Stereo Review

A Stereo Review Forum: sixteen industry experts discuss WHAT MAKES A GOOD PHONO CARTRIDGE

The Buyer's Shorter Guide to **PHONO-CARTRIDGE SHOPPING**

CBS' NEW "CX" ENCODED DISC An end run around digital?

EQUIPMENT TEST REPORTS

- Benjamin Model 4100 Automatic Turntable
- Harman Kardon hk300XM Cassette Deck
- KEF Model 103.2 Speaker System
- Pioneer A-8 Integrated Amplifier and F-7 AM/FM Stereo Tuner
- Yamaha R-700 AM/FM Stereo Receiver

DISC SPECIALS

Phoebe Snow • Ellen Foley
Clarke/Duke Project • V.S.O.P.
Dave Edmunds • Sophisticated Ladies

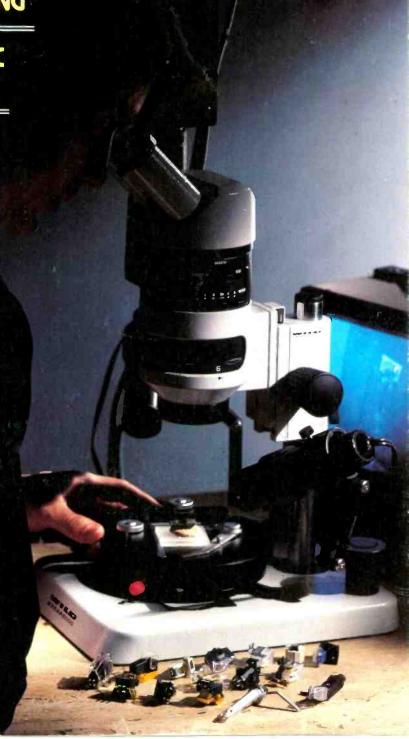
ROSSINI: L'Italiana in Algeri

BARTÓK: Piano Concertos Nos. 2 and 3

DELIUS: *The Magic Fountain* MAHLER: Two New Tenths

м оквисе ил **0.1025** S2 МЕ*г*гин ив ZEIH ивкег Öl

200720 1KE DOS2MO31 1411 NCA83





Pioneer goes beyond state of the art electronics to make a major new contribution in human engineering.

In the past 40 years Pioneer has vour antenna for the made countless contributions to the state of the art in High Fidelity. Now Pioneer is introducing new components that actually restate the art. We call it High Fidelity for Humans.

This year to a list of audible innovations and incredible specifications we have added human engineering features that give the owner of our equipment a new ability to control it and the quality of the sound it produces.

For example, Pioneer's new CT-9R, three direct drive Time Remaining Counter with a digital readout that shows you how much recording time is left on a tape. So you won't run out of tape before running out of music. There's also an Index Scan feature that previews a tape by playing the first five seconds of each piece of music.

And to give the CT-9R an

incredible signal-to-noise ratio with extended high frequency response, Pioneer's engineers developed RIB-BON SENDUST tape heads with laminations 4 to 5 times thinner than conventional Sendust heads. And only Pioneer has them.

Our new Quartz Synthesized F-9 Tuner has a Multipath Indicator that goes so far as to tell you when a signal is being reflected off nearby objects or buildings. So you

The same of the

can adjust

best reception. It can also memorize six of your favorite FM and six AM stations and retrieve them instantly. And to make

sure every one always sounds its best, our engineers combined two of our exclusive ID MOSFET transistors in a Push-Pull Front End circuit. When you tune in a weak station there's no worry about stronger stations causing distortion

Pioneer's new components advances to high fidelity.

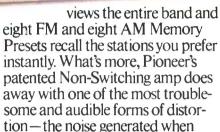


due to front end overload. And Quartz-PLL Synthesized tuning makes drift impossible.

Unique features on the new Pioneer A-9 Integrated Amp include a Subsonic Indicator. It lights up only when you need to use the Subsonic Filter to get rid of very low frequency interference caused by record warps and such. Inside, a new DC Servo circuit eliminates all capacitors from the signal path so they can't muddy up the signal.

> That gives you a purer signal with superb definition. Pioneer's SX-7 Receiver brings you precise electronic control of most functions includ-

ing volume. The Auto Station Scan control pre-



output transistors switch on and off thousands of times a second.

Our new top-of-the-line turntable, the Linear Tracking PL-L800 is another feat of human engineering. It features a linear motor that drives the

tonearm across the track by electromagnetic repulsion -another Pioneer innovation. So it's extraordinarily quiet with no noisy belts. worm gears or pulleys and tracking error is virtually non-existent. The tonearm

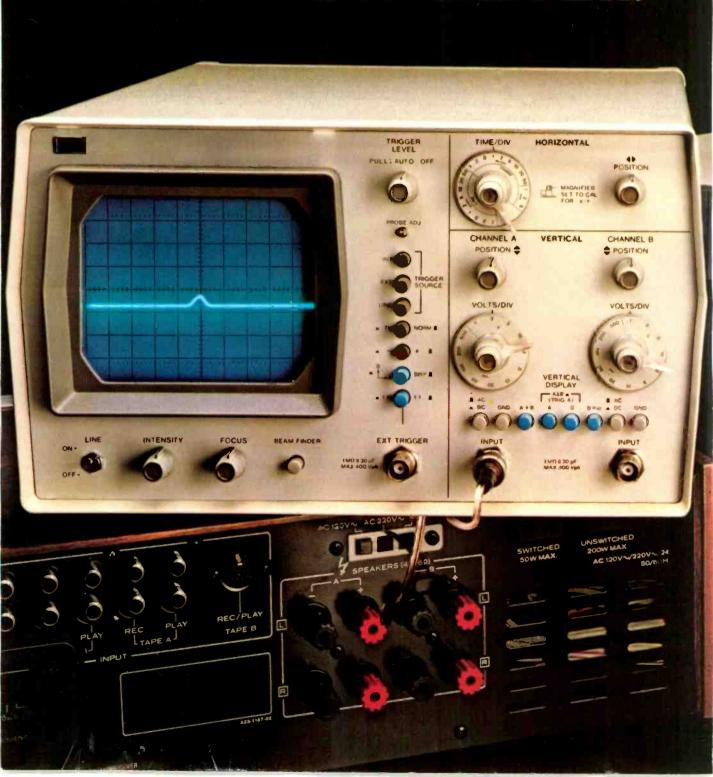
itself is made of Polymer Graphite —an amazing material that dampens resonance. And there's a coaxial suspension system that isolates the platter and tonearm assembly. These features combine to keep what's going on in the room around the turntable from becoming part of the music.

And all this is just the beginning. While the Pioneer concept of human engineering makes our components a pleasure to live with, Pioneer's innovative electronics and technology make them a pleasure to listen to. If you'd like to hear more, visit your nearby Pioneer dealer. You'll see and hear why Pioneer components are #1 with humans who care about music. (I) PIONEER

CIRCLE NO. 44 ON READER SERVICE CARD

WE BRING IT BACK ALIVE

EVERY YEAR, HI-FI COMPANIES MAKE MINOR IMPROVEMENTS IN THE STATE OF THE ART.







"May your father borrow your vehicle tonight sir...seeing as it has the Jensen?"

The Jensen R406 AM/FM stereo cassette receiver.

Jensen receivers have brought an exceptional

level of high fidelity to car stereo. Not just with advanced features, but with truly fine specs and, of course,

terrific sound.

The R406 AM/FM Sterec/ Cassette receiver has the convenience of 5 station, push button tuning. And it has an auto reverse tape system that lets you instantly play the other side of a cassette, or after rewinding, it will automatically play the same side again.

But it's those features that affect sound performance that make the R406, along with all the other fine Jensen receivers, impressive. Features like Auto High Blend circuitry. It's a special IC that automatically ad-

special IC that automatically adjusts the high frequency separation when FM stereo reception

SOUND LABORATORIES

AN ESMARK COMPANY

conditions are poor. So even in low intensity areas you're able to get clearer, sharper music with less interference.

And the R406 has a host of other sophisticated refinements such as loudness compensation to improve bass at low volumes. FM interstation muting. And separate controls to fine tune treble and bass.

Jensen has a wide selection of car stereo receivers that offer you many of the advantages of home hi-fi component systems. You can select engineering advances like electronic switching, bi-amplification and Dolby[®] noise reduction.

So listen to the full line of Jensen receivers. There's one with just the right

features anc, more importantly, just the right sound to move you.

® "Dolby" and Dolby System" are trademarks of Dolby Laboratories, Inc.

When it's the sound that moves you.

© 198), Jensen Sound Laboratories, Schiller Park, Illinois 60176.

JULY 1981 • VOLUME 46 • NUMBER 7

	he Eq	uipment ————	
NEW PRODUCTS			
Roundup of the latest audio equipment a	nd accessori	es	12
AUDIO/VIDEO NEWS CBS' New "CX" Encoded Disc	*******************		18
AUDIO OUESTIONS AND ANSWEI	RS	rnal TV SpeakerLARRY KLEIN	
TAPE TALK		'sCRAIG STARK	
TECHNICAL TALK		JULIAN D. HIRSCH	
EQUIPMENT TEST REPORTS Hirsch-Houck Laboratories test results of Pioneer A-8 integrated amplifier and F-7 hk300XM cassette deck, KEF Model 103.	n the Benjan AM/FM ste 2 speaker st	nin Model 4100 automatic turntable. reo tuner, Harman Kardon vstem.	
		JULIAN D. HIRSCH	32
THE SHORTER GUIDE TO CARTR Suitability for your audio system should	IDGE SHO	OPPING riterion PETER MITCHELL	58
WHAT MAKES A GOOD PHONO C	ARTRIDG		
		Music ———	
BEST RECORDINGS OF THE MON	TH		
Rossini: L'Italiana in Algeri	70	Bach: Goldberg Variations	
Phoebe Snow: "Rock Away"	72	"The Clarke/Duke Project"	74
Ellen Foley: "Spirit of St. Louis"		Bartók: Piano Concertos Nos. 2 and 3	
CLASSICAL MUSIC			
Bartók: Concerto for Orchestra Delius: The Magic Fountain		Mahler: Symphony No. 10 (twice)	86
		Mozari: Idomeneo	
POPULAR MUSIC			
Duke Ellington: Sophisticated Ladies Champaign: "How Bout Us"	94	Rex Harrison: "Accustomed to Her Face"	
Lisa Gilkyson: "Love from the Heart"	98	Trapezoid and Figgy DuffV.S.O.P.: "Live Under the Sky"	110
Dave Edmunds: "Twangin"	100	and the sky	110
c c	ec co		
	me Re	egulars ————	
BULLETIN		WILLIAM LIVINGSTONE	5
SPEAKING OF MUSIC		WILLIAM ANDERSON	6
GOING ON RECORD		JAMES GOODFRIEND	8
INSTALLATION OF THE MONTH		JAMES GOODFRIEND	57
ADVERTISERS' INDEX		NOBERT OREENE	110

COVER: Design by Borys Patchowsky; photo by Bruce Pendleton. (Wild M5A Stereomicroscope courtesy E. Leitz, Inc., Rockleigh, N.J.)

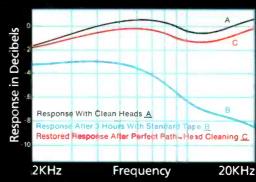
COPYRIGHT © 1981 BY ZIFF-DAVIS PUBLISHING COMPANY. All rights reserved. Stereo Review, July 1981, Volume 46, Number 7. Published monthly by Ziff-Davis Publishing Company. Editorial and Executive Offices at One Park Avenue, New York, New York 10016; Telephone: 212 725-3500. Philip B. Korsant, President; Albert S. Traina, Vice President; Selwyn Taubman. Treasurer, Bertram A. Abrams, Secretary. Also publishers of Backpacker, Boating, Car and Driver, Cycle, Fly Fisherman, Flying, Popular Electronics, Popular Photography, Psychology Today, Skiing, Stereo Directory, and Tape Recording & Buying Guide. One-year subscription rate for the United States and its possessions. \$9.98; Canada, \$10.98. All other countries, one-year subscription rate \$14.98, cash orders only, payable

in U.S. currency. Second-class postage paid at New York, N.Y. 10016 and at additional mailing offices. Authorized as second-class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash. SUB-SCRIPTION SERVICE: Forms 3579 and all subscription correspondence should be addressed to Stereo Review, Circulation Department, P.O. Box 2771, Boulder, Colorado 80302. Please allow at least eight weeks for change of address. Include old address as well as new—enclosing if possible an address label from a recent issue. PERMISSIONS: Material in this publication may not be reproduced in any form without permission. Requests for permission should be directed to John Babcock, Rights and Permissions, Ziff-Davis Publishing Company, One Park Avenue, New York, New York 10016.



The Perfect Path Difference:

- "Cleaning contact" is made along the total tape path including guides and heads, normally untouched by wiper cleaners.
- Perfect Path cleans without alcohol or freon. It will not extract and age pinch rollers.
- Perfect Path simultaneously cleans tape heads while removing debris from along the tape path.
- Perfect Path's cleaning fiber grid is non-abrasive. Even after hundreds of passes, it will not scratch heads.
- Perfect Path restores high frequency "air" and transient response of cassette recordings.



Playback accuracy of a calibrated test tape. Note that after only three hours' play, high trequency response is reduced by as much as 10 dB. One cleaning with the Perfect Path Head Cleaner restores the highs to within 1 dB of the original response.

discwasher* PERFECT PATH.

