Drayton. 01 897 9870 167 220 p/h 87 £10 p/h. Cep 12. DC/be. tř. DSX. SM. Ks. R-R-C, eli rates

DC/be, tř. DBX, SM, Ka, R-R-C, ell rates negotiable Fender. Mershell and more available. MAJESTIC STUDIOS

MAJESTIC STUDIOS 146 Clapham High St., London SW4 01 622 1228/9 24T £45p/h Cap 50 46T £65p/h R-R, DBX, CP, OTC £7p/h

MARQUEE STUDIOS
10 Richmond Mews, Deen Street, W1.
437 6731/2
247/167 £44p/h. p/d neg. Cap 35. D. rf. R-R. R-C. d-t. CP. Ka (Steinway) £8p/h. OTC.
MS. S.(Remix & Studio with MC1 500
series automated consoles. Live recording

NOVA SOUND RECORDING STUDIOS LTD.
27-31 Bryanston Street, London WJH 7AB.
Enquiries Pat 01 493 7403
25T. Cap 30. D. R-R. CP. Ka: (Steinway Grand/ R-C. Mix. d-I M. S. Eastlake TM 3T Monitoring, neve 40/12, 32 Mon. MCI 24T., Studer 2T., Neumman, AKG, E. V. 24 HR.

facilities to sjoining Marques Club).

PATHWAY STUDIOS

2A Grosvenor Avenue, London NS
01 359 0970
8T £8 p/h, Cep 6, R-R, CP, R-C d-t.

PAMPORT STUDIOS.

carpark.

115 Thessalv Road, London SWB 01 720 5066 Cap 40 Bam-6pm 16 and 24T £45 p/h 6pm-Bam 16 and 24T £55 p/h flat rate wirends 16T £40 p/h 24T £55 p/h Bank holidays inct. D 6 DBX Bosendorter, Rhodes, Hammonds B3 Q.M.S. rf. R.R. R.C. R.Cr. d+, SM, ba.

REGENT SOUND STUDIOS 4 Denmark St., London WC2 01 836 8789 167 £16 p/h Cap 20 R.R-C OTC, Sound Techniques Desk 18 × 16

ROCK STAR RECORDING STUDIO, 63 Cherlotte Street, London W1. 01 637 0999 16T. 3M machine, Scully mixdown machine, Piete Echo, Revox ADT, Phesing, 16T. Cap. 15 £16 p/h. D. R-R, RC, OTC. M. S. AC, bs. SM.

ROX BOX STUDIOS, 92 Devonshire Roed, Chiswick, W4. 01 670 7821 47. £5p/h. p/d. neg. Cap 7. tf. R-R. R-C. CP. M. S. SM, ba. (Fender, Marshell, HH, Amps). Rehaersel Studios £2.00 p/h. SAY STUDIOS 26 Harrison St., WC1 278 7893 16T £120 p/d 8T £24,50 p/h. DBX. Cap 15, I-F, R-R, CP, Ka, (Piano) R-C, Mix. R-CR, d-f. Q. Ger Park,

SCARF STUDIOS, 24 Furze Street, London E3. 01 987 1561 87, Cap 15. Deys £7.50 p/h. Evenings £8.50 p/h. Over 8 hours 10% discount. if R-R. 1 St. CP. KA, RC, Mix, DC. M. S. BA. SM.

STAGE ONE
14 Sebert Road, Forest Gate E7
(01) 534 5472
16T £13 p/h. (24hr Rec) Cap10. R-R. R-C.
R-CR. D-t. CP. ka. (Acoustic plano,
Wurtlitzer plano, String synth ARP syn) De
MS AC SM



ROCK CITY SOUND STUDIO
Sheperton Studio Centre, Sheperton,
Middlesex.
09328 69531
24T. £40p/h. Cap 20. tf. R-R 1St. CP.
KA. A-C. Mix. d-t. Q. OTC(£5p/h).
M.S.VS. ba. SM.
Trident TSM Desk.
THEATRE PROJECTS SERVICES
LTD.
11-13 Neals Yard. Monmouth Street.
London WC2

London WC2 01 836 1168 Studio A 8T £12p/h and piano Cap 15 (demo tape) Studio B.M.S. £12p/h Cap 6 (voice overs) R-R-C OTC. Studio B 8T £14p/h Cap 6 artistes Ideal for overdubs, mot downs, voice overs. Oubbing suite—sound effects. All transfer facilities available.

T.M.C. RECORDING STUDIO, 118 Mitcham Road, Tooting, London SW17 of 672 4108/8488 24T f30 p/h. D. tf. R-R. CP. Ka. Ř-C. d-t. M. S. OTC. SM. Steinway Piano and Hammond Organ available. Scamp System ADT.

TRIDENT RECORDING STUDIO,
17 St. Anns Court, Wardour Street,
London W1.
01 734 9901
48 and 24 Track E60 p/h.
48 Track mix £85 p/h. No O/T
48T. Cap 30, D. tf. R-R. St. CP. Ka RC. Mix.
Dc. dt. M. S. AC. ba, SM.

MANCHESTER

CSS
Central Sound Studios,
91 St. James Street, Manchester M1 4PH.
061 236 5552
8T. Cap 20 fB p./h. D. tf. R-R. St. CP. Ka.
A-Cr. Mix. OC. dt. M. S. SM. Reduction on
block hookings. Production and publishing

PLUTO STUDIOS 36 Cranby Row, Manchester 001-228 2022 24T, E40 p/h, p/d neg, D.I F. R-R, R-C, R-Cr, Lyrec 24T, Trident series 80 30/24 desk, Studer stereo.

PAUL ROBERTS, 20 Ellesmers Road, Choriton-Curn-Hardy, Manchester, 8T Cep 10 £10 p/h, £75 9 hours, ft. R-R, 1St. CP, RC, Mix, M, S, AC, SM, EMI-BMW Speakers, Allen + Heath Mod-3 Bennell minl BMXR Digital-Detey Custom Bulti-Reverb Qued 405-303 AKG-Bayer mikes full Ludwig set, Gibson 338, Mertin D18 music man beas Fender Strat, Roland guite synth, Layed back interesting environment.