Discwasher, Inc., 1407 N. Providence Rd., Columbia, MO 65201 CIRCLE NO. 16 ON READER SERVICE CARD



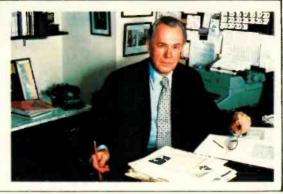
Edited by William Livingstone

- MICRO CASSETTE DECKS with Dolby HX systems and metal-tape capability are in the works in Japan and may reach the United States market as early as this fall. Many major manufacturers of audio equipment are considering the format very seriously. Good as some of the specs for these new units may be, they do not yet reach the standard set by full-size cassettes. Scoffers should remember, however, that few people thought the standard cassette could ever attain hi-fi quality.
- NPR'S ACCLAIMED JAZZ ALIVE! SERIES has received the 1980 Peabody Award for Entertainment in recognition of "most distinguished and meritorious public service." The winning show was "The Jazzmobile Sunday Festival," a four-hour live special featuring the N.Y. Jazzmobile founded by Dr. Billy Taylor. First aired last fall, this winning program will be rebroadcast by NPR member stations in July. Dates will vary, so check local stations. Dr. Taylor, best known as a composer and pianist, has received NPR's Edward Elson Distinguished Service Award for his contributions to the growth and development of National Public Radio.
- ◆ THE CANADIAN MUSIC COUNCIL'S AWARD for outstanding contributions to the cultural life of Canada went to Glenn Gould this year. His CBS Masterworks recording of Bach's Preludes, Fugues, and Fughettas (M 35891), released in the U.S. last fall, won the Council's award for the best recording by a Canadian artist for a non-Canadian record company. For other awards see Classical Music Briefs, page 76.
- THE NEWPORT JAZZ FESTIVAL, founded in Newport, R.I., in 1953, became the world's most famous festival of its kind, and in 1972, when it was moved to New York City, the old name was retained. Scheduled to run this year from June 25 to July 5 and featuring such artists as Ella Fitzgerald, Mel Tormé, Sarah Vaughan, Weather Report, Chick Corea, and Dizzy Gillespie, the festival is changing its name to the Kool Jazz Festival -- New York.

- COUNTERFEITERS of Jensen car-stereo speakers and importers and sellers of Jensen "look-alike" speakers are being sued by Jensen Sound Laboratories, of Schiller Park, Illinois. The company is also seeking the aid of the United States Department of Commerce and the Taiwanese government to protect its name and the rights of the legitimate dealers in Jensen products. Most of the defendants in the first of these suits filed in U.S. Federal Court are companies on the West Coast, but there is one in Texas, one in Pennsylvania.
- ◆ THE AMADEUS QUARTET honored Mozart by taking his middle name when the group was formed thirty-odd years ago. We have just learned that members of the quartet, which has sold more than two million records on the Deutsche Grammophon label, refer to themselves privately as the Wolf Gang.
- "LIVE AT THE RITZ," the first album by the Rockats, a new-wave rockabilly group, was produced with a speed that Island Records claims is a first for the industry. By designing the jacket in advance and mixing the master tape in the sound truck during the concert, Island aimed to have a limited edition of 5,000 on the street forty-eight hours later. The regular edition was scheduled for the end of June. Speed seemed appropriate to the boys in the band. "We perform best under the pressure of a live concert," said one member. "Besides, our music is fast."
- GIAN-CARLO MENOTTI'S 70TH BIRTHDAY celebrations at the Spoleto Festival in Charleston, S.C., are the subject of a telecast to be seen on PBS July 22. The show is one of a series of ten on the festival, founded by Menotti, that air on most PBS stations Wednesday nights from June 3 to August 5. Also on PBS this month in Exxon's Great Performances series are Mahler's Ninth Symphony with the Vienna Philharmonic conducted by Leonard Bernstein (July 6) and Puccini's Tosca with Raina Kabaivanska, Placido Domingo, and Sherrill Milnes (July 27). Check local listings for time.

Speaking of Music...

By William Anderson



CHINESE TRADE GOODS

SOME few years ago, when former President Nixon parted the Bamboo Curtain behind which the Chinese retired after World War II, among the first trade goods to reach this shore was a recording of a comically eclectic, thoroughly occidental piano concerto (see "Way Down upon the Yellow River" in April 1974 STEREO RE-VIEW or pick up a copy of RCA ARL1-0415 if you can) which offered convincing evidence that China was not as completely closed to Western influences as we had been led to believe. Unfairly roasted by a few critics for having profaned Red Seal with meretricious tomfoolery, RCA evidently decided not to return to the same well, and it was left to CBS to enter into negotiations with the China Record Company last year to arrange another entente musicale.

I don't know what we've sent them, but they have sent us "Phases of the Moon" (CBS M 36705, inaccurately subtitled "Traditional Chinese Music"), a collection that considerably broadens our perspective on the Chinese recording industry. The sound is (largely) in perfectly adequate stereo, and since the music is played by a cross section of well-connected forces (the Traditional Instruments Orchestra of the Central Conservatory, the Shanghai Philharmonic Society, Peking Opera Theatre of Shanghai, etc.), it permits us to assess the performance level—impressively high—of some of China's more important ensembles.

The unifying theme of the sampler is "moonlight," but to my ears the contents break down into two mutually exclusive categories: the music of metropolitan, West-

ern-influenced China (the Peking/Shanghai axis) and the music of some of the country's many ethnic minorities. The metropolitan music (The Moon Mirrored in the Pool, The Moon on High, Spring on a Moonlit River) is largely contemporary and of the plucked-string kind we take to be "typically" Chinese—probably because the plaintive whine of its melodic style was for years successfully imitated in the background music for any number of Hollywood's Shanghai gestures. There is also the martial Days of Emancipation, a piece of Socialist Realism to remind us subtly that China is one of those countries where the clever become trimmers and the principled dead or silent, where prize-winning concert pianists have their arms broken for entertaining Bad Thoughts.

The ethnic music, however, is quite another bowl of rice. Like all good folk music, it reminds us of other folk, and I take that to be a measure of its authenticity, tarted up though it may be. Dance of the Yao People, which sounds like a balalaika orchestra, and Spring on the Panir Plateau, featuring a fabulous flute solo, are highly recommended. Tashwayi sounds like a Middle Eastern belly dance, Purple Bamboo like a fiddle-led hoedown, and Axi Jump Moon is surely an unknown Copland ballet score. If there are more sounds like these available, CBS should grab them fast before such minority expressions go the way of Tibet.

The jacket notes innocently include a poem written in 816 (yes) by Bo Juyi, one of China's greatest poets. It contains this astonishing passage: "I came, a year ago, away from the capital/And am now a sick exile here in Kiu-kiang/And so remote is Kiu-kiang that I have heard no music/Neither string nor bamboo, for a whole year." That might have been written by some rusticated Chinese intellectual only yesterday. China is still China.

Stereo Review

PUBLISHING DIRECTOR
SIDNEY HOLTZ
EDITOR IN CHIEF
WILLIAM ANDERSON
EXECUTIVE EDITOR
WILLIAM LIVINGSTONE
MANAGING EDITOR
LOUISE GOOCH BOUNDAS
ART DIRECTOR
BORYS PATCHOWSKY

TECHNICAL DIRECTOR LARRY KLEIN ASSOCIATE TECHNICAL EDITORS ROBERT GREENE, DAVID RANADA

MUSIC EDITOR
JAMES GOODFRIEND
POPULAR MUSIC EDITOR
PAULETTE WEISS
SPECIAL PROJECTS EDITOR
STEVE SIMELS

ASSOCIATE EDITOR
DAVID STEIN
ASSISTANT EDITOR, RESEARCH
RICHARD SARBIN
EDITORIAL ASSISTANTS
BARBARA AIKEN, SHEILA DWYER

LONDON EDITOR HENRY PLEASANTS CONTRIBUTING EDITORS

CHRIS ALBERTSON
IRV COHN
NOEL COPPAGE
RICHARD FREED
PHYL GARLAND
DAVID HALL
JULIAN D. HIRSCH
GEORGE JELLINEK
IGOR KIPNIS
IRVING KOLODIN

PAUL KRESH STODDARD LINCOLN RICK MITZ LINCOLN PERRY PETER REILLY EBET ROBERTS CHARLES RODRIGUES ERIC SALZMAN CRAIG STARK JOEL VANCE

ASSISTANT TO THE PUBLISHING DIRECTOR PEARL HARRINGTON

ASSOCIATE PUBLISHER ROBERT JOHN UR, SR.

PROMOTION COORDINATOR OLIVIA WILSON

Editorial and Executive Offices: 212 725-3500 Ziff-Davis Publishing Company One Park Avenue, New York, New York 10016 National Advertlsing Manager: Richard J. Halpern Eastern Advertising Representative: Charles L. P. Watson

Midwestern Office, The Pattis Group: 312 679-t100 4761 West Touhy Ave., Lincolnwood, Illinois 60646 Arnold S. Hoffman

Western Office: 213 387-2100 3460 Wilshire Boulevard Los Angeles, California 90010 Western Advertising Manager: Shelley Lewis

Japan: James Yagi Oji Palace Aoyama, 6-25, Minami Aoyama 6-Chome, Minato-ku, Tokyo, Japan Telephone: 407-1930/6821, 582-2851 Circulation Office P.O. Box 2771, Boulder, Colorado 80302

EDITORIAL CONTRIBUTIONS must be accompanied by return postage and will be handled with reasonable care; however, publisher assumes no responsibility for the return or safety of art work, photography, or manuscripts.

Member Audit Bureau of Circulations





ZIFF-DAVIS PUBLISHING COMPANY President: Philip B. Korsant Senior Vice Presidents: Richard Erle

Senior Vice Presidents: Richard Friese, Phillip T. Heffernan, Sidney Holtz, Edward D. Muhlfeld, Phillp Sine, Albert S. Traina

Vice Presidents: Robert Bayler, Paul Chook (Research), Baird Dayls (Production), Edgar W. Hopper (Marketing), George Morrissey

Treasurer: Selwyn Taubman Secretary: Bertram A. Abrams

Vice Chairman: W. Bradford Briggs

ZIFF CORPORATION
Chairman: William Ziff
President: I. Martin Pompadur
Executive Vice President: Hershel B. Sarbin
Vice Presidents: Furman Hebb, Bruce Maggin,
Lawrence Sporn

Today, only one high bias tape is able to combine outstanding sensitivity in the critical high requency range with the lowest background noise of any oxide tape in the world.

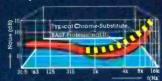
That tape s BASF's Professiona II.

Professior al II is like no other tape because it's made like no other tape. While ordinary high bias tapes are made from modfied particles of terric oxide, Professional II is made of pure chromium dioxide. These perfectly shaped and uniformly sized particles provide a magnetic medium that not only delivers an absolute minimum of background noise, but outstanding high frequencies as well.

Like all BASF tapes, Professional II comes encased in the new ultra-precision cassette shell for perfect alignment, smooth, even

movement and consistent high fidel ty reproduction.

With Professional II, you'll hear all of the music and none of the tape. And isn't that what you want in atape?



The ditterence in noise level between PRO II and ordinary high bias tape is greatest where the human ear is most sensitive (2.6 kHz).

GUARANTEE All BASF tape cassettes

life-lime guarantee. Should any BASF cassette ever fail—except for abuse or mist and ling—simply return it to BASF for a free replacement.

Mobile Fidelity Sound Lab.

Mobile Fidelity Sound Lab.
BASF Protessional II is so superior II was chosen by Mobile Fidelity Sound Lab for their Original Master Recording "High Fidelity Cassettes These state o'the-art prersonded cassettes are duplicated in real Ime (11) from the original recording stude master tapes of some of the most prominent recording artists of our time.





For the best recordings you'll ever make.

Le Cube.



The ALLISON:SIX™ is our smallest loudspeaker system. It is an 11-inch cube incorporating the Allison' Room-Matched* design principle. While compact, the model Six is not a "mini" system in any sense. Its low-frequency output is flat to below 50 Hz with reasonable system efficiency. The highest audible frequencies are reproduced smoothly and dispersed uniformly by the same convex-diaphragm tweeter used in the most expensive Allison models. Allison Sixes are accurate, full-range loudspeaker systems, without allowance for size or price.

Revue du Son, in a feature review,* said "La 'petite' Allison Six est une grande enceinte [loudspeaker].

Full-range performance is possible from loudspeakers that can be used as bookends on an open shelf. The Allison Six costs \$160 with walnut grained vinyl cabinet and \$172 in black or white lacquer.

Descriptive literature, including complete specifications, is available on request.

For literature and information call (800) 225-4791 [in MA (617) 237-2670] or send coupon.

*Revue du Son, No. 32 (November, 1979)



LLISON Seven Tech Circle/Natick, MA 01760, U.S.A.

Name			
Address			
City	State	Zin	



TERS TO THE E

Christopher Cross

 I find it most amusing that Steve Simels can hold himself out as a record reviewer after his comments in May on Christopher Cross, especially since the album has gone platinum and Cross won five Grammy awards with his "bantamweight" talent. It is obvious that a lot of people do not agree with Mr. Simels or the album would not have achieved the success it has

> BILL WENDLANDT Austin, Tex.

Steve Simels replies: Mammoth sales have nothing to do with musical quality. Proof? How about Three Little Fishes, The Hut-Sut Song, Mairzy Doats, and A-Tisket A-Tasket of unforgettable memory?

• I am very sure that someone has asked these questions before, but who is Christopher Cross? Where did he come from (what prior group, if any)? And how long has he been performing?

> VINCENT R. BOWLES Philadelphia, Pa.

Christopher Cross sang and played guitar with the Flash, a San Antonio-based band, in the early Seventies, leaving in 1973 to work on his own material. He pulled together the core members of his current group in Austin, Texas, and after countless local gigs doing covers of current hits and golden oldies, they recorded a demo tape of original material by Cross. The band then showcased the songs at the Alamo Roadhouse in Austin on Halloween night 1978. Representatives of Warner Bros. Records were in the audience, and three months later Christopher Cross and Co. had a contract with the label. In other words, just your average overnight-success story.

The Clash

 Ha! I got Simels! It's "Sandinista!" with an i, not "Sandanista!" But despite that, the review in the May issue was good. The Clash is one of the few bands left that challenge themselves and their listeners; any band this exciting has earned the right to dispense with editors. They, like (Mis)Spellin' Steve, are usually on the mark.

ED JANUSZ Brick Township, N.J.

SIARE Postscript

 We do not disagree with Julian Hirsch's findings in his test of the SIARE Delta 400 speaker system (May 1981 STEREO RE-VIEW), but by now all the Deltas in dealers' stocks will have had their woofers replaced with improved, low-distortion drivers, and all future production will incorporate this revision. Anyone who has previously purchased Delta 400s need only write to us with proof of purchase, and we will arrange to have the improved woofers installed at no charge. The new drivers will provide distortion measurements of the caliber printed in our new literature rather than at the level Mr. Hirsch measured in his early samples.

ED MAIDEL, Vice President SIARE Corp. 80 13th Avenue Ronkonkoma, N.Y. 11779

P. D. Q. Bach

 I read Eric Salzman's critique of Schickele's new Bachisch endeavor. I thought it was truly unique and furthermore downright clever.

One question remains on my mind, though,

and I hope that the editor will still it. It's whether Herr Salzman was fer it, or whether the good gent was agin it. HAL GRANHOLM

Pownal, Maine

How's that agin?

Japanese Broadcasting

• I have spent quite a bit of time in Japan since 1958, and I have read with great inter-(Continued on page 10)

ALLYOU HAVE TO DO IS LISTEN.

THE SANSUI 900 SUPER SYSTEM.

Just listen.

Your ears will tell you immediately. Here is sound that's just about as good as it gets. And your eyes will tell you here's styling that's a cut above the rest.

But best of all, here is a senslbly priced complete system of high performance separates that is as easy to use as it is to buy.

All you have to do is plug it in — and enjoy.

C-77 Control Center/
Preamplifier with Automatic
Fader and Moving Coil PrePreamp Unique in offering full
stereo mixing with the convenience of an automatic and manual fader for smooth, professional
sounding transitions from any
connected source to any other,
plus a built in pre-preamp for
moving-coil cartridges. Variable
loudness control.



B-77 LINEAR-A DC Servo
Power Amplifier with Spectrum
Analyzer and Peak Power Meter.
Sensibly rated at 60 watts/channel, min. RMS, both channels into 8 ohms from 20-20,000Hz, with no more than 0.03% THD.
Direct-coupled throughout, it features Sansui's exclusive new "Linear A" circuitry for low distortion with high efficiency, along with separate 10-band spectrum analyzer and peak power displays that show just what your system is doing.

T-77 Quartz-PLL Digital
Synthesizer FM/AM Tuner with
8 Preset FM/AM Stations and
Auto Search Digital Quartz-PLL
Synthesizer design, which guarantees the most accurate tuning
possible, is the highlight of this
extraordinary tuner. Stores up to
8 stations in memory circuits for
instant recall.

This system also has a direct/





drive automatic-return FR-D45 turntable with its low 0.025% wow/flutter and 72dB S/N ratio.

The attractive audio rack that contains the 900's components has additional space for an optional Sansui metal-tape compatible cassette deck.

Also included are two S-57
12", 3-way loudspeakers specially designed to perfectly match the system's components and fill your listening room with an uncanny amount and quality of music.

If you love great high fidelity, but don't have the patience for a lot of shopping and technical talk, you'll want to see and hear the Sansui 900 Super System. Visit your Sansui dealer and find out how



easy it is to own a top-of-the-line high fidelity system.

The Sansul 900 Super System.
All you have to do is listen.



SANSUI ELECTRONICS CORP.

Lyndhuist, N.J. 07071 • Gardena, Ca. 90247 SANSUI ELECTRIC CO., LTD., Tokyo, Japan CIRCLE NO. 34 ON READER SERVICE CARD est the recent articles in STEREO REVIEW dealing with the latest in Japanese audio and video hardware (such as April's "Stereo TV in Japan"). Japanese excellence in the invention and production of these devices has become axiomatic, but readers may be misled by the tacit implication that the residents of Japan are really enjoying superior audio and video broadcast programming compared with ours.

There are thousands of stereo FM stations in the U.S.; our large cities have dozens each, but even Duluth has six, Colorado Springs has eight, Sioux Falls has six, and Anchorage has four. Guess how many stereo FM stations listeners have to choose from in Tokyo, cultural jewel of the Pacific,

the stereo-hardware Mecca of the world? Two, either FM Tokyo or NHK-FM; that's it. Moreover, most of the musical selections broadcast by these stations, whether some whining Bobby Dylan epic or a Baroque standard, are fragments of larger works surrounded by endless discussion.

Although Editor William Anderson's March "Speaking of Music" correctly states that 70 per cent of Japan receives stereo TV broadcasts, I doubt that most American city dwellers would wish to trade their programs for those available in Tokyo. (Of course, there is a generous spate of softcore pornography and pretty-lady-beating after 11 p.m. for those who like that sort of thing.) As for stereo, it should be remem-

bered that the sets are usually about 3 feet wide, so any actual stereo effect is apparent only if one sits a few inches from the screen—or adds an external stereo tuner, amplifier, and speakers; adding speakers directly to the set usually results in distortion because the built-in amplifiers are not designed for them. With regard to the marvels of bilingual TV in Japan, I must note that there are now only about two fragmented hours a week available.

I don't mean to suggest that there is not great stuff on Tokyo TV, because NHK is full of spectacular things, and the picture quality is matchless. But our own PBS compares very well, and once the FCC permits stereo TV in the States, I think that the Japanese will be flocking over here to see where their programming has failed.

RICHARD H. HEIM Superior, Wis.

The rule holds even in Japan: the hardware anticipates the software. But rules are made to be broken: CBS is already marketing software (New Music's "Sanctuary," Epic NFE 37314) in its brand-new compatible "CX" encoded format—see page 18.

Offenbach and Columbus

• Geraldine Segal was mistaken in her statement (March "Letters") that Offenbach composed an opera about Christopher Columbus. He intended to, but he never got beyond an American Eagle Waltz. Here in London, for the American Bicentennial in 1976, the directors of Opera Rara, Patric Schmid and Don White, both Americans, took an Offenbach flop, La Boîte au Lait, wrote a Columbus libretto for it in English, and presented it in a semi-concert version at the Queen Elizabeth Hall on July 6. I covered that production for the International Herald Tribune, and this bit of synopsis from my notice will give some idea of what kind of romp it was:

"Columbus, it appears, was an international philanderer and polygamist who attracted the amorous attention of Queen Isabella. They are caught in the act—or close to it—by King Ferdinand, and Columbus escapes dire consequences only by selling Ferdinand on the notion that the world is round and that there might be good trade prospects for Spain in the exploitation of its roundness.

"Ferdinand gives him the Nina, the Pinta, and the Santa Maria, Isabella gives him her jewels, and off he sets with his wives and cronies as the crew. It all ends not in the Caribbean, but in Manhattan, with Columbus married to Minnehaha and the discoverer not of gold, but of the Kola nut, which may come pretty close to the same thing."

HENRY PLEASANTS London, England

This correspondence is now closed.

Price Change

• We have been advised that the price given for the Allison: Six loudspeaker system in our June 1981 test report on the product is no longer current. The speakers are now \$320 per pair in walnut, \$344 each in black or white lacquer finish.

New RKO Ultrachrome is a <u>true</u> chrome tape!



When you're looking for chrome-cassette performance, don't settle for a substitute.

Did you know that most so-called "chrome" recording tapes aren't really chrome at all? They're made of ferric particles, treated with cobalt to make them perform at a chrome bias setting. Their proper name is "chrome-equivalent" tape.

New RKO Ultrachrome is a brand-new, second-generation, <u>true chrome</u> tape, made of genuine chromium dioxide particles. It's specifically formulated to give high output, low distortion, and low noise on quality home cassette decks.

Why settle for a "chrome-equivalent" when you can have the real thing?

Insist on RKO Ultrachrome. You owe it to yourself. And to your music.



RKO TAPE 3 Fairfield Crescent, West Caldwell, N.J. 07006 Telephones: 201-575-8484, 212-233-3520

CIRCLE NO. 33 ON READER SERVICE CARD



Beyond quartz, the world's most precise tuning system, lies a new ability to expand sound

Imagine you're in a room with Technics SA-828 receiver. What you hear is beautiful stereo. Then you activate Technics variable Dimension Control. Incredibly, the sound begins to move. The stereo image widens to the point where the music begins to surround you. You're intrigued by its richness and depth. You're' enveloped by a new experience in sound. That's the wonder of the patented technology in Technics Dimension Control.

Just as wondrous is quartz synthesis, the world's most precise tuning system. That's how the SA-828 quartz synthesizer eliminates FM drift as well as the hassle of tuning. You can even preset and instantly retrieve 7 FM and 7 AM stations, all perfectly in tune.

Another perfect example of Technics technology is our

synchro-bias circuitry. What it does is constantly send minute amounts of power to the amplifier transistors. And since they can't switch on or off switching distortion is eliminated.

And when it comes to power, the SA-828 has plenty: 100 watts per channel minimum RMS into 8 ohms from 20Hz to 20kHz with no more than 0.005% total harmonic distortion.

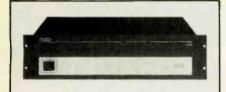
The SA-828 goes on to show its sophistication with a super-quiet phono equalizer, soft touch program selectors, fully electronic volume control, and a Dimension Control display that doubles as a power level meter.

Technics SA-828 is part of a full line of quartz synthesized receivers. Hear it for yourse f. Beyond its quartz synthesizer lies a new dimension in sound.

Technics
The science of sound

CIRCLE NO. 41 ON READER SERVICE CARD

New Products latest audio equipment and accessories



Load-adjustable QED Power Amplifier

Questar Electronic Design's Model 440 quasi-class-A power amplifier is rated at 222 watts continuous into 8 ohms (200 watts into 4 ohms). On a dynamic basis the amplifier will deliver 400 watts per channel into 4-ohm loads. Dynamic headroom is given as 2.7 dB. Optimal power delivery into various speaker-load impedances is aided by a rear-panel switch selecting one of two transformer taps; one is for 2- to 4ohm loads, the other for 8- to 16-ohm loads. The amplifier also has a two-speed, thermostatically controlled fan for heat dissipation. Other circuit features are dual high-speed relays for speaker protection and a soft-clipping circuit. Specifications include a total harmonic distortion of less than 0.05 per cent, intermodulation distortion of 0.1 per cent (SMPTE), a slew rate of 80 volts per microsecond, and a frequency response of 10 to 100,000 Hz ± 3 dB at a 50-watt output level. The rack-mounting unit is 19 inches wide and 41/2 inches high; weight is 26 pounds. Price: \$699. Questar Electronic Design, Dept. SR, 2210 Cemo Circle, Suite A, Rancho Cordova, Calif. 95670.

Circle 120 on reader service card



The three models in Concord's high-output series of moving-coil cartridges require no pre-preamp or step-up transformer. The styli are user-replaceable. The low-mass design (overall weight of each cartridge is 2.3 grams) enables the cartridges to be used in low-mass as well as conventional arms. The top-of-the-line CMC-300 (shown, headshell not included) has a nude-mounted line-contact stylus and tracks at 1 to 1.5 grams. Tracking ability is rated at 36 centimeters/second; static compliance is given as 33×10^{-6} centimeters per dyne. Output voltage is 2.1 millivolts with a 5-centimeters-per-second groove velocity at 1,000 Hz. Recommended load impedance is 30 to 100 kilohms. Price: \$189.95.

Circle 121 on reader service card



☐ The auto-calibration microprocessor in the Nakamichi 700ZXL cassette deck automatically adjusts azimuth alignment, bias, reference recording level, and equalization to fit the requirements of each cassette. The same processor controls the unit's Random Access Music Memory (RAMM), which provides random access to each of fifteen programs per tape side. The playback sequence can be composed of up to thirty commands to allow for program selection and repetition in any desired order. Each programmed tape is tagged with a subsonic code that carries playback-equalization and noise-reduction instructions for automatic setting of those functions.

The 0.6-micrometer gap in the Crystal-loy-core playback head is said to be able to resolve the 2-micrometer wavelengths of 24-kHz recordings. New geometry in the playback head is claimed to virtually eliminate "head bumps" in the low frequencies. Other features include a dual-capstan transport, a four-digit LED tape counter, peak-holding LED level meters, and switching for an external noise-reduction system in addition to self-contained Dolby-B circuits. The unit also includes three microphone imputs, a subsonic filter, pitch control, and a high-output headphone jack.

Frequency response is given as 18 to 24,000 Hz ±3 dB at a -20-dB recording level. Signal-to-noise ratio at the 3 per cent distortion level is greater than 66 dB. At a 0-dB recording level total harmonic distortion is less than 0.8 per cent (metal tape). Dimensions are approximately 1934 x 1038 x 978 inches; weight is about 31 pounds. Price: \$3,000.

Circle 122 on reader service card



☐ The Straight Line Two preamplifier from Crown has several unusual features, including a yellow rumble-indicator LED that lights up in the presence of low-level infrasonic signals, alerting the user to activate the unit's low-frequency filter (which rolls off at 18 dB per octave below 33 Hz). Other LEDs show the presence of a normallevel signal and indicate overload. In addition to the usual tape-to-tape dubbing facilities, the Straight Line Two allows taping of discs while listening to any other input. A mode control has stereo, mono, reversedstereo, and mute positions. The tone controls are defeatable. Specifications include an RIAA equalization accuracy of ±0.5 dB and a phono signal-to-noise ratio of 85 dB (inputs shorted). High-level frequency response is ± 0.1 dB from 20 to 20,000 Hz, total harmonic distortion less than 0.005 per cent over the same range. The rackmountable unit is 13/4 inches high (without the optional wooden cabinet shown). Price: \$479

Circle 123 on reader service card



☐ The Geo-Disc from Mobile Fidelity is intended to aid in aligning a phono cartridge for proper offset, tracking angle, and overhang. Using the device a cartridge can (Continued on page 14)



TDK brings two new standards to open reel.

excellence.

Raising sound standards is nothing new to TDK. For years, TDK cassettes have set reference standards in metal and high bias. Now TDK announces two breakthroughs in open reel—GX and LX. Both are formulated to be fully compatible with your present system. You don't have to rebias to appreciate them.

TDK GX Studio Mastering tape handles the most critical demands of live music mastering beautifully. TDK's new ultra refined ferric oxide particle gives GX superior MOL, low distortion and a wide dynamic range. Equally impressive is TDK LX. Its super refined particle gives it high performance with low noise and low distortion throughout an extended frequency range. LX is ideal for both professional and audiophile use.

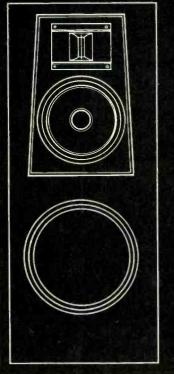
The refinements don't stop with the

formulations. A unique calendering and binding process rivets the particles to the tape surface, making dropouts practically a thing of the past. A special graphite and carbon backcoating, found on all GX and most LX tapes, reduces friction for the smoothest possible winding. At the same time, it prevents static discharge and reduces wow and flutter.