SMILE RECORDING STUDIO, 58 Upper Chorkon Road, Manchester 16, 001 226 5369 contact Steve Foley, 16T. Cap. 20£12 p/h £80 p/d R-R 1St. CP. Ka. RC. Mix. R-Cr. DC. dt. M. S. VS. AC. be. SM. Producer eveilable, refreshments, pool table, pinball. Cadey 16 Track, Revox B77 and A77 record pressig, sleeve and label design.

MIDDLESEX

LANE STUDIO
87 Deans Lene, Edgeware, Middx.
(01) 959 8466
4T/8T fac. £4 p/h Cap8 t-F, R-R, R-C
CP, MS. \$M (tba). No OTC (yellism amps, cassettes avail no ex. charge).

MAGRITTE MUSIC STUDIOS 16 Holloway Lane, Harmondsworth, West Drayton, Middlesex. 01 697 9670

ST2 24T, 16T with full AC. £350 p/d. Cap12. DC. tha. t-F. DBX. SM. R-B. Mix. RC. Fender, Marshall + Avail.

ROCK CITY SOUND STUDIO Sheperton Studio Centre, Sheperton, Middlesex. 09328 66531

24T. £40p/h, Cap 20. tf. R-R 1St. CP. KA. A-C Mix,d-t. Q.OTC(£5p/h), M.S. VS. ba. SM. Trident TSM Desk.

NORFOLK

WHITEHOUSE SOUND, 70 Develor Rd., Easton, Norwich, Norfolk. 0803 880768 8T. Cap 7, tf. R-R, CP, Ka, R-C, Mix, S. AC. SM.

NOTTINGHAMSHIRE

RAINSOW SOUND LTD.
Padraon Buildings, 26/28 St. James Street,
Nottinghes,
0602 412748
67 £8.50 g/h, p/d, bs. Cep 6 ñ-R, R-C, Ks.
d-t, No OTC. M.S. Åc. bs. SM bs. Grand
piano, Syn. string machine full select.
guitars, berious percuesion instruments.
AOT phasing, stereo reverb, expander
getes.

SIN CITY MUSIC OF NOHPONEX LTD. c/o Flat 1, 1 Shirley Road, Mapperley Park, Nottingham. 0602-624666 16T £12.00 p/h, £85.00 p/d (8 hours) 4T £6.00 p/h, £45.00 p/d (8 hours) Further discounts for longer periods. Cap 8 tf; CP, R-R, R-C, D-T, M, S, DBX, Ka. SM & DC ba.

Various instruments and amplification available or by arrangement. New fully Professional Recording Equipment with excellent Accessories and Effects.

OXFORDSHIRE

TELECOMMS STUDIO, 189, London Rd., North End, Portsmouth, Tel: (0705) 60036 16T. Cep 8, E112 p/d. £18 p/h. tf. R-R. R-C. CP, Kai: Mix R-CR. D-t. M. S. SM.

WOODWORMS STUDIO
Cropredy Nr. Banbury
Tel: (029575-424
Specialists in acoustic music.
8T £6 p/h. Lots of extrás. Contact: Dave
Pegg.

SCOTLAND

BLACK GOLD RECORD PRODUCTIONS LTD Solsgirth Studio, Langmuir Road, Kirkintilloch, Glasgow

CASTLE SOUND STUDIO.
The Old School, Park View, Pencaitland,
East Lothian.
0875 340143

16T €22.50 p/h. Cap50. t-F. R-R. C-C, R-C. CP. Ke (Yamaha grand, Hammond organ, ARP syn, Mellotrom, Honky Tonk) D-t, AC.

CRAIGHALL RECORDING STUDIOS 88 Craighill Road, Edinburgh, EH6 4RL, 031 552 3886 157 2279/h, p/d neg, Ö. tf. R-R. R-C. CP. Ka. (Steinway grand, Yamaija String Machine) d-t, Q. OTC (+25% on basic after 6,00pm or Saturdays and Sundays). M. S. SM ba. Ac. ba. (87 Mobile evailable, Prices on resulest.)

SOMERSET

TRIPLE 'M' RECORDINGS, 47 Sedgemoor Road, Bridgwater, Somerset, 0278 55562 37 Mobile Recording Vehicle, Gigs recorded, Demo Work, Record production. £8 p/tl, £50 p/d, R-R, R-C, d-t, CP, SMbe.

SUFFOLK

Octopus Studios: Blacksmiths Cottage: Saxham St. Stowupland: (04492) 76842, 8T. £7.50 p/h or £70 per 14 hr. day. SM Ka (Poly Moog & Pedall t.F. R.R. R.C, CP. Mix. M.S.

SUSSEX

AIRSHIP RECORDING STUDIOS.

1 Argyle Road, Bognor Regis
(0243) 822564

1 Cap6, E7 p/h. t-F. R-C. CP. Ka. R-C. Mix
R-Cr. d-t. MS. A-80 Mastering.

ICC STUDIOS, Silverdale Road, Eastbourne, Sussex. 0323 26134

24T Cap30, £28 p/h, (spec, weekly and daily rates) D. t-F. R-R. CP. Ka. (grand piano, Fender Rhodes, Korg syri) R-C. Mix. AC. MAS. SM.

TYNE & WEAR

GUARDIAN RECORDING STUDIOS 26 Front St. Pity Me, Durham Tel: 0385 62896 24T £21.50p/h £150 p/d 16T £15.50p/h £125p/d CP, DC, AC, NO OTC

WALES

BBC WALES
Stacey Road Studio, c/o Broadcasting
House, LLantrisant Road, Cardiff.
Tel: 0222 493063
16T £20 p/h. 8T £10 p/h. (Block bookings
neg.) CAP 40. D. ff. R-R. R-C. d-t. CP. Ka
(Bechstein Beby Grand, Yameha Electric
Plano, Poland String Symth. Drum Kit,
Electric Organ). Q/bs. OTC + 25%. M.S. fcf.
VS. AC/bs. SM. (Also 22T facility available)

BROOKSIDE RECORDING STUDIO 46 Sandringham, Pen-v-Lén Cardiff (0222) 493284, (0222) 31331 47, Cap & £4.50 p.h. Ka Rc, Mix S.M. CP SM.ba. Acc. ba.

FOEL STUDIO LTD Foel, Llanfair Caereinion Powy's Wales (1933) 882 758573 IGT Capilo E120 p/d tf. R-R. CP. Ka. R-C. Dc. M. S. AC/ba. SM.

ROCKFIELD STUDIOS
Ambarley Court, Rockfield Rd., Monmouth
0800 2449/3825
Studios 1 & 2, 241, 40 Chennel Custom
Built Mixer, Natural Acoustic Echo Room,
Auxiliary equip, to cover all eventualities.
ALSO Acousticelly insulated Rehearest
Studio in 10 Bedroom country house. 1½
milles of fishing evailable. ALL prices on
insullastion only.

WORCESTERSHIRE

THE OLD SMITHY RECORDING STUDIO The Old Smithy, 1 Past Office Lane, Kempsey, Worcester. 0806 820568

24T £29 p/h p/d ba. Cap 35 D. tf. R-R. R-C. Dc. CP. Ka. No OTC, M.S. VS. Ac. SM.

ROOK MUSIC Anglo House, Worcester Road, Stourporton-Severn. Tel: 029 93 77626 87, £10 p/h. Cap 15, tf. R-R, R-C, CP, t-d, M.

W. YORKSHIRE

LEADER SOUND 209 Rochdele Road, Greetland, Halifax, W. Yorks. 04227 8161 8T £8 p/h, Cap 8 D. DBX, R-A. R-C. CP. Ka (Piano), Dc ba, M.S. Ac. SM ba. KEY FÖR STUDIO GUIDE

T Track
Cep Cepacity
p/h per hour
p/d per day
D Dolby
tf Transfer facilities
R-R Reel to Reel
St Number of Studios

CP Copying
tba to be advised
Ke Keyboards evailable
R-C Real to Cartridge
Do Disc Cutting
Comp. Mix
d-t Open

d-t Disc to tape

Q Quad

OTC Overtime charge

M Mono
S Stereo

fcf Fully coated film

VS Video Studio

AC Accommodation
be by arrangement

SM Session Musiciens

O HIREGUIDE O

ACE P.A. HIRE Park House, East-Dulwich, London SE22. 693 1734 P.A. 1,000 watt-500 watt foldback. Graphica - Clark Tecknik, T & C. Di. CM. PA.

ACME P.A. HIRE Willow Bank, Leeds Road, Otley, Yorkshire. 09434 2261 ANDROMEDA SOUND SYSTEMS (IRELAND) 1 Thirtmere Gardena, Belfast, 8T1 55EF 0232 772491

0232 772491 Pa. St. CTM. Sc. T&CME. R, CM. ST.

AXIS SOUND EQUIPMENT 58 Avon Road, Bournemouth, Dorset, 0202 38248 ME, T& C, SL, Sc, Di, CM, PA, R.

BACKUNE EQUIPMENT HIRE 99 Church Road, Barnes, London SW13. 01 741 0891/2565 ME, T& C. Di. CM, PA, R. Specialist in Ampag and acoustic amplification, 24 hour repair service.

BAN ELECTRO MUSIC 89/97 St. John Street. EC1 M4AB. 01-253 9410/9079 ME, T & C. RhR. Ba. St. R. CM.(24 or 16) P.A.

ELECTRO P.A. HIRE. Rectory Lodge, Norton Church Rd., Norton, Sheffield 8. Tel: (0742) 749 739

PILEDRIVER EQUIPMENT HIRE
11 Harrison Gardens, Edinborough 11.
031 337 1071
4K, 4 Way up to 2K F/B Backline. T & C.

EUROPA CONCERT SYSTEMS EUROPA CONCERT SOUND LTD. 11A Sharpleihell Street, London NW1 01 586 3848 PA Militera, T. & C. CTM.

KC LIGHTING & HIRE, 287 Prince Edward Road, South Sheilds, Tyne & West, 0832 653261 - day 567895/569977 - eve. 5. SL. SC. Di. ST. 48 Kw Pyros Strobes and los Machines.

MITREX
95, Oldham Rd.,
Newton-Heath, Manchester
061-205 8093.
5K, 3K, and 1K Rigs with full F/B and crew.
Also lights up to 20K.

METEORLITES PRODUCTIONS LTD., 8 Pinnocks Lane, Baldock, Herts. 0462 892121 Stage lighting hire and sales.

THE LONDON THUNDER CO The Production Village 110 Cricklewood Lane NW2 01-450 8969 ME, TBC, CM, 20 upfront 12/4 stagemix P.A. Contact Paul Samuelson.

OSLA LIGHTING 2 Beadlow Manor Cottages, Beadlow, Shefford, Beds. (0525) 60143 T&C. SC. Di. ST. R.

MUSCLE MUSIC 74 Great Suffolk Street, London SE1 (01) 633 0065 ME, TGC, RhR, SL, CM, CTM, PA, ST, R, THE P. A. COMPANY 7-9 Market Road, London N7 01-607 0087/8 ME. PA. T & C. RHR. Sc. CM. Spec in Yamaha Equip.,

PASE HIRE,
'Upstairs Downstairs', Armley Ridge Road,
Leeds 12.
'0532 632402
ME. T &C. CM. CTM. PA.
Concert Sound for the Stars.
PILEDRIVER EQUIPMENT HIRE
11 Harrison Gerdens, £dinburgh 11.
031 337 1071
4K. 4 Way up to 2K F/B Backline. SL. Di. T & C.
ME. T & C. SL. Di. PA. 16T Channel Mixer
Frunt. MM. Rose Morris.
PAUL TANDY PA AND LIGHTING HIRE
91 Darley Avenue, Choriton, Manchester
M21 2QR.
T9t. 051-881 4505.
ME. TC. RHR. SL. Df. CM. CTM. ST. PA.

MAURICE PLACQUET HIRE 69 Jeddo Rd., London W12 01-749 3232, PA. ME. T & C. RhR. Di, Cm. CTM.