These high standards are carried through to the newly designed 10" metal and 7" plastic reels. Each has a separately molded hub and flange to ensure circularity and high strength. If you think open reel has gone as far as it can go, listen to the finest. TDK GX and LX. They could open up a whole new standard of recording

Now from Speakerlab comes the new \$11, \$15 and \$17. Housed in slender, elegant enclosures, these speakers are designed to reduce edge defraction for better "imaging". Componentry includes: amazing Samarium Cobalt leaf tweeters for limitless high-end; efficient, ultra-low distortion polypropylene/Polylam™ woofers; and passive radiators to extend the low end both powerfully and accurately. The. combined effects are awesome -bringing you music that's so fresh on your ears it's really like being there.

Send for a free catalog and read about these and a dozen more new designs from Speakerlab.



SOCAL SR17, 735 N. Northlake Way Seattle, Washington 98103

address

address

New Products

latest audio equipment and accessories

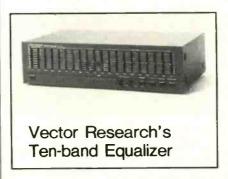
be aligned to within 0.003 inch of optimum. The 12-inch black-plastic disc fits over a turntable's spindle. The user sights along the raised ridge, aligning it with the tone arm's lateral pivot point. The cartridge is then aligned in its headshell to a grid pattern on the Geo-Disc. Price: \$25.

Circle 124 on reader service card



□ Robins Industries' hand-held videocassette eraser is claimed to erase virtually all recorded signals from all videocassette formats. The UL-listed unit's powerful magnetic field reduces noise below normal erase-head levels in seconds without touching the tape. This avoids wear of the VCR's mechanisms while restoring the tape's magnetic qualities to nearly blank-tape level. The device will also erase all audio tapes. It measures 5 x 3½ inches and weighs 4 pounds. Price: \$53.

Circle 125 on reader service card



□ Vector Research's VQ-100 ten-band stereo equalizer employs discrete-transistor circuitry and offers up to 10 dB boost or cut in each band. The unit's signal-to-noise ratio is 110 dB (weighted). Total harmonic distortion is 0.005 per cent from 20 to 20,000 Hz, and the frequency response is 5 to 100,000 Hz ± 1 dB with the controls centered. Five-segment LED displays for each channel monitor signal levels. Switching permits a recorder hooked up to the VQ-100 to receive either the original or the equalized signal. Separate right- and left-channel gain controls permit matching the equalizer's output level to other equipment. A switchable infrasonic filter rolls off response below 20 Hz at 12 dB per octave. Dimensions are 175/16 x 43/4 x 93/8 inches. Price: \$250.

Circle 126 on reader service card



☐ Loranger Manufacturing's ferric and chrome-type Loran cassettes have shells made of Lexan plastic instead of the commonly used polystyrene. As a result, the shells maintain stable dimensions within a temperature range of -60 to +200 degrees Fahrenheit, which means that a Loran cassette left on a car dashboard in summer heat will not warp. The shells also have sixteen times the impact resistance of most other cassettes. The five screws holding each shell together are designed to make possible repeated opening and reclosing without stripping the threads; they can take either regular or Phillips-head screwdrivers. The cassettes' pressure pads are made of "natural fur," and the built-in record-interlock tabs are rotating and resettable.

The ferric-oxide tape formulation used in Loran cassettes is said to give from 2 to 12 dB improved performance at a 0-dB recording level at 15,500 Hz. The chrome-type tape is double-coated, with a ferric-oxide inner layer and a chromium-dioxide outer one; the dynamic range is said to be at least 2 to 3 dB greater than that of comparable tapes. All Loran tapes have headcleaning leaders and run slightly long in order to compensate for slightly off-speed decks. Prices: ferric C-90, \$7.65; chrome C-90, \$7.95. Loranger Manufacturing Corp., Dept. SR, P.O. Box 948, Warren, Pa. 16365.

Circle 127 on reader service card

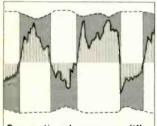
(Continued on page 16)



Bob Carver explains (briefly) how the Magnetic Field Amplifier works. (Others tell how it sounds.)

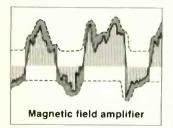
- **Q.** How is it possible for an amplifier as small and as light as the M-400 to deliver so much power and to cost so little?
- A. The M-400's size (less than 7 inches) and weight (less than 10 pounds) reflect the advanced technology and the new patented designs used in both its power supply and amplifying stages—and the innovative relationship between them. (Not to mention the incredibly low price that resulted: \$399.)
- Q. What is different about the M-400's power supply and amplifying stages?
- **A.** In any amplifier, the power supply produces and stores energy for use by the amplifying circuits.

Conventional amplifier power supplies are very inefficient because they produce a constant high voltage level at all times—irrespective of the demands of the everchanging audio signal—and even when there's no audio in the circuit at all!



Conventional power amplifier

Solid line: audio output signal Broken line: power supply voltage Shaded area: wasted power Vertical lines: power to speakers



This inefficient approach demands large and expensive power transformers and electrolytic capacitors. Large heat sinks are also needed to get rid of the heat associated with the constant high voltage of conventional power supplies.

In sharp contrast, the M-400's "smart" power supply produces only the power that the amplifier section needs from moment to moment to handle the signal accurately. In effect, the M-400's power supply is signal-responsive. As a result, overall efficiency is extraordinarily high.

- Q. Do I really need 200 watts per channel?
- A. Yes! If you want to hear music reproduced with full realistic impact and dynamic range, the musical peaks must be handled without compression, clipping or overload.

You'll be amazed at the improvement in openness and clarity when your system is able to deliver the power that music really requires.

When full digital audio arrives, dynamic-range capability will be even more significant. And the M-400's power will be even more necessary—with its ability to deliver 500 watts in mono, 900 watts for brief time periods, and more than 1200 watts on peaks!

- **Q.** Now I understand why the M-400's power capability will improve my system, but can my speakers take it?
- **A.** Speakers with a power rating of 50 watts or so will have no problem with the M-400. That's because speakers are not generally blown out by high, clean power, but rather by low-powered amplifiers pushed beyond their overload points. These low-powered amplifiers

"clip", generating speakerdamaging transients.

In addition to providing better sound and sufficient power, the M-400 has special protective circuits that guard both itself and your loud-speakers from almost any conceivable damaging circumstance. These include long and short-term overload, sudden overdrive signals (such as from dropped styli), shorted speaker leads, etc.



M-400 Magnetic Field Amplifier 201 watts minimum continuous power per channel (500 watts. mono) into 8 ohms, 20 Hz to 20 kHz, with no more than 0.05% total harmonic distortion.

All this protection operates via the signal-controlled power supply circuits, not the amplifier stages, so there's absolutely no chance of the typical distortions caused by conventional protection circuits.

- **Q.** Aside from the technical innovations in its design, how does the M-400 sound when it comes to music?
- **A.** My design goal was to make it sound musically accurate, and I'm proud to

say that it does. More convincing perhaps, others confirm this. Leonard Feldman in Audio reported: "Music reproduction was superb and completely free of any false bass coloration or muddiness. The amplifier handled the toughest transients we were able to feed to it with ease...there was none of the brittle quality that one often detects from amplifiers that are beginning to strain."

Julian Hirsch reported in Stereo Review that "...Its distortion and noise levels are entirely negligible... hardly conceivable that a small, inexpensive, lightweight cube such as this could deliver as much clean power as any but a few of the largest conventional amplifiers on the market—but it does "

- **Q.** Is the M-400 limited to systems with separate amplifiers?
- A. No. The M-400 can be used in many different types of systems, including those with receivers and integrated amplifiers. With our new Z-coupler device, you can upgrade your existing low-power system into a superb 200 watts-per-channel system. What's more, the M-400 is easily connected without accessories to put out 500 watts mono!
- Q. How can I get more information?
- **A.** Easily. For literature, test reports and the address of your nearest Carver dealer, circle the number below. For faster response, write to us directly



P.O. Box 664, 14304 N.E. 193rd Place Woodinville, Washington 98072

CIRCLE NO. 10 ON READER SERVICE CARD

details .. A DIFFERENT KIND OF RECORD CLUB

You can now own every record or tape that you may ever want ... at tremendous savings and with no continuing purchase obligations. You can get valuable free dividend certificates, you can get quick service and all the 100% iron-clad guarantees you want.

Now you can stop price increases that leave you with less music for your record and tape budget. You can guarantee yourself more music for less money through membership in Discount Music Club.

Look at these benefits:

TREMENDOUS SAVINGS

on every record and tape in print—no "agree-to-purchase" obligations of any kind.

DISCOUNTS OF 43% TO 73%

off mfg. suggested list . . . special catalog features hundreds of titles and artists.

ALL LABELS AVAILABLE

including most imports through special custom ordering service. If we don't stock it we'll get it for you.

SCHWANN CATALOG

lists thousands of titles; classical, pop, jazz, ballet, opera, musical shows, folk, rock, vocal, instrumental, country, etc

DISCOUNT DIVIDEND CERTIFICATES

Dividend Gifts—Every shipment carries a dividend gift or dividend certificate. Certificates redeemable immediately for extra discounts.

NEWSLETTERS

happenings in the world of music; concerts, critiques, new releases . . . special super-sale listings at discounts of up to 73%.

DISCOUNT ACCESSORY GUIDE

Diamond needles, cloths, tape cleaners, etc. Discount Music Club is your complete one stop music and accessory buying service.

OUICK SERVICE

same day shipping on many orders . . . rarely later than the next several days. Partial shipments always made in the event of unforeseen delay . . . all at no extra cost to you.

100% IRON-CLAD GUARANTEES

on all products and services.
Everything is guaranteed factory fresh and free
of defects or damages of any sort.
Your total satisfaction is
unconditionally guaranteed.

Discount Music Club is a no-obligation membership club that guarantees tremendous discounts on all stereo records and tapes and lets you buy what you want ... when you want ... or not at all if you choose.

These are just a few of the money-saving reasons to write for free details. You can't lose so why not fill out and mail the coupon below for immediate information.

DISCOUNT MUSIC CLUB, INC 9-0781 650 Main Street, New Rochelle, N.Y. 10801 P.O. Box 2000 New Rochelle, N.Y. 10801				
NAME				
ADDRESS				
CITY				
STATE	ZIP			

New Productslatest audio equipment and accessories



"LAST" Liquid Record Preservative

☐ The Liquid Archival Sound Treatment (LAST) record-care kit contains a bottle of record cleaner, a bottle of LAST preservative, special applicators, record markers, and instructions. The product is said to reduce record wear, distortion, and static electricity and to increase stylus life. The preservative chemically and physically alters the record surface to a depth of about ten molecular layers. No buffing or rubbing is required in application, and a single treatment is effective for at least two hundred plays. Used according to instructions, a single kit will treat a minimum of fifty records. Price: \$19.95. The Last Factory, Dept. SR, P.O. Box 41, Livermore, Calif. 94550.

Circle 128 on reader service card



Pioneer Turntable
With Low-noise
Linear Tracking

□ Unlike other straight-line-tracking tone arms, which may suffer from vibrations from a complex drive mechanism, the tone arm in Pioneer's PL-L800 turntable is said to achieve improved performance by being directly driven by a linear motor. Other benefits claimed for this arrangement include lower tracking error, lower crosstalk and distortion, and less resonance due to the shortness and rigidity of the polymergraphite arm. The turntable comes with a PC-4MC high-output moving-coil cartridge

that not only does not require a pre-preamp but has a user-replaceable elliptical stylus. Specifications for the quartz-locked direct-drive turntable include a wow-and-flutter rating of 0.012 per cent and a signal-to-noise ratio of 78 dB (DIN B). Front-panel controls include speed and disc-size selection, tone-arm lift, and cueing. Price: \$450.

Circle 129 on reader service card



Lubricant Cleans Audio Connections

☐ The Cramolin Audio Kit from Caig Laboratories contains lubricants and preservatives for application to all metal-tometal electrical connections. Use of the Cramolin fluids is said to dissolve oxide films and prevent new oxidation, thus reducing contact resistance and cases of radio-frequency interference that arise from contact rectification. The product is recommended for use on phono-cartridge connections, audio jacks and plugs, switch contacts, potentiometers, etc. The kit contains one bottle each of CR-10 protection and cleaning fluid and of CR-20 contact preservative. Price: \$11.95. Caig Laboratories, Inc., Dept. SR, 1175-0 Industrial Avenue, Escondido, Calif. 92025.

Circle 130 on reader service card

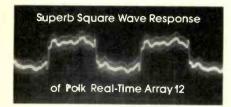
NOTE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturers, who will respond directly to reader requests for further information.

Domestic inflation and fluctuations in the value of the dollar overseas affect the price of merchandise imported into this country. Please be aware that prices quoted in this issue are therefore subject to change.



"Polks are vastly superior to the competition."

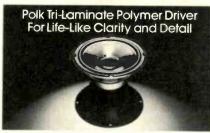
Musician Magazine



Lab and listening tests prove Polks measure and sound better.

Experts agree Polk speakers will give you the highest quality sound and the most listening pleasure for your money. They will deliver amazingly life-like, boxless, three dimensional sound with breathtaking clarity and detail in your listening room from your hifi system.

"Polk speakers are so vastly superior to the competition...a remarkably well integrated and coherent sound that adapts itself ideally to all kinds of music...the kind of open, uncolored, perfectly imaged sound we thought began at twice the price...



Sound quite magnificent with a good mid-powered popular brand receiver... They make the popular speakers in their price range seem dim, colored, boxy and just plain insufficient.

Our advice is not to buy speakers until you've heard the Polks."

Musician Magazine

"Exceptionally pleasing sonic balance...transient response is absolutely first rate...hemispherical dispersion is superb...frequency response covers the entire audible range with commendable flatness...Open, boxless, three dimensional quality

...sensitivity is adequate for use with a 10 watt amplifier, yet it could absorb the full output of a 200 watt amplifier without damage...certainly a very fine speaker. Polk's key design goals have

definitely been realized."

Stereo Review



Better sound in your home Polk Audio loudspeakers will give you more

listening pleasure and greater long term satisfaction from your music, your records and your hifi system. They offer you the best sound for your money and are affordably priced from less than \$125 each to less than \$400 each.

Simply use the free reader service card to receive detailed information, copies of the expert's rave reviews and the location nearest you for auditioning the Incredible Affordable Polks.