PANTHER SOUND HIRE Block 6/8, The Avon Trading Estate, Avonmore Road, West Kensington, Léndoh W.4. 01-803 4438 Zoot Horn PA to 4000W, Backline ME. Storage, RhR. T & C.

Middleaux. 01-903 6456 T&C. CM. PA. 18 chan, SOUND EXPLORATION SYSTEMS PROTOLOG LTD., 465 Battersea Park Road, London SW11 4IR 01 228 8065/641 3137 T & C. St. Di. CM., PA.

SOUND SERVICES
1/8 Landor Road, London SW9,
01-274 6576 (24 hr. service).
"Probably the best little system in London."
2Kw front of house, 600w of monitors.
TRACTOR MUSIC - K.T. AKOUSTIGS HIRE
Kenion Street, off Drake Street, Rochdele,
Lancachire.
0706 56287
24 hours, contact Chris, P.A. to 15,000
watts, T.& C. SL. Di. 12 and 24 CM, CTM, R.

WHALE AUDIO VISUAL 20 Belmont Park Road, Maidenhead, Berks. 0628 21696 Allen Heath/Martin 28CM (20-channel monitors) PA. SL. (100kW) Y&C. Di.

WIGWAM ACOUSTICS
St Annes House, Ryecrost Avenue,
Heywood, Lancashire.
0706 68766 Contact Mike Spratt
ME: T & C. SL. 24 CM, CTM, R PA to 5000
Watts, 30 into 8/2 mixer. Concert sound for

KEY FOR HIRE COMPANIES

ME Musical Equipment
T&C Transport & Crew
RhR Rehearsal Rooms
SL Stage Lighting
Sc Security
Di Disco
CM Channel Mixer
CTM Concert Tour Menagement
PA Public Address
ST Storage
R Reposits

PASH MUSIC STORES

5 ELGIN CRESCENT (off Portobello Rd) London W112JA

MS10 MS20 Sequence Guitar si Micro pr Vocoder: Stage ed Guitar tu Chromat Quartz gi ACOUS' Guild D2 Guild D2 Guild D4 Guild D3 Guild D4 Guild G3 Guild F1 Ovation Ovation Artist Ovation	234.00	MUSIC MAN COMBOS 1 x 15 100 watt392.00 1 x 12 65 watt with phase340.00 1 x 12 65 watt with switchable distortion340.00 2 x 12 130 watt460.00 2 x 10 130 watt ELECTRIC GUITARS Music Man Sabre 2. 320.00 Guild S70300.00 Music Man Stingray Bass320.00 Guild B302 Bass300.00 Westbury Standard. 135.00 Westbury Standard. 135.00 Westbury De-luxe160.00 Westbury Track II Bass200.00 Westbury Track II Bass200.00 EFFECTS MXR Distortion +39.00
		Bass
Ovation	Electric	EFFECTS
Ovation		MXR Phase 4544.00
Legen Ovation	d	MXR Phase 9090:00 MXR Phase 10090.00
	m Balladeer, 310,00	MXR Flanger 100.00
Cusio	TI Balladeel. 310.00	With Hanger

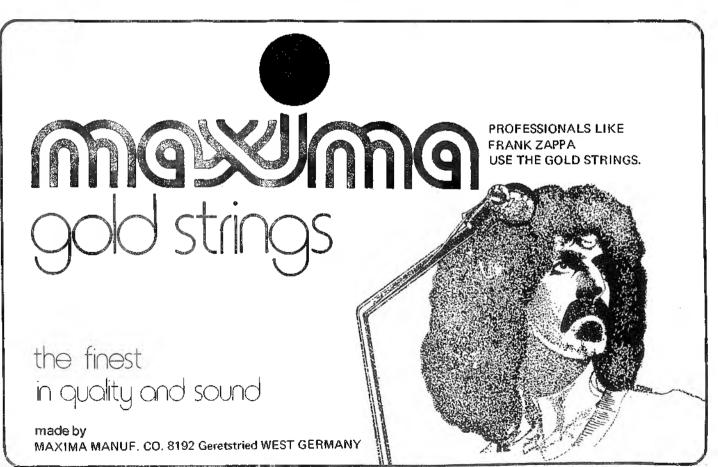
Open 10.30-6.00

PHONE: 01-727 5227

PERCUSSION SERVICES LTD 289-299 BOROUGH HIGH ST LONDON S.E.1 TEL: 01-407 4952/01-403 1056

THE PERCUSSION CENTRE OF EUROPE	
Tama Swing Star 5 drums with stand	C289.25
Tama Royal Star 5 drums with stand	£500.38
Fama Imperial Star 5 drums with stand	£557.82
Premier Resonator 5 drums Trj-lok stand	£649-11
Premier Elite 4 drum	£298 04
Premier ELite Natural wood 8 drums Tri-lok stand	£902.98
Premier Elite 6 drums	€488,52
Gretsch 4 drums undrilled shells black	£458.11
S: H Rogers 4 drums with cases	0345.00
DRUM KIT OFER	
Senor 5 drums with stands	6629.20
Ludwig Maple Bock Machine	£742.32
Ludwig Big Beat	£565, 11
Super Olympic	£247.27
Premier 10 drums	£610.07
Duraline drum heads (egg head)	
Remo Products — Gon Bop — Congas — Bongos — Authentic Brazilian Latin Hand made wooden whistles	Percussion
Full range of top quality cymbals at excellent prices	
New orange bass pedals, chain drive pedals Hi-Hat stands, deadringers (drum hea	d owitters)
Trade and General Public Welcome Please broug this ad with you on your visit Phone Alan or Mick for anymore details	

Can't afford the effects you want? Return this coupon today for the best deal around. To: **Effectomania**, 5 Salterton Rd., London N7 688 Please send me the MXR effects ticked below: ☐ Phase 100; £65 ☐ Noisegate/Line Driver: £37 ☐ Phase 90: £45 ☐ Envelope Fiter: £37 ☐ Phase 45: £35 ☐ Dyna-Compx. £37 ☐ 6-Band graphic: £37 ☐ Distortion Plus: £29 Add £1.60 pGp, insurance & Battery. Allow 3-4 weeks delivery I enclose cheque(P.Q. for £



ROKK 12/2 MINI-MIXER



Maskell Barnes

channel model

MUSIC SERVE LIMITED 51 Station Road, Billingshurst, West Sussex, Billinghurst 3838

CHANNEL FEATURES:

- Line input
- Microphone input
- * Treble E.Q. control
- * Bass E.Q. control
- * Echo send/Foldback
- Panoramic routing control
- * Channel Fader

Professional solid state circuits combined with semimodular construction for maximum reliability and ease of service.