Polk Audio, Inc. 1205 S. Carey St.,
Baltimore, Md. 21230.



CIRCLE NO. 32 ON READER SERVICE CARD



"RATED NO. 1 FOR SERVICE & RELIABILITY
THIS MONTH'S
SUPER SPECIALS!

VIDEO SPECTACULAR!

	VIDEO RECORDERS	VIDEO CAMERAS
	AKAL VPS 7350 Port VHS \$1295	AKAI VC-X1 Auto Focus
	JVC HH 6700 VHS Recorder \$795	JVC GX 88 Camera
	JVC HR 2200 Port VHS Rec \$945	MAGNAVOX 8244 Came
	MAGNAVOX 8340 VHS Rec \$990	PANASONIC PK 700 Carr
	MAGNAVOX 8310 VHS Rec \$625	PANASONIC PK-750 Car
	MAGNAVOX 83/2 Port VHS \$995	PANASONIC PK-800 Car
	MAGNAVOX 8371 Port VHS \$895	RCA CC 007 Camera
	MAGNAVOX 8370 Port VHS\$825	RCA CC-010 Camera
	PANASONIC PV 1210 VHS Rec. \$625	SONY HVC-2010 Camera
	PANASONIC PV 1300 VHS Rec \$795	SONY HVC 2200 Camera
	PANASONIC PV 1400 VHS Rec \$875	SONY HVM 100 B/W Cam
	PANASONIC PV 1750 VHS \$1040	TOSHIBA IK-1850 Auto Fo
	PANASONIC PV 3100 Port VHS\$795	TOSHIBA IK. 1830 AUTOF
	PANASONIC PV A35P lun Tim \$295	SONY COLOR TV
	PANASONIC PV 3200 Part VHS\$945	
	RCA VET 250 VHS Recorder . \$750	KV 4000 (4" Screen)
	RCA VET 450 VHS Recorder \$845	KV-5200 (5" Screen)
	RCA VET 650 VHS Recorder - \$1050	KV-8100 (8" Screen)
	RCA VET 170 Portable VHS\$1050	KV 9400 (9" Screen)
	SONY SL-5400 Beta Recorder \$775	KV-1217 12" Screen)
	SONY St. 5600 Beta Recorder \$875	KV-1221R (12" Remote)
	SONY \$L-5800 Beta Recorder \$1045	KV 1543R (15" Remote)
	SONY SL 3000 Portable Beta \$950	"KV-1715R [17" Remote] .
	SONY IT 3000 Tuner/Timer \$395	"KV-1913 (19" Screen)
	TECHNICOLOR 212 Port 14" . \$850	*KV-1943R [19" Remote)
	ZENITH VR 9000 Beta Rec \$695	"KV-2601 (26" Screen)
	ZENITH VR-9750 Beta Rec \$945	*KV-2643Ř (26 " Remote) .
		*Shipped Freight Collect
	VIDEO DISC PLAYERS	PIONEER VP-1000 Laserd
Ċ	MAGNAVOX VH 8000 Laser . \$599	ROA SET 100 CED DISC Plan
١		

CAR STEREO

RP-8500 144.90 KE-2100 172 441.90 KEX-220 214.90 KP-8502 (lareign cars) 144.90 KP-8000 (reg amp) 154.90 KPX-9500 (reg amp) 175.90 KEX-5100 209.90 CASSETTÉ UNDER DASP	R-40 R-410 R-420 RE-51 SPEA J-100 J-100 J-100 J-120
KP-373	J-1130 J-1174 J-1124 J-1188
POWER AMPS/FQUALIZER BP.32/O 54.90 AD.30 94.90 AD.50 144.90 GM.120 100.60 CD.5 89.90 GM.2 34.90 CAR SPEAKERS 15.MI2 34.90[PAII 15-T3 34.90[PAII	SA FICE FICE FICE FICE FICE
TS107 39.90[PAI TS167 54.90[PAI TS168 84.90[PAI TSX6 99.0[PAI TXX9 134.90[PAI	BL. CR-2 CR-3
PE-683A (White Art to ward) 79,9 PE-550A (Auto Rev. w Dotty) 169,9 PE751C (P/B Auto Rev.) 229,9 PE-758A (Frectronic Turneq) 289,9 PE-758A (P/B Auto Rev.) 179,9 PE-758B (P/B Auto Rev.) 179,9 PE-958B (Hectronic Turneq) 319,9	S WE CAJ

PIONEER CASSETTE IN-

CASSETTE IN	
JENSEN CASSETTE IN-	
R-4O2 receiver	
R-406 Inceiver	
R-41O receiver	
R-42O receiver	
RE-512 (Auto Heverse) 259.90	
SPEAKERS	
J-10016x9 reparates 98.90/PAIR	
J-10656x9 trus 64.90/PAIR	
J-10336:9 that I 83.90/PAIR	
J-12O1 6x9 coax if thin 62.90/PAIR	
J-1101-4x10 thar 66.90/PAIR	
J-113O 4:10 trav II 88.90/PAIR	
J-1174 514 max 66.90/PAIR	
J-1124514 than I 88.90/PAIR	
J-1188 619 coax thin 43.90/PAIR	
J-1069 6x9 coax 43.90/PAIR	
J-10376×9 coax I 64.90/PAIR	
J-1041514 coax II 53.90/PAIR	

\$429 \$409 \$429 \$389 \$369 \$479 \$479 \$499 \$449 \$569 \$799 \$899

422611E
59.90
.99.90
114.90
119.90
134.90
147.90
169,90
229.90

BLAUI	P	J	P	4	K	1	1		
CR-2001									249.90
CR-3001									
CR-4000									
CR-5001									
BEA-100									
BEA-200									159.90
WE ALSO	Cal		¥	71	at.	0		1	M (W)

WE ALSO CAMPY THE FULL LINE OF CAR STENEOS BY PANASONIC, GRUN-DIG, METSURISM, CONCORD, SONY, AUDIOVOX AND CRAIG.

BLANK CASSETTES

DEATH C	MOSETTES
AUDIO AWRI SCRAMDMASTERIORI CO0 2.99 BASI PROLLI GORIICOO 2.90 FULIFIXI GORIICOO 2.90 SCOTICH Inghander 190 3Pa 3.90 SCOTICH Inghander 190 3Pa 3.90 SCOTICH HASTERI COR INCOO 3.25 SCOTICH HASTERI COR INCOO 3.25 SCOTICH HASTERI COR INCOO 3.25 SCOTICH COO 3.25 SC	VIDEO WE CARRY WEST TAPES BY AMPRI. BAS' RILL IN'C MATELL PANSONIC. BAS' RILL IN'C MATELL PANSONIC. BAS' RILL IN'C MATELL PANSONIC. BAS' SOTTON SONY REA ALL BETAL 750 10.95 ALL BETAL 750 12.95 ALL STATE L'INELLINSION 2.95 ALARY WEST OCK ALL VIDEO DISC'S. MEMOREX VISTAL L'UIDEO DISC'S.
TDK MA C90 (METAL) 6.29 TDK MA C90 (METAL) 7.99 MAXELL UDIT TOTUDE IIC 90 3.47 MAXELL PRICES ARE TOO LOW TO AD- VERTISE. CALL OR WRITE FOR PRICES.	WE STOCK BAW AND COLOR TY'S, VHS AND BETA VIDEO RECORDERS, AND HOME MOYES FROMALL MAJOR HOLL YWOOD STUDIOS SEND FOR CATALOGUE.

RECORDS & TAPES

NUM ORDER 12 TAPES 100% GUARANTEED

HOW TO ORDER 8Y MAIL; for grompt and courteous shopment, seed money order, certified creek cashes; check Majate Folking or Visit include card number, espiration date and signature; DO NOT SEND CASH Personal and business; checks must clear our bank before processing. Shopping and instruction charge, ethics, or total order with a \$3.95 minimum charge. Phease double these charges for orders outside Continental \$1.50 calability, the Cashody New Action (Continental Section 1) or Cas

ORDER TOLL FREE (800) 221-8180

Customer Service Hot Line (212) 233-0857

DEPT. SR

SEND FOR OUR 260 PAGE FREE CATALOG 23 PARK ROW, NEW YORK, N.Y. 10038

CIRCLE NO. 26 ON READER SERVICE CARD

Audio/ Video News

By David Ranada



CBS' NEW "CX" ENCODED DISC

N mid-May, and with surprisingly little fanfare, CBS demonstrated for the press its "CX" (Compatible eXpansion) noise-reduction system for discs (as announced in STEREO REVIEW's "Bulletin" in January). CX is the only encode-decode disc noise-reduction system claimed to be audibly acceptable in non-decoded playback-in other words, compatible with ordinary playback systems. At first hearing it seems that CBS has done all the necessary psychoacoustic homework needed to perfect such a system, for CX lives up to everything claimed for it, at least with the musical selections and pressings used at the demonstration, a sampling of broad-dynamic-range jazz and classics.

The claims for CX are impressive. When played through an inexpensive CX decoder (expander), a CX-encoded record will offer a dynamic range 20 dB greater than that of a normal pressing. This gives a total disc dynamic range of up to 85 dB, depending on the pressing quality, comparing favorably with the dynamic range offered by a stereo mixdown from a multitrack sixteen-bit digital-audio master tape. Noise from a CXencoded disc played without a decoder is said to be no worse than that from a conventional pressing. In addition, there is no alteration of frequency response in non-decoded playback and a minimum of "pumping" of music or noise. (It is this last point that will undoubtedly be the crux of the audiophile debate that is sure to be started over the CX system.)

Eventually all CBS discs will be released in CX-encoded format, and licensing agreements with other major labels are expected. CBS is not asking for royalties on CX-encoded records and expects the prices of encoded records to be no higher than those for normal discs. Their stated goal is to make CX ultimately "the industry standard for disc manufacturing" since the compatible nature of the encoding eliminates the need for double inventories. The first CX-encoded pop record has already been released (New Music's "Sanctuary," Epic NFE 37314). On the hardware side, the circuit looks

On the hardware side, the circuit looks quite simple. It requires only common, offthe-shelf parts with no special selection or matching required. By the time you read this there may be at least one custom-made integrated circuit (IC) available that will contain almost all the necessary circuitry for a CX decoder. Add-on CX boxes are promised from Phase Linear, MXR, Audionics, Sound Concepts, and others, and they are expected to cost between \$50 and \$100. That cost is dominated by the cost of the cabinet, chassis, and power supply, not by the CX circuitry, which means that CX decoders could be built into preamplifiers, amplifiers, and receivers at very little additional cost.

It should be noted that CX is incompatible with other tape and disc noise-reduction systems (Dolby B and C, dbx) and in its present form is optimized for disc noise reduction only, not for tape or the audio channels of videodiscs. Like the Dolby tape systems, however, the CX decoder is sensitive to absolute signal level; unlike the Dolby circuits, a level mismatch of up to 6 dB in the CX system is said to be "almost unnoticeable." (Level matching at home need be done only once using a reference-level calibration disc and a decoder control.)

The CX system is also similar to the dbx tape and disc systems in that it uses a 1:2 expansion ratio in playback. The CBS system, however, does not use this expansion over the entire dynamic range as does dbx. Signals more than 40 dB below the reference level are not processed, and this is one of the three main reasons that a CX-encoded record does not sound unnatural in non-decoded playback.

ANOTHER reason for CX's acceptable nondecoded performance is that, unlike Dolby and dbx, the system does not use pre-emphasis in encoding. Non-decoded CX records thus have the same overall frequency balance as normal pressings. The last major factor in CX compatibility is that the encode-decode process has been carefully designed to take advantage of the ear's limited ability to follow rapidly changing loudness levels. The internal circuit timings and levels have been chosen so that perceived noise pumping is minimized in both decoded and non-decoded playback. Amazingly, you should be able to check this out for yourself by early fall.



When you're ready to "face" the music we have a tip for reduced distortion

Whether you are seeking to reproduce the full dynamic range in the grooves of today's new superdiscs, or simply to obtain maximum listening pleasure from treasured "oldies" in your record collection, you need a phono cartridge that will deliver optimum trackability with minimum distortion.

Because the phono cartridge is the only point of direct contact between the record and your entire stereo system, its role is critical to faithful sound re-creation. That's why upgrading your phono cartridge is the single most significant (and generally least costly) improvement you can make to your stereo system.

To that end Shure now offers the Hyperelliptical Stylus Tip configuration—first introduced on the critically acclaimed V15 Type IV—in a *full line* of cartridges with a broad range of prices.

The Hyperelliptical Stylus Tip has been called the most significant advance in decades in tip geometry. It has a narrower and more uniform elongated contact area that results in significantly reduced intermodulation and harmonic distortion.

Look over the list at left to see which Shure HE cartridge best matches your tracking force requirements.

Shure has been the top-selling cartridge manufacturer for the past 23 years. For full details on this remarkable line of cartridges write for AL667.

Go with the leader-Shure.



Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204 In Canada: A. C. Simmonds & Sons Limited Manufacturers of high fidelity components, microphones, sound systems and related circuitry.



There is no true accuracy without high efficiency.

The "power war" is over. High-powered receivers and amplifiers are going the way of the "gas guzzler" in this era of energy consciousness and inflation. Yet technological advancements in source material such as direct-to-disc and digitally-mastered recordings demand far more from your system than ever before.

To accurately reproduce this state-of-the-art material you need efficient loudspeakers that literally allow your amplifier to idle during normal listening levels and respond with its rated capabilities only to reproduce the sharp transients and increased dynamic range typical of today's source material.

The Interface: A was designed to answer the high-efficiency challenge. Highly efficient, truly accurate, yet capable of handling a lot of power when necessary, without the sonic coloration found in so many loudspeakers.

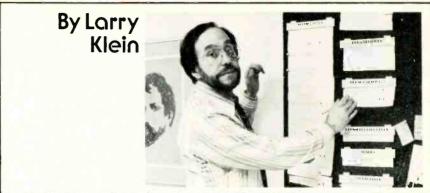
Listen to your music the way it was intended. Audition the Interface: A at your nearest Interface dealer.



Electro Voice

a gulton company 600 Cecil Street Buchanan, Michigan 49107

Audio Q. and A.



Rock Tracking Force

I'm a hard-rock fan, and I was wondering if there should be a different tracking force for rock discs than for "normal" or easy-listening discs. I've noticed some distortion in the louder parts of my hard-rock discs, while quieter music seems to come through distortion-free.