One line input and one microphone input on each channel

Low impedance microphone input allows input leads of up to 50 metres (164ff) length



50 Bancroft, Hitchin, Hertfordshire, Tel-Hitchin 35494

24 TRACK AIR CONDITIONED STUDIO From £29.75 per hour

Accommodates up to approx. 30 musicians Automated Soundcraft 111B 32 x 24 desk Allison Research Computer Studer tape machines Dolby noise reduction throughout Eastlake Monitoring H.H. Mos-Fet amps Neuman, A.K.G.; Sennheiser, Shure, Calrec mikes Programming Technologies "Ecoplate" Digital Delay, Harmoniser, Flanger/Doubler, Noise gates, Compressor Limiters Yamaha Grand Piano/Wurlitzer Electric Piano C.S.10 Synthesiser all free Other instruments available for hire

Accommodation by arrangement. Easy parking. Hitchin is approx. 35 miles by road from London just off Al

(VAT and Tape not included) Tel: Hitchin (0462) 35494 (ask for Dave or Bud) or phone for brochure

ALLENTON ELECTRONICS

Announces the offer of the century. Why because the customer comes out ahead. Yes we actually lose on the deal. Offer is limited until July 10, 1980. We are doing this offer to launch our newest and latest product. Hence actual sale

are during this orier to launch our newest and latest product. Hence seed as sale price is less than our cost.

Standard Jack Lead Tester Checks for OC inner and outer conductors also short circuit by LED display. Special price £4.95 but cut out this advert return with your cheque or money order and you may deduct 50p from advertised price. Don't wait, offer open while stocks last.

Enclose cheque, postal money order.	7 Whinbrush Ave., Derby, Derbyshire					
l enclose £,	Send to:					
Address						
Borr t wait, orier open will a soo						

Why be satisfied with less than the best?
THE PITCHMETER
has no equal for easy, instantaneous and fully
accurate tuning of all types of guitar - including
bridge adjustment
"easy and simple to use"
"more accurate than any
tuning device I know"

"almost essential to any recording studio that wants to have musicians playing in tune... "invaluable when checking guitar intonation and accuracy of fretting

Chris Rogers in IMRW £295 + VAT from CLAVITUNE Ltd 24 Adelaide Square, Windsor, Berks. Tel: 63180

CLASSIFIE!

GUITAR MAKERS AND REPAIR MEN

Our mail order catalogue specialised contains timbers for necks, solid bodies, acoustics etc., finishes, alues. inlay materials. machine heads and a large range of accessories and books on construction.

Send 55p for catalogue. or SAE for details of a complete solid body guitar. Kit for only £75. STRINGS and THINGS 63 Far Gosford St, Coventry

Tel: (0203) 24406



SONGWRITERS

Songwriter Magazine explains copyright royalties, publishing etc., and interviews famous songwriters. Free copy from

INTERNATIONAL SONGWRITERS ASSOCIATION LTD IMRW), Limerick City, Ireland

DRUMMERS - SUBSCRIBE NOW TO SAM ULANO'S DRUM WORLD

PUBLISHED FOUR TIMES PER YEAR

\$8.00 OUTSIDE THE USA — \$6.00 INSIDE THE USA SEND INTERNATIONAL M.O. OR CHECK ON USA BANK TO: SAM ULANO

P.O. BOX 1126, RADIO CITY STATION, N.Y. 10019 THE ONLY PERCUSSION PAPER OF ITS KIND



BOPRACTICE B DRUM KIT

WHY HAVE NOISE PROBLEMS? WHY HAVE NOISE PHOBLEMS 7 Stofflood from property and the second of the second of the second of the second samp in 8 off Southern 84 Connessed Average, Southalf, Mickle, Personal american OT 1578 2908 lag-count DELIVERY ANYWHERE IN THE OK



If you can buy them cheaper we will refund the difference



GRETSCH **DRUM & GUITARS**

For best cash/PX deals, ring the Drum & Guitar Centre

Cambridge 64410

YOUAT

PROFESSIONAL PRODUCTS

See and hear the new luckingham Monitors and XO 5000 Dividing Network, at: AUDIO SERVICES. Dislay, Chashira. Ask for Alan Cheethair Tel: (06632) 2442

COURT ACOUSTICS

For Sale: Brand new Tannoy Eaton £110. Cheviots £120. Also other JBL and Tannoy products. Tel: 01-359 0956

SWAMP SOUNDS SUMMER SPECIAL

5 KW Front .5 KW F/B £700 & VAT per week Including crew & transport for backline, Tel: (0865) 45552

KEYBOARO HIRE 176 BARNSBURY ROAD LONDON, N1 607 8797/8798 - 837 6059 HARPSICHORDS ELECTRIC PIANOS ORGANS SYNTHESIZER AND PRO-GRAMMING GUITARS PERCUSSION ACK LINE EFFECTS TUNING SERVICE

All equipment flight cased it required CALL US FOR A COMPLITIVE QUOTE

SOWTER

Miniature Bridging Transformer Type 4567

Outstanding performance with small size 7 10K/10K for levels up to plus 20d8m Mumetal screening can 33mm diameter 22mm high.

Leaflet with full details on request. P.O. Box 36, Ipswich, England. Tel: (0473) 52794

TELEPHONE ANSWERING MACHINES

Call in from any phone around the world to get your messages.

Also: Automatic Dialers; Cordless Phones; Multi-memory phones; Flip Phones; Zip Phones. Please phone for full list: MICROLINK (01) 455 8208

BOSE 802's

Before buying check our price Pair with EQ \$499.00 + VAT without EQ \$473.00 VAT Contact us for Crown amps/microphones/mixers etc. All at substantial discounts

C.A.V.S. Ltd., 171 Ghase Side Enfield, Middlesex Telephone: 01-565 6125

DRUM WORKSHOP

Recover your own drumkit from £25. New & reconditioned drums, stands, pedals for sale/P.X. Most recovering and repairs done while you 01-985 1344 After 11.30 a.m.