ROBERT BAKER Rahway, N.J.

A The tracking force required in a given record player is that which is necessary for the stylus to track the record groove accurately. This is determined, in turn, by the forces in the playing process that tend to drive the stylus out of the groove. To put it another way, the applied vertical tracking force must at all times be greater than the various forces that operate to cause the stylus to lose contact with (mistrack) the groove walls. It's the mistracking that produces the distortion you hear.

The forces contributing to mistracking can be divided into those that affect tracking at low frequencies and those that affect it at high frequencies. The low-frequency problems are usually the unsubtle ones; the stylus "sticks" or jumps grooves, or it reproduces a variety of low-frequency thumps, bobbles, and quavers. These problems are almost always caused by record warps, too low a tracking force, improperly set antiskating force, a bad mismatch between tone-arm mass and stylus compliance, or a combination of these factors.

The high-frequency tracking problems appear as overly sibilant "sss" sounds and a sort of "break-up" or raspy quality on loud high-frequency passages. High frequencies are embodied on a disc in the form of very rapid undulations in the record-groove walls. If the moving part of the phono stylus has too much mass-and hence too much inertia-to follow these rapid twists and turns, it will momentarily lose contact or bounce from peak to peak when things get really rough, and this results in exaggerated sibilants and raspiness. Applying more vertical tracking force may produce more reliable contact during such stress conditions. But keep in mind that any vertical-force increase must be kept within the range of the cartridge's rated tracking force. If the manufacturer rates the cartridge for 1 to 2 grams of tracking force and the distortion is still heard at 2 grams, it may mean that your ear is better than your cartridge (and one or the other should be replaced), your tone arm needs help, or the record has been so overcut that no cartridge will play it cleanly. In any case, may the tracking force be with you.

MM and MC Cartridges

I don't understand one aspect of the switch labeling on some of the new equipment. On some of the expensive components the phono-input characteristics can be switched to accommodate moving-coil (MC) or moving-magnet (MM) cartridges. But aren't there other types of cartridges on the market besides those two?

A. TOBIN Denmark, S.C.

There certainly are, but the term MM A. is used pseudo-generically to indicate a phono cartridge, usually magnetic, whose load-impedance requirements and signaloutput voltage fall within certain values. These vary in respect to signal output (say, 0.5 to 5 millivolts) and are generally fixed in regard to the required input impedance (47,000 ohms). Moving-coil cartridges have output voltages ranging from a tenth to a hundredth that of the MM type of cartridge, and additional boost must therefore be supplied by a step-up transformer or prepreamplifier "head amp." Cartridges other than MM or MC types, if they are to work into inputs designed for MM or MC cartridges, usually need internal circuits to adjust their outputs for the appropriate electrical characteristics.

Unnatural Digital Discs?

Several months ago, I bought some digitally mastered discs because of the favorable comments your magazine has made about such digital processing. These records sound unnatural—which is because they are made by an unnatural proc-

(Continued on page 22)

IMMORTAL MUSIC SHOULDN'T BE KEPT ON MORTAL TAPE.



Good music never dies. Unfortunately, a lot of cassette tapes do. At Maxell, we've designed our cassettes to be as enduring as your music. Unlike ordinary cassettes, they're made with special antijamming ribs that help prevent tape from sticking, stretching and tearing.

And our cassette shells are built to standards that are as much as

60% higher than the industry calls for.

So if you'd like to preserve your old favorites for the years to come, keep them in a safe place. On one of our cassettes.



IT'S WORTH IT.

CIRCLE NO. 27 ON READER SERVICE CARD

NEW HIGHS. The 500ID defines hard-to-get high frequencies because it comes with a cantilever that doesn't easily distort them.

It's boron-vapor hardened to track under "G"forces that would buckle ordinary cantilevers.

NEW FIDELITY. In addition to hearing more highs, you're going to hear less noise from a 500ID.

There's nothing complex about the benefits of Samarium-Cobalt magnets. They are simply less massive and higher in output than conventional

So, if we had to give a reason for our signal-to-noise ratio being better than most, it's because the materials we use are better than most.

NEW TECHNOLOGY. Beacuse the 500ID features Empire's inertially damped tuned stylus system, its performance is consistent - even when the capacitance varies from one system to the next.



Which means, the performance we monitor in our lab is the performance you're likely to hear at home.

NEW SECURITY. Empire's twoyear limited warranty is 365 days longer than the one-year limited warranty offered by many other manufacturers.

An extra year in no uncertain terms.

NEW SOUND. The Empire 5001D. You're an arm's length away from a new listening experience.

ess. And since they sound unnatural they cannot be classified as true high-fidelity records. Any comment?

> JOSEPH SABOL Conneut Lake, Pa.

Unnatural? There's nothing "natural" A about any aspect of the recording and reproduction process, whether done by old-fashioned analog or new-fangled digital. What is "natural" about microphone diaphragms converting sound waves into minute elecrical signals which are then amplified, equalized, compressed, converted to magnetic patterns on a master tape, stored, reconverted to electrical signals, expanded, equalized, amplified, and used to drive a device that cuts grooves into a lacquer master disc that becomes the prototype for the disc you play at home?

What I've described, once over lightly, is the "natural" way a conventional analog disc is produced. A digitally mastered disc is no more or less natural, differing mainly in the form in which the signal is stored on the master tape and in the elimination of some of the compression/expansion and equalization processes.

All of the above is not meant to imply that Mr. Sabol did not hear something disturbing in his newly acquired digitally mastered discs. However, to assume that the bad sound heard is a result of the digital mastering employed is just poor logic.

As a little exercise that may be helpful in other areas of hi-fi evaluation, consider these possibilities:

(1) Product A sounds good, and its designer states that it uses a new technology.

(2) Product B sounds bad, and its designer states that it uses a new technology.

When I'm faced with either of these two circumstances, I resist as best I can the normal human tendency to leap to a conclusion. I have usually found it best to withhold opinions on the possible causal relationship between the sound of a new product and its technology until time and/or a deeper investigation have revealed the facts.
I say "usually," because when a reader

wrote recently claiming that he had found that some types of speaker wire sound better with one end attached to his amplifier than the other, I did come to a fast conclusion-and not about the wire either.

External TV Speaker

Q. Would it be possible to upgrade my TV sound by substituting a good external speaker for the one in the TV? JOSEPH MITCHELL

La Jolla, Calif.

Sometimes yes, sometimes no. It A depends on whether the major faults you hear arise from inadequacies in the speaker itself or from the TV audio section feeding it. In the past I have found that using an external speaker with a set often simply revealed buzz, hum, and hiss that the internal speaker didn't reproduce. On other occasions, with other sets, the improvement was worthwhile. In any case, unless you have some experience with electronics (or have a usable earphone-output jack), leave the external-speaker wiring connections to a competent technician.

EVERYONE WHO WANTS THEIR OLD SYSTEM TO SOUND LIKE NEW. RAISE YOUR ARM.



Look what we've brought back from Europe.

Hello, we're back again. This last trip to Europe added so many new titles to our list of imported Classical Music that we'll have to strain your eyes a little with fitty bitty typeface. You know that prices for imported Classical Music can be outrageous. But this can be changed. Here's how we're doing it: We buy large quantities with an ever stronger Dollar. We handle our own shipping. We cut

overhead and sell directly by mail. And so our imports often cost far less than you'd expect. All recordings are pressed, printed and sturdily boxed in Europe. All are Stereo unless otherwise noted. All are factory fresh European namebrands. As many of these sets are available for the first time in the U.S.A., "not" prices are for comparison only, based on the suggested list price for comparable LP sets.



The Most Resultiful Madei gals, with the Collegium Vocale. Cologne "The listener will discover a treasure Sung in Ger/Dutch/Span/Fr/ Eng/Ital., cond. by W. Fromm.
CBS. Masterworks. (79333).
Made in Germany. Text Eng/
Ger. • • • • 4 LPs not \$30 only \$22.99 It#29579

Telemann: Banquet Music Complete recording. From the year 1733: "Music lovers can look forward to a year of grand instrumental work from the pen of Telemann. Subscrip tions are due quarterly at 2 talers of Hamburg value." G. Leonhardt, Concerto Amster Leonhardt, Concerto Amsterdam, F. Brueggen, Grand Prix du Disque. First rate Tele-funken (6 35298), Made In Ger. Text Ger/Eng/Fr. Sumptuous box. • • • • • 6 LPs not \$60 only \$34,99 It#29295

fin & Orch. With Salvatore Ac cardo who "was able to read a score even before he could read or write"; Charles Dutoit & London Phil. Top-qual. Deut. Gram. (2740121). Made in Ger. Text: Ger/Eng/Fr/Ital.

* * * * * 5 LPs not \$50 only \$39.99 It#29470

John Dowland: The Bookes of Songs (1597 to 1603).
Original Dylan of his tymes.
'The applause of them that judge, is the encouragement of those that write: My first to books of aires speed so well that they have produced a third." (1603) Anthony Rooley & Consort of Musicke, Exc. Telefunken/Decca (6.35484).
Made in Germany. Text: Engi Fr/Ger * * * * 6 LPs not \$60 only \$49.99 ttw29434



Plainsong: An Anthology of astery: Monk-monophony. Performed by Plainsong Choir Performed by Plainsong Choir of the Capella Antiqua. Munich. Fabulous Textbook in Latin/Eng/Ger/Fr. Precise MPS Metronome (88010-4). Made in Germany. * * * 4 LPs not \$40 only \$24.99 tt#29461

Carmina Burana: 33 Songs from the Orig. Manuscript ca 1300. Fore-fore fathers' music. Early Music Quartet. Very, very rare Telefunken/Das alte. Werk. (6.35319). Made in Ger. Text: Latin/Eng/Ger . . 2 LPs only \$19.99 (1#29294

Harasiewicz plays Chopin iewicz is presently considered the top Interpreter of Chopin, and this record is in big de-mand." Grand Prix Chopin, Phillps (6747017), Made in Holland. Text Eng/Fr./Ger

Klemperer Conducts Beethoven. Complete: 9 Symph. Mis-sa Solemnis Fidelio. 5 concer-tos for Piano & Orch. Leonore Overtures etc... etc. With Baren-born. Menuhin, Nilsson et al. EMI/Electrola (1C19753400/19) Made in Germany. Text Ger BLUE ANGEL EXCLUSIVE. * * * * * * * * 20 LPs only

Beethoven: The 5 Plano Concertos & Choral Fantasia, Op. 80. New Philha. Orch. London. Barenboim & Klemperer. John Alldis Choir. Grand Prix du Disque. Edison. EMI/Electrola (1C 19701890/93) Made in Ger. Text Ger. • • • 4 LPs not \$35 onty \$19.99 It#29249

\$79.99 (1) 11#29401

Beethoven: The String Quartets, Juilliard Quartet, R. Mann, C. Adam, etc. CBS Master C. Adam. etc. CBS master-works (GM 101). Made In Ger. Text Eng/Ger/Fr. • • • • • • • • • 10LPs not \$71 only \$49.99 ItW29307



Beethoven: Complete Sym Gewandhausorch phonies. Gewandhausroch. Lepzlg, Franz Konwitschny. With T. Adam, t. Wenglor, U. Zollenkopf etc. Radio Bre-men: "Beethoven like he has not been in a long time." Fon-tana (K71BA600). Made in Holland. Text German. • • • • • • • 6 LPs not \$54 only \$24.99 It#29213

Beethoven: Complete Piano So natas Fried Gulda Awards winner. Metronome/Amadeo (89007/11). Made in Ger. Text

Beethoven Masterworks Sym #5. Concertgebouw Orch.. Eugen Jochum: Sym. #9 Gewandhausorch.. Kurt Masur: Piano Concerto #5. Con-certgebouw Orch.. Haltlink; Vi-olin Concerto in D. New Phil-harmonia Orch.. Alceo Galliera, cond. Grumiaux. Violin Romance #2 in F. Con certgebouw Orch., Haltink, cond., Grumiaux, viol: Sonata #8 Op. 13 in C minor, Sonata #23 Op. 57 in F minor. Sonata #14 Op. 27/2 in C sharp minor. Claudio Arrau, piano. Philips (6768231). Made in Holland. Text Eng/Fr/Ger. 5 LPs only \$19.99 It#29591

1977 Berlin, Phil. H. v. Karajan, Tomowa-Sintow, Schreier, etc. Deutsche Grammo (2740172) Made in Germany. Text Ger.

* * * * * * * 8LPsList
\$71 only \$59.99 lt#29422

Lute Music of the Renais sance. Walter Gerwig plays pieces from Germany. Eng-land. Italy & France. "It was part of the education of the nobility as well as of the bour-geoisle to know this instru-ment to at least some degree." Meticulous Electrola-Harmo-nia Mundi (149980507) Made in Germany Text Ger /Eng

• • • 3 LPs not \$30 only
\$19.99 it=29346

Klemperer Conducts Mozart. Complete: Cosl fan tutte. Nozze di Figaro, Magic Flule etc. Sym: No. 25, 29, 31, 33-41 etc. etc. Philharmonia & New Phil. London Wind Ens., etc. EMI/Electrola (1C19753714) 38). Made in Ger. Text Ger BLUE ANGEL EXCLUSIVE. • * * * * * * * * * * * * *



Mozart: Complete Plano Con certos. Daniel Barenboim & the English Chamber Orch the English Chamber Orch
Cited as being a masterwork
by a still young Interpreter.
EMI/Electrola (1C19752249)
60). Made in Germany. Text
Eng./Ger. * * * * * * *

* * * * * 12 LPs not \$107 nly \$49.99 It#29231

Mozart: Symphonies 1-41. Ber lin Phil. cond. by Karl Boehm

Mozart: Complete Violin Con-certos. Bath Festival Orch. Y. Menuhin cond. & plays. EMI/ Electrola (1C15352341/44). Made in Germany. Text Ger.

• • • 4 LPs not \$35 only

Mozart: Idomeneo, Nicolaus Harnoncourt, Mozart Orches-tra & Choir of the Zurich Opera, New DIGITAL record-ing on Telefunken (6.35547). Made in Germany, Complete libretto in German/English tratian/French + Complete
"Das alte Werk" catalog.