DODEKORION 4T.

R.S.D. 16 inho 4 Oraphic E.g., D.B.X. Revox instruments session musicians available Committed engineers who really know about music for p.h. £35-Bhos. Profits to alternative

Southampton (0703) 583814.



16 Track Studio for facilities for mastering or demos. 2" tape free use of Rogers drums, amps, cabs, keyboards, £13 per hour + VAT. 01-534 5472 (free brochure available)

PUBLICITY STICKERS

31/2 dia. from £30 per 1,000

Metal badges various sizes. Send large SAE for prices etc.. to: PHOTOLITH, 7 South Parade. Doncaster. Tel: (0302) 66345.

FIE BADGES

STILL 10% DISCOUNT 38mm Badges 100 from £16.20 55mm Badges 100 from £17.55 TShirts Posters Artwork

Be Seen-Be Safe Phone Norwich (0603) 52291

WHAT HAVE ALL THESE **FAMOUS** DRUMMERS **GOT IN COMMON?**

Phil Colins, Keef Hardey, Bryson Grehem (Alvin Lee & Spooty Tooth) Grahem Broad (Bandit)

They have all had lessons from: Lloyd Ryan. — Have you? Tet 01-836 4941/874 8619

TEAC 3440 1/4" 4 TRACK NOW IN STOCK - \$750 + VAT

Also complete 4-track package deals - Mixers Amps - Multicores etc Ring for quotation:

SPRINGTIME SOUNDS

MOUNTAIN STUDIOS

Comfortable, accoustically treated, 600 sq ft Studio Farmhouse with 7 bedrooms. lounge, colour TV, Sound System, pintable, TV games, etc.

PA, Backline and 8T Recording Available. Easy access M4. Rehearsal Rate:

£30 per 24 hours £180 per week (self-catering) Catering £5 per person per day

Discount for block bookings Details and Brochure

Tel: (055) 83 301

EARTHBEAT STUDIO

4-track - £6 p.h. Per Day - £35 We work for the musicians, not for millionaires 28 Dartford Avenue, Eccles, Manchester Tel: Manchester (061) 707 2217

COUNTY RECORDING SERVICE

For Super Quality Master Discs, Demo Discs and Pressings. Scully fathe with our latest MKW90 Serec Cutting System; also half-speed cutting for that very special disc. Dotby 'A', Dotby 'B' and DBX noise reduction. Talephone Brecknell (0344164936, London Road, Binfield, Bracknell, Berks RG12 588

Musical Instrument Makers & Repairers largest selection of tonewoods, tools & parts in the country. Callers or mail-order welcome!

Touchstone Tonewoods Ltd, 27 Lesbourne Rd.. Royake Surrey RH2 **7JS**

JAZZ/ROCK **FUSION**

Postal Guitar Tuition Emphasis on Improvisation, Tel: Leeds 689 062



Peter Cook by reputation the best

Custom Built Guitars, Basses and Flight Cases Repairs, Resprays, Refrets, P.V. Rewinds, Circuit Repairs and Modifications. Tel: 01-998 3101.

SCIENTIFIC SERVICES

KENT REPAIRS TO ALL GROUP EQUIPMENT Tel: Folkstone 50145 106 Guildhall Street, Folkestone

Andrew Marson 1. Mariday Villas 2 3 3 -Blackness Road 43 6 Blackness Road Crowborough, Sussex

GEORGE LOWDEN FINE CUSTOM BUILT ACOUSTIC GUITARS TO ORDER ENOUIRIES. 6A HIĞH STREET BANGOR, N. IRELAND (0247) 62981

HONEBONE **ELECTRICAL**

Efficient repairs to all solid: state amplification equipment. One off requirements designed and manufactured. Ring MARK HONEBONE on 01-253 4399 ext. 463

REPAIRS WHILE

WAIT

1 YEAR WARRANTY **AVAILABLE**

A.M. ELECTRONICS **LONDON SW16** Tel: (01) 677 5856

CHRIS ECCLESHALL

GUITARS EST. BUILDERS OF ACOUSTIC, ELECTRIC GUITARS, MANDOLINS AND DUILCIMERS. 17C-17B STATION PARADE. UXBRIDGE ROAD, W5 TEL: (01) 792 4,41

RONA

The best repairs & spares in Еигоре.

We'd need a page to tell you what we stock. Just call us for anything from an Allen key to a Zither 01-240 2610

BUY A GUITAR FROM THE MAKERS! SECOND-HAND AND VINTAGE SPECIALISTS. PROFESSIONAL REPAIR AND REFINISHING SHOPS, HAND-MADE ELEC TRICS, ACOUSTICS, AND BASSES CLUBIC & BANDY'S

BASSES
CHRIS & ANDY'S
GUITAR WORKSHOPS
27 Denmark Street,
London, WC2
Tel: {01} 836 0899 48 High Bridge, Newcastle-on-Tyne Tel: (0632) 27202

Agemus at. Edinburgh (031) 228 1704 Hartlepool (0429) 77111 THE OVERWATER GUITAR CO ALSTON (04983-873)

MELVYN HISCOCK GUITAR BUILDER and REPAIRER 2A CAVENDISH ROAD, CLAPHAM, SW12 Tel: (01) 673 0025

TONEWOODS

For Guitar Makers, Wide range for Acoustic and Electric Guitars. Export, Trade & Amateurs supplied. Free catalogue. A. Highfield & Co., Rosewood House, Bridge Road, Downham Market, Norfolk.

WATT-HALLEY

GUITARS

COMPLETE GUTTAR REPAIR and CUSTOMISING SERVICE. FINE HAND MADE ELECTRIC GUTTARS FROM STOCK OR TO ORDER.

7 River Terrace,
Guardhridge, Fife, Scotland

Tel: Leuchars (033483) 484



RAPPORT

quite simply the best introduction service for intelligent people - all ages, nationwide.

Details:

stamp and age to RAPPORT

Department 2C, PO Box 94, Oxford

ONCE UPON A TIME

Dateline introduced a new concept into the lives of millions of single men and women. Thirteen years on we are more in demand than ever and are happy that we have helped thousands of people, not just through love and marriage, though our success rate is high, but simply through bringing people together and expanding their social lives. Phone us or send for the full remarkable story to:

23 Abinedon Rd. RW cobno 1

MEET NEW FRIENDS IN YOUR AREA.

Free Brochure/List for the unattached, all with no obligation.

SUE CARR. Somerset Villa, Harrogate Yorkshire Tel: (0423) 63525



For all your RECORD MANUFACTURING and PINE) SLEEVE DESIGN/PRINT RECORDS requirements, tel: 01 **388** 57

ALLAN GORDON (Leyton) Special weekday 10-6 and Saturday evening £5.50, weekend 10-6 EB.50 evenings 6 30-11 00 £7 00 Fully equipped rehearsal room available at extra cost containing five amplifiers including H&H lead bass and P.A. Shute miss drum electronism. Shure mics , drum, electric piano 01-520 3706/8642

RECORD & TAPE **EXCHANGE**

LP's and Tapes of every kind bought, and so LP's and Tapes of every kind bought, and sold and exhanged 40 Notting Hill Gate, London W.11. 28 Pembridge Road, Notting Hill Gate, W.11 90 Goldhawk Road, Shepherd's Bush, W.12. TELEPHONE 01-749 2930

VIDEO

£99 per hour



- 2 COLOUR CAMERA SWITCHING
- PLAYBACK/8 TRACK RECORDING
- 10-18k LIT STUDIO

Details Ed Pie, Shepperton Studio Centre (09328) 62688

GUITAR CRAFT

Custom Guitar building kits & accessories, Guitar & bass bodies direct replacements for all models, hand made from the finest quality maple/ash or mahogany, £££'s below retail prices. all models from £45 plus P&D

GUITAR BUILDING KITS

Of rare and unobtainable models '56 Strats, '58 V's, Explorers, Juniors, S.G.'s etc. Original or through neck construction, plus round bowl acoustics, or your individual design, ready fretted and sealed. Simple to finish, from £85 + P.P.

Custom Pick-ups and rewinding service, brass handware, direct from the factory.

Send S.A.E. for brochure to: -Guitarcraft, 185, Westgate Rd., Newcastle-upon-Tyne (0632) 614037

CAN YOU SELL?

In our current expansion programme we are looking for effective sales staff in Reading, Woking, Guildford and Crawley areas. Preferably experienced in demonstrating and selling group gear and accessories. If you can demonstrate, sell, are under 35 and enthusiastic, get in touch for a chat now!

ANDERTONS

Haydon Place, Guildford, Surrey Tel: (0483) 38212

TECHNICAL MANAGER

Loudspeaker Technology East Sussex

Our clients, FOGG LOUDSPEAKER COMPONENTS LTD., of Eastergate are prominent UK manufacturers of Loudspeaker components. Their plans for production expansion require the appointment of additional expertise, and they seek urgently a Technical Manager.

He/she will have relevant experience in the Loudspeaker industry. In addition to quality control and inspection, the Manager will assume responsibility for technical innovations, and will have a major role in technical liaison with customers and potential markets in the UK and overseas.

Salary and benefits will be in accordance with qualifications and experience, and this appointment will afford opportunities for career progression within the expanding and successful UNITECH GROUP.

Please telephone TODAY or write briefly for more details and a career history sheet to:

D Bryan Andrews Associates, Management Selection, St. Martins House, 29 Ludgate Hill, London EC4M 7BQ. Tel: 01-248 8033

SALES MANAGER

c£10,000

+

Volvo

We are a leading manufacturer of top quality sound systems for the music industry and are currently expanding our sales base, both locally and abroad, via specialised outlets.

We are looking for an experienced sales executive, male/female, to take over the sales management in the UK, together with responsibilities in Europe and North America.

The successful applicant will live within easy reach of central London, be aged between 28-38 and have proven ability in this market area.

Rewards are by way of a considerable basic salary of c£10,000 p.a. and discussions will take place on a performance related bonus. Realistic expenses are provided together with a Volvo estate car.

For initial and confidential interview telephone our recruitment consultants on: LONDON (01) 637 0781

CRAWLEY (0293) 514071

BISHOPS STORTFORD (0279) 506464

A T A SELECTION

230 Great Portland Street, London W1

	DOD36		B. C. Rich23
AR	Dynacord	Keio Electronics16, 180	Roost
AD.	DB Elce154	Kemble34, 35	Rose-Morris12-15, 102, 175
		RS Kitchens 60, 86, 87	RSD
	Elka Orla	Klark Technic83	RED
INDEX	Electro-Voice 193		
INLEA	ESS	Leech Musical	Sain126
	Eardey	Services 129	Stage 154
Allenton.,	Eulidion194	Loudwater 199	Schaller
Allen & Heath124	Everyman Music 154	Lowland 120	Schecter3
AKG18	Elliott155, 146	201101101111111111111111111111111111111	Strand Sound114
Aria & Co41	EDC146	Maine Electronics85	September Sound194
Rog Argents179	LDC	Majestic 197	Sesion192
Richard Allen	Farralane 199	Dean Markley103	Shadow 54
Axe154, 84	F.D.H	C.F. Martin174	Shure 8
ABC	FM Acoustic94	Mayfair	Sigma,
Audio Renforcement, 186	Chase E. Foote198	MCI	Sescom
Audio Consoltents 154	Freedmans	Minns	Sisme 70
Addio Consoltants154	Formula 59	Keith Monk	Schnieder
Bell 198	Neil Farragrah136	Morleγ11	Soho Soundhouse, 139
Beyer Dynamic101	Future Film34	MXR	Southside190
1 ' '	Fane 82	Modern Music, 175	Statik71, 133
Brodr Jorgensen, IFC, 191	raileoz	Music Ground, 17	Soundwave6, 7
	Cain 100		
Boozey & Hawks 43	Gain	Music ManIBC	Sound & Stage120
Buzz	Galama	Music Serve	Streetley
Bartolini 120	Galli Corde Musicalli210	Music Shop10	Sunn,,
Cadabaa Cataa	Gigsville	Multivox37, 40	Sewiai 54
Carlsbro Sales	Greenhalgh	November 146	Tanno. 116
Equipment75	Groops	Newton146	Tannoy
Calrec	Guild	DA CE 100	Tour
Carlsbro Sound	A -1	PACE	Traynor Yorkville185
Centres	Adam Hall	Pearl	Transylvania
Canary	Hammond Industries 102	Peavey Electronics170, 107	Turnkey
Celestion International80	Harman (UK) Ltd128	Percussion	140
Cerebrum	Henrits	Petes Gig	Unit 8119
	Hessy	Peters Guitar198	Vox74, 143
Chase Musicians 148, 149	HH Electronic172, 173, 177	Pulsar,	
Clavitune 205	Hill	Peck 155	Vitavox
Clef	James How Rotosound158		107
Cleartone OBC	James How Superwound78	Quest 154	Wave Sound187
	Honkeγ151, 100	Proceeded 1	Woodroff
Covemain	1794.4	Randall	Western Organs, 151
J. T. Coppock57	ITA		أمما
	IPC 172	Regal205	Yamaha , 129
Di Tapes89	100	REW88, 89	-n
DiMarzio	JPS 142	Rhythm House194	Zildjian 184
<u> </u>		· · · · · · · · · · · · · · · · · · ·	