* * * 4 LPs not \$43.92
only \$34.99 tt#29584

Mozart: Wind Concertos Bassoon B Maj: Flute No 1 G Maj: Clarinette A Maj: Oboe C Maj: Flute, Harp & Orch Maj: Flute, Harp & Orch C Maj: etc. Herbert v. Karajan cond. Berlin Philharmonics. EMI/Ejectrola (1C19702238/ 40). Made in Germany. Text Ger. * * * 3 LPs not \$26 only \$19.99 lt#29369

Gustav Mahter: The 9 Symphonies. Sir George Sotti conducts London & Chicago Symphonies, Concertaebo Orch. (Amsterd.). With H. Watts. R. Kollo. Lucia Popp. etc. An assembly of Grammies, Edison Awards, Grand Prix du Disque. Deut. Schall-plattenpreis. Wonderful Telefunken Decca (6.35230). Made in Germany. Text Ger Silver embossed clothbrt box



Bach: Brandenburg Concertos 1-6. On the orig, Instrum. with orig, orchestration. Con-centus Musicus, Harnoncourt. Grand Prix du Disque, Tele-Junken/Das Alte Werk (635043) Made in Ger. Text Eng /Ger /Fr • 2 LPs \$17.99 It#29205

Bach: Complete Organ Works Cinel Rogg. Considered by Grammophone Mag. to be the ultimate collection. EMI/Elec-trola (1C19714101/20). Made

Jacques Loussier Play Bach Loussler finally tracked down the swinging common cenominator between baroque music and Jazz." (Rhein ische Post, Duesseld.) All 5 Play Bach LPs freshly pres-sed by Telefunken-Decca (6 30115). Made In Germany. A BLUE ANGEL EXCLUSIVE. * * * * * 5 LPs not \$39.90 only \$25.99 It#32101

IS Bach Orchestra Works Brandenburg Concertos (orig. version!). Suites for Orchestra
16. The Musical Offering: The Art of Fugue. Neville Marriner & Academy of St. Martin in the Fields (London). Excellent Phil-lps pressing (6768232). Made in Holland, Embossed box, Ger. not \$70 only \$44.99 lt#29559



J.S. Bach On the Original In struments. Collegium plays Brandenburg Concer tos 1-6 & Overtures 1-4: as performed in the 18th cen-tury. Sought-after EM/Har-monla Mundi (1C 19753000). Made In Germany. Text: Ger. 4 LPs not \$40 only 519 99 11#29510

J.S. Bach: 6 Sultes for Violon cello. Played by Pablo Ca sals, the most important cel-Est of our times. Deutsche Zeltung: "Mascullne, dry Bach, moved into timeless-eess Grand Prix du Disque Rare historical mono recording EMI/Dacapo [1C14700892/4] Made in Germany. Text Ger
• • • 3 LPs not \$30 only
\$19.99 It#29511

Verdi: 7 Operas, Celebrating 200 years of La Scala, Milan. Rigoletto, Il Trovalore, La Tra-viata, Un ballo in Maschera. Macbeth, Don Carlos, Simon Boccanegra Cond. by Kube-lik, Abbado, Seralin etc. Beau-tiful set: 7 boxes in 1 box. complete Ilbretti. Deutsche

The Best Plano Concertos Beethoven #3, 4, 5, Mozart #8, 20, 21, 23, 26, 27, Chopin 1, 2, Grieg Op. 16, Schumann 1.2. Greg Op. 16. Schumann Op. 54. Brahms 1, 2. Liszt 1, 2. Tchai. #1. Rach. #1. 2. 4. Ravel. etc. Barenbolm. Arrau. Welssenberg. Richter. etc. EMI/Electroia (TC 19753680:94). Made in Ger. Text Ger. Schubert: The String Quar-Schubert: The String Quartets. Melos Quartet, Stull-gart. Deutsche Grammoph. (2740123). Made in Germany. Text Engl:/Ger./Fr. * * * * * * 7 LPs List \$62 only 549.99 It#29475

Concentus Musicus: N. Har noncourt & Ensemble Hay do. Purcell, Telemann, Biber Muffat, Schmelzer, Legrenzi Füx: instrumental musli: from 16th cent. Fr., Engl., Italy & Ger Metronome/Amadeo (189003-7) Made in Germany. Text Ger.

* * * * * * * * 7 LPs only
\$29.99 It#29085



Vivaldi, 82 Concerti. The most complete anthology, perf. by I Musicl. Grand Prix du Disque: Edison Award: Deutschei

Schumann: Piano Works, With Caudio Arrau. Op. 2, 11, 13, 17, 18, 19, 20, 21, 26, 28, etc. Philips (6768084). Made in Holtand. Text Eng/Ger/Fr. * *
* * * * * * 9 LPs not
\$80 only \$59.99 [1#29410

not \$161 only \$65.99 lt#29502

Brahms: Complete Chambe Music. The Piano Trio:; The String Sextetts: The Piano Quartets; The Piano Quintet: The String Quartets The The String Quartets: The dwo So-natas. With Haas. Grumi-aux, Beaux Art Trlo. Quartet to Italiano. Ber. Phil. Octet. Good fol Philips (6768146). Made in Holland, Text, Eng.

Brahms: Complete Sympho nies, Acad. Festival & Tragic Overtures Op. 80 + 81. Phil Crch. London. Klemperer. EMI Electrola (1C19750034/7). Md in Germany, Text German •
• • 4 LPs not \$35 only
\$16.99 lt#29131

Handel: Works for Orchestra & Concertos. Complete Concerti Grossi op. 3 & 6, 16 Organ Concertos. Water Music Royal Fireworks Music for Ballet. Oboe conc. etc. Acad-emy of St. Martin, cwn. N. \$75.99 [1#29436]

Handel: 16 Concerti for Or gan & Orch, Lionel Rogg on the organ of St. Michel, Gail-lac: with Georges Armand. Crch. de Chambre Tou ouse. Fine EMI/Electrola (1C16314 051/54). Made in Ger Text on Ger 41 2s no \$40 only \$19.99 H#2924H

The Beaux Arts Trio plays Plano Trios, Piano Quartets and Plano Quintets by Haydri Mozart, Beethoven, Schubert and Plano Quinters by Hayon, Mozart, Beethoven, Schubert, Mendelssohn, Schumann, Brahms, Dvorak, Tchaillovsky & Ravel, Philips (6768238) Made in Holland, Tex: Eng/



12 Orig. Hendrix LPs. Orig. covers (inc. Ladyland). Are you experienced. Bold as love Band of Gypsies, Isle of Wight Cry of love, West, War Heroes, Midnight Lightning Crash Landing, Blues End, Ladyland, Plus are single Book Polydor (25/25038) Made in Germany 12 LPs not \$95 only \$85.99 tr#23947

Dinu Lipatti. (The James Dean of Classical Music.) Selected Works from Bach. Brahms Chopin. Enescu, Grieg, Liszt. Mozart, Ravel, Schubert, Schu mann & Scarlatti, Important Mono rec EMI/Electrola (1C19753780/86). Made in Ger Text Germ. • • • • • • 7 LPs only \$29.99 It#29554



Verve Jazz Box: A hommage to one of the most important Jazz labels and to one of the best Jazz producers. Nor-man Granz A collection of Jazz heavies from the begin nings to now Louis Arm strong, Ella Fitzgerald, Jimmy Smith, Stan Getz Wes Mont gomery, Oscar Peterson Charlie Parker, Billie Holi day, Gerry Mulligan, Gene Krupa, Lionel Hampton, Count Basie, Duke Elling-ton, Bennie Goodman, Django Reinhardt, Modern Jazz Ouartet, Bill Evans, Dizzy Gillespie, Chick Corea and Return to Forever John Mc-Launhlin, On 1 LP side each A history of Jazz In a bitter-sweet chocolate brown box Gold-printed booklet. Verve 2625011. * * * * * * * * 10 LPs not \$80. only



\$49.99 11#32100

Rolling Stones Story: The good old Decca times. Stones 1 Around & ar. Stones 2. Out of our heads. Aftermath, Go live If you want. Satanic Majesty. Beggar's Banq, Let It Bleed. Ya yas Out. Metamorphosis. Btw. The Buttons. 2 historical Mono LPs. Tele * * * * * 12 LPs only \$74.99 It#24213

Call Toll Free: (800) 446-7964 Virginians, pls. call (804) 293-5197. We are here from 9-5 EST. Ask for Bambi, or leave a message.

Okay, folks, I'll give you a try!

Quant.	Of Item#.	\$ each.		

Quantities are limited. Add \$3 for post&hdlg. VA residents add 4% sales tax. 10 day money back guarantee for unplayed records.

FOREIGN ORDERS: Visa/MC, Intl. money order or cashier's check in U.S. funds only. Add 10% for p&h, \$7.50 mlnimum.

) I have enclosed check/money order for \$, (allow 3 weeks for personal checks). () Send it C.O.D. I will pay add. post & here's \$10 as a deposit.

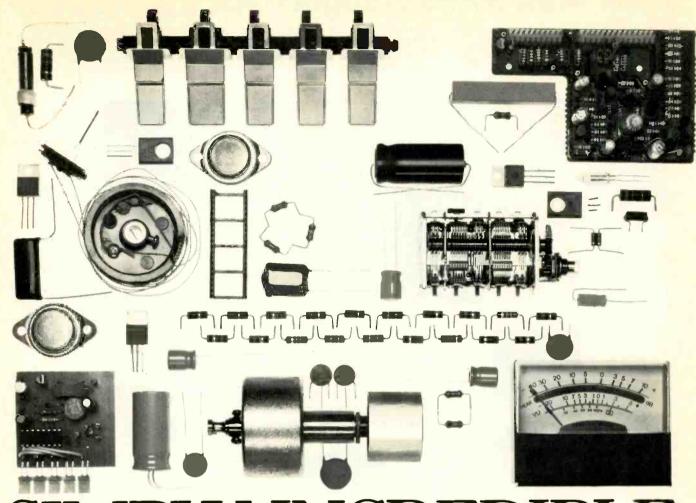
1 Charge it to my / 1 MC () Visa (fast

delivery!).	o iiiy () ivi	C () VISA (IA:
Card#		
Exp. Sig	gn	
Name (print)		
Address		
City		
State		Zip

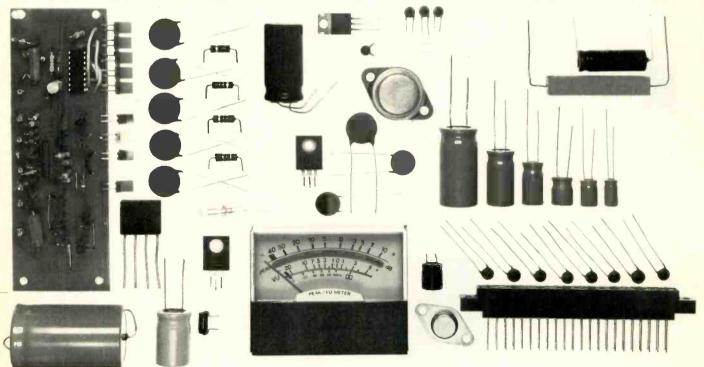
) Please send me your catalogue

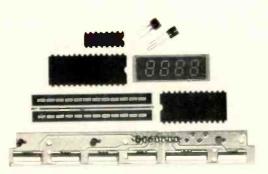
Blue Angel, Inc. 1738 Allied St. Charlottesville, VA 22901

CIRCLE NO. 48 ON READER SERVICE CARD



SIMPLY INCREDIBLE





INCREDIBLY SIMPLE

Sophistication without complication. Performance without bulk. It's not a dream. It's the incredible Aiwa M-501 mini-component system. An audio system whose technology is so advanced, size is immaterial. Only efficiency counts.

Instead of trying to impress you with oversized, overcomplicated components, the Aiwa M-501 system leaves you with just one impression: awesome performance.

All the Aiwa M-501 components together measure less than many single components, but their specifications measure up to and often beyond conventional hi-fi systems.

And with Aiwa, technology doesn't quit with performance. It just begins.

Nearly every function in the Aiwa M-501



mini-component system can be activated by Aiwa's unique infrared remote control. In fact, the M-501 system shown here is so advanced it can be programmed to turn on by itself, record by itself, even change up to 6 preset tuner channels by itself. Just about all you have to do, is buy it.

The incredible Aiwa M-501 mini-component system—preamplifier, quartz synthesizer tuner, metal-capable cassette deck, digital quartz timer, infrared remote control and DC stereo power amplifier with 50 watts minimum RMS, both channels driven, into 8 ohms from 20–20000 Hz. With no more than 0.02% total harmonic distortion.

AI WA SIMPLY ADVANCED

For more information, write: Aiwa America Inc., 35 Oxford Drive, Moonachie, New Jersey 07074. In Canada, Shiriro (Canada) Ltd.

Tape Talk

By Craig Stark



Digital Cassettes

I wonder why no one has come out with digitally recorded cassettes? These would be more versatile than discs and more accurate than the best of today's analog recordings.

DAVID A. WILSON Arlington, Mass.

A The idea of the digitally recorded cassette is attractive, but there are several problems that have to be solved first. Information-packing density is one. To put enough "bits" on the tape to equal or improve on conventional analog recording demands a bandwidth (frequency response) about equal to that of a video recorderwhich, incidentally, is why PCM (digital) adaptors for home use have all required a video recorder.

One way around the bandwidth problem is to record each bit within a digital "word" on a physically separate track, or at least to split up the fourteen- or sixteen-bit digital words among several different tracks on the tape. The 3M and Mitsubishi open-reel digital machines (designed to use 1/4-inch videotape) that I've seen both do this. The new Mitsubishi X80-yours for a mere \$25,000—uses a total of ten tracks (eight for the audio signals, two for control purposes) for two audio channels and runs at 30 ips. Compare that to a less than 1/4-inch tape running at 1 1/8 ips and you can start to appreciate the problem of a digital-cassette format.

There is a further difficulty with the standard cassette as a digital-recording medium. The mechanical stability of cassette shells and guidance mechanisms is simply not up to digital requirements. Enormously complex "error-correction" systems would be needed—far more so than with open-reel digital recorders.

There is an attractive existing alternative to the VCR-based home digital system, however, and that is the almost-forgotten eleaset format. Its slightly wider tape and 3¼-ips speed are closer to the digital track/bandwidth requirements, and because the guidance system for an eleaset (unlike a cassette) is not dependent on the shell, it can be made as stable and precise as needed. If I were looking for a practical

alternative to the VCR format for home digital-audio taping, that's where I'd start my investigation.

Metal Playback

My cassette deck does not have a switch position for metal tape, but I was told that I could still play, though not record, such tapes. However, when I play a metal tape recorded on a friend's deck the right channel occasionally "drops out" or becomes muffled. What's the problem?

D. SCOTT FERGUSON Kent, Ohio

A You were told correctly: if your deck lacks a "metal" switch position you cannot successfully record such tapes, but you should be able to play them back using the CrO₂ switch position.

Your problem in playing back the tapes recorded by your friend has nothing to do with their being metal. The likelihood is that there is some very slight incompatibility in head adjustments and/or cassette hold-down arrangements between the two decks. Despite every attempt to make cassettes interchangeable from one deck to another, there can be occasional problems when one unit is toward the high side of the allowable tolerance while the other is toward the low side. The variations within tolerances in the cassette shells themselves are another possible factor in decreasing compatibility.

Transport Controls

Is there any difference in quality between mechanically operated, solenoid-operated, and motorized-cam-operated cassette transports? Also, what is TTL control?

NICK STASSIO New York, N.Y.

A well-designed mechanically operated transport-control mechanism will outperform a badly engineered solenoid system, and several recent decks have incorporated mechanical pushbuttons that are far easier to use than the traditional "piano keys." A mechanical system, however, is inherently more complex and therefore harder to design well than one based on electrical solenoids. And since higher prices can be charged for solenoid-controlled decks, the probability favors good design (with some exceptions) in them. Solenoids also provide the option of remote control.

Solenoids are not free of problems, however. For one thing, they tend to clank, sometimes rather loudly, when they operate. This noise reflects a shock to the parts being moved by the solenoid, one of which is the tape-head/pinch-roller assembly, and it has been alleged that these repeated shocks may, in time, put the heads out of alignment. So as to combine the convenience of light-touch pushbutton control with a more gentle mechanical action, therefore, a few rather expensive decks use a small motor that activates a series of gently operating cams to bring the heads up to the tape, control the brake mechanism, etc. In the abstract, this is probably the "best" way of controlling the transport, but the cost is sufficiently high to make it justifiable only in a few machines.

The phrase "TTL" stands for "transistor-transistor logic," a type of integrated-circuit technology. With a purely mechanical transport it's possible to arrange the levers so that potentially destructive operations—such as going directly from high-speed rewind into play before the tape stops—can be precluded. With electrically controlled transports the safety interlock must be electrical, which is what the TTL circuitry is for. It senses the machine's transport status at any moment and delays the execution of a "dangerous" command until the proper intervening steps have taken place.

C-120 Cassettes

I understand that at one time many recorder manufacturers warned that C-120 (two-hour) cassettes should not be used on their decks. Why isn't there a problem in all cases? What causes the problem? Is the warning still valid?

PETER MARKOFF St. Louis, Mo.

The warning is still appropriate. The A longer the tape enclosed within a cassette shell, the thinner it must be, and the only way to reduce tape thickness is by using thinner plastic base material or a thinner magnetic coating. Experience indicates that C-60 and C-90 cassette tape can have the same coating thickness if there is a tolerable reduction in the base-film thickness of the latter. For a C-120 tape to fit into a standard shell, however, requires both a thinner magnetic coating and a still further thinning of the plastic base. Such superthin tape provides inferior sonic performance, and there is a serious increase in the likelihood of its slipping or jamming in many decks.

Improvements in both cassette-deck transports and cassette housings have certainly reduced the purely mechanical drawbacks of C-120s, but they are still risky at best, and the sonic loss remains. You may get away with using them, but you're courting trouble.

WHY ONLY SONY WINDS UP WITH FULL COLOR SOUND.

Strangely enough, some of the things that make Sony Full Color Sound sound so terrific are things you can't hear. Such as Sony's unique experience and technical

achievement. Sony makes both tape and the equipment



that plays it. So Sony's experience with tape recording is unique among major tape manufacturers. After all. you'd better know all there is to know about tape decks before you make a tape. Sony does.

Then there's unique Sony balance. The fine-tuning of all

the elements that go into making a tape, so that each synergistically complements the other and delivers the finest recording humanly and technically possible to achieve.

the stepped hub wheel, which suppresses wobble; parallel "rails" of the liner which guide the tape and hub and keep

the tape winding flat and even. Even the surface which touches the tape is special graphite-coated polyester, for the least possible friction.

Some of the unique patented Sony innovations are

pioneering and how the Sony balance system works.

Our Sony SP mechanism is actually 10 times more trouble-free in lab tests than our old conventional mechanism. And the increase of friction after 200 "torture-test" windings and rewindings has been reduced by nearly $\frac{2}{3}$!

The fact is, the more sophisticated your equipment, the more you'll appreciate Full Color Sound. Listen to Sony SHF (our best normal bias tape), EHF (high bias), FeCr or Metallic tape. Listen to the perfect balance of its perfect components. It's the secret of Full Color Sound. SONY

© 1381 Sany Corporation of America Tape Div.

Sors, is a trademark of Sony Corp.

You also can't hear Sony's unique SP mechanism, one of the carefully balanced elements in every Sony tape. It's a perfect example of Sony technical achievement. The SP mechanism is what makes the tape run so smoothly inside the cassette. And smoothly running tape is critical for total, perfect tape performance. Smooth running means less friction.

So some of the most popular tape makers give the tape as much clearance inside the cassette as possible. (We used to do the same thing.) But this method results in uneven or too tight winding and actually increases friction as you wind and rewind the tape. Jamming and even a stopping of the tape in its tracks can result.

It was clear to Sony that even, uniform winding was the key. So Sony reversed the basic thinking about friction completely and invented the SP mechanism, the first positive guidance system on the market. Instead of giving the tape lots of room, it gently guides the tape smoothly and precisely through the cassette, and onto the reels, with a maximum of positive precision support, yet with an absolute minimum of friction. This is a perfect example of Sony CIRCLE NO. 36 ON READER SERVICE CARD

Precision guide roller

Tape

Pressure pad



Shelding plate

Technical Talk

By Julian D. Hirsch



Phono-cartridge Loading

A READER writes to ask about the significance of capacitance in cartridge-loading specifications. He wonders just how important it is and what can be done to modify his turntable or receiver to take it into account for the best results with any particular cartridge.

It is not practical, in this limited space, to go back to the fundamentals of electrical theory to define capacitance and show in detail how it affects the compatibility of phono cartridge and preamplifier. I will therefore assume that the reader has at least a rough understanding of the term "capacitance" (or is willing to look it up) and limit myself to discussing its practical implications for record playing.

The frequency response of a magnetic phono cartridge is largely determined by two factors: its physical response to the record-groove modulation and its electrical frequency response. Both of these involve the phenomenon of resonance. This resonance can be placed (by the cartridge designer) within a wide range of frequencies, depending on the effective values of the cartridge's electrical characteristics of inductance and capacitance and its physical characteristics of mass and compliance. Taking the sources of the mechanical resonance first, if a mass is suspended on a spring (compliance) and excited by an external vibration at various frequencies, the physical movement of the system will be maximum at the resonance frequency of the combination. The moving mass of a phono cartridge consists of the stylus-tip jewel, the cantilever that supports it, and any generating elements attached to

or contacting the cantilever (such as coils, magnets, or iron armatures). Since the mass is distributed over the length of the assembly and each part has an effect proportional to its distance from the stylus tip, it is customary to refer to an equivalent or effective tip mass; this is the single value of mass that, if located at the stylus-tip position, would produce the same resonance frequency as occurs in the actual cartridge-moving system. In most modern cartridges, the effective mass is less than 1 milligram.

The compliance or "springiness" of the cartridge's moving system is usually supplied by the elastomeric cantilever pivot. There is also another compliance involved, one that is not within the direct control of the cartridge designer: the compliance of the disc material itself. This can differ between makes of records according to the composition of their vinyl compounds.

The combined effect of these elements on the mechanical resonance of the cartridge can be quite complex, but for most good cartridges the high-frequency stylus resonance is above the main part of the audible-frequency range. Typical frequencies are 15,000 to 25,000 Hz, and in some cartridges with very light moving systems the resonance can be as high as 35,000 Hz or above.

The result of this resonance is an increase in cartridge output at that frequency, and to some degree over a range of frequencies surrounding it. There is not likely to be much recorded program content near the resonance frequency, but random noise is always present, and, if it is unduly accen-

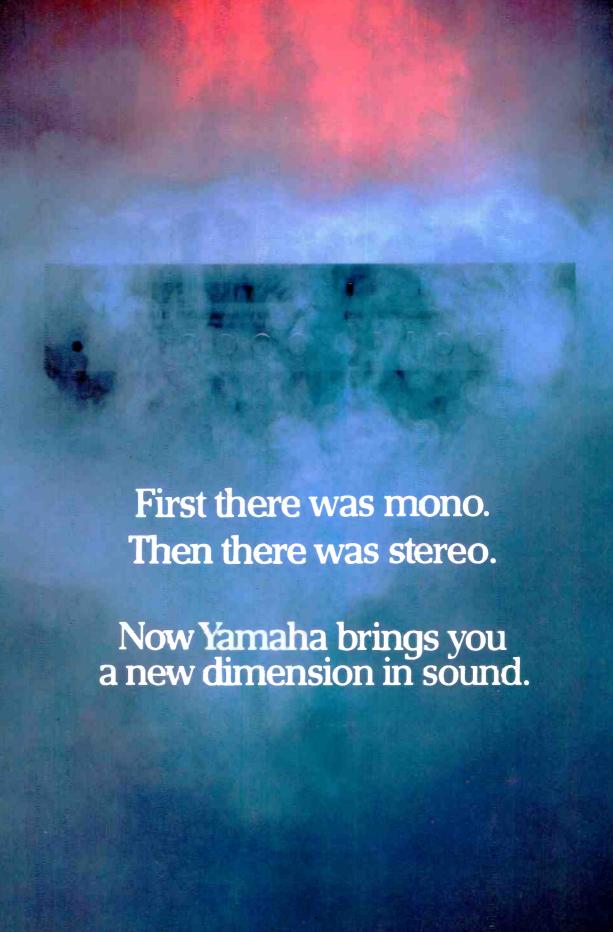
tuated by an increase in resonance, it is possible for the cartridge output to overload the input stages of some preamplifiers (this is particularly true of some moving-coil designs which may have large undamped resonances at very high frequencies). Therefore, it is common for the cartridge designer to use mechanical damping (analogous to resistance in an electrical circuit), generally in the pivot material, to reduce the amplitude of the mechanical resonance.

Excessive mechanical damping can impair the tracking abilities of a cartridge as well as degrade its transient response, so with most non-moving-coil cartridges the remaining resonance peak is compensated for (equalized) by the electrical resonance between their coil inductances and the external load capacitance. The midrange response of a cartridge can be determined by a proper choice of internal mechanical and electrical characteristics. Often there remains a fairly well-damped mechanical resonance in the vicinity of 15,000 Hz which could raise the cartridge output by several decibels, with the output dropping off rapidly above that frequency. Tuning the electrical resonance to a somewhat higher frequency can compensate for that drop, resulting in a virtually flat response.

As with the mechanical resonance, the amplitude (and bandwidth) of the electrical resonance can be controlled by the proper amount of resistive damping (loading) in the external circuit. Since most cartridges are designed to be terminated in the stand(Continued on page 32)

Tested This Month

Benjamin Model 4100 Automatic Turntable ● Harman Kardon hk300XM Cassette Deck KEF Model 103.2 Speaker System ● Yamaha R-700 AM/FM Stereo Receiver Pioneer A-8 Integrated Amplifier and F-7 AM/FM Stereo Tuner





favorite station. You're never without sound.

The Record Out function.

With Yamaha's independent Record Out, you can record from any source (tuner, tape, phono) while listening to any other. You can also feed a separate, different signal to a second amplifier and speakers in another part of your home. So you can have two complete home music systems for just the price of an extra amplifier and speakers.



Station-locking tuning.

Quartz-locked tuning is accurate. But quartz tuning circuits have an internal frequency oscillator which generates RF signals. These signals can be picked up by the



tuner and be mixed with the regular audio signal to cause distortion. To solve this problem, Yamaha

developed a unique microprocessor chip with a memory. It stores the exact tuning location of every AM and FM station. When you tune a Yamaha receiver, the microprocessor produces exactly the frequency you're looking for instantly...from its memory. Tuning is 100% accurate. All you get is clean music.

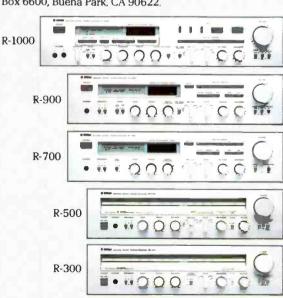
Pushbutton tuning.

The Yamaha R-2000 virtually tunes itself. At the push of a button, the tuning circuitry quickly sweeps the band in the direction you desire. The receiver locks automatically onto the next station—perfectly. You can also pre-select seven FM and seven AM frequencies for instant access to your 14 favorite stations.

We could go on. But hearing is believing. There are six completely new R-Series receivers. Each step up brings

more power, convenience and versatility. All feature the accurate, musical sound quality for which Yamaha has become world-renowned. And naturally, every Yamaha product is backed by a nationwide network of Preferred Customer Service Centers. The new R-Series receivers will make a dramatic improvement in the enjoyment and realism you get from your home music system. Truly the next step in sound from Yamaha.

For more information, write to: Yamaha Audio, P.O. Box 6600, Buena Park, CA 90622.

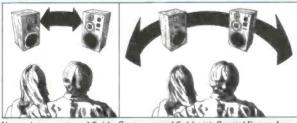






Now Yamaha takes you a giant step closer to the excitement of live music. The new R-2000 receiver goes beyond ordinary stereo to re-create the full depth, presence and excitement of actually being at a live performance. It's the top of the line of our new R-Series receivers; each designed to bring you pure, accurate musical reproduction. Sound to please the most discriminating audiophile—and features to please the most sophisticated music lover.

The Spatial Expander recreates the feel of a live performance.



Normal stereo sound field. Stereo sound field with Spatial Expander.

Normal stereo is limited to the space between two

speakers. Yamaha's Spatial Expander extends the sound field out beyond the speakers. This