COMPLETE STUDIO FOR SALE BRAND NEW EQUIPMENT - FULL STUDIO ENVIRONMENT DEMONSTRATIONS BUT MORE IMPORTANT TO YOU "THE MOST COMPETITIVE PRICES AND TERMS TO BE FOUND ANYWHERE" (H.P. AVAILABLE)

TAPE MACHINES Brenell Mini 8 Multitrack — Teac 3440S — the latest A.S.C. 2 track stereo, recently acclaimed the most versatile prospec reel-to-real. (Remotes & Vari Speeds) (Remotes & Vari Speeds)
MIXERS by Allen & Heath Mod III 16-8-16 and SD 12.2 SPEAKERS the latest Tannov super reds — Lockwood Majors AMPS Quad Turner and

MIXERS by Allen & Heath Mod III 16:8-16 and SD 12.4 and and SD 13.4 and and SD 13.4 and SD



COMPLETE P.A. RIG FOR SALE BRAND NEW EQUIPMENT - WARRANTY - READY FOR THE ROAD - NO HIDDEN EXTRAS. PLEASE COMPARE OUR PRICES FOR A FEW ITEMS SELECTED FROM STOCK

			· · · · · · · · · · · · · · · · · ·			
EV Jumbo Bass Bins	(Combination Mobile P.A. Amp. Consisting of	rft –		
200w folded horn + heavy duty wheels + hard fibre case	£1100.00	Our Price 2599.00 Plus VAT	1 x Turner B502 Power amp 2 x Turner B302 Power amp Canary x-over in air cooled heavy duty wheeled flight case	$\left\{ \right.$	Retail £1560-00 and, VAT	Our Price £975.00 Plus VAT
EV Jumbo High End 200w horn stack + hard fibre case	£1080.00	Our Price 5599.00 Plus VAT	Yamaha G100 instrument amp with Yamaha 4x12" (4125) speaker in light hard covers	{	Retail £620.00 incl. VAT	Our Price £320.00 Plus VAT

MANY MANY OTHER BARGAINS - IN STOCK - DISCO EQUIPMENT - MIC STANDS

Contact Alan Cheetham AUDIO SERVICES 25 South Meadway High Lane Stockport, Tel: Disley (06632) 2442

वातिव

Just available. Cerebrum's new catalogue of package lighting systems. Six specially selected, all-in, balanced systems. Whatever you play, be it heavy-metal, mod or Mozart, whether you play large or small gigs, there's one just the right size and price r the road. fór you. Today the public expects professional presentation so it's dangerous to rely on what the venue has or hasn't to make the most of your act. Contact us for your copy of 'One for the Road' CEREBRU **CEREBRUM** and see what the specialist lighting and stage effects company has to offer. Cerebrum Lighting (Sales and Hire) Limited, 168 Chiltern Drive, Surbiton, Surrey KT5 8LS, England, Telephone: 01-390 0051 Please send me my copy of 'One for the Road' I am interested in your other stage effects equipment Address

Art.	SELECT GAUGES	DIAMETERS				,	
	1	2	3	4	5	6	
N. PHB 10	Extra light	010	014	023	030	039	047
N. PHB 20	Light	012	016	024	032	042	053
N. PHB 30	Medium	013	017	026	035	045	056



PHOSPHOROUS BRONZE STRINGS

Strings in phosphorous bronze produce a brilliant and lively sound and a better harmony. These strings have surpassed other types because each winding of phosphorous bronze wire is subject to a special treatment. We have found that this special treatment gives the strings a better flexibility and an excellent durability. It is a fact, phosphorous bronze strings, wound with other alloys last longer,

Here it is! the string you have been looking for for years, studied and perfected by Galli tecnicians to give your guitar a revolutionary sound. Take our word, the Galli PHB is the string for tomorrow. Remember

that our experience in the field of guitars is always at your service. SURNAME **PROFESSIONIST O** PUPIL O **AMATEUR O** INSTRUMENT YOU USE AND MARK OACOUSTIC Guitar O Classic Guitar O Bass Guitar O Electric Guitar O 12 String Guitar STRINGS ACTUALLY USED **ADDRESS** PLEASE DRAW UP THE CARD SO THAT WE CAN SEND YOU SAMPLES OF OUR STRINGS. DITTA GALLI P.O. BOX, 2177 A.D. 80143 NAPLES (ITALY) Tel. (081) 7590029 - 7596760 - TELEX: GALLI - 73227



LARK

LARR

BE POTTERFUL, PORTABLE PARK MIXER/PA

A Plember of the Marshall Group of Companies, 7 Dewson Road, Mount Form, Miller Keynes, MK1 1Ut. Tel: 0908-71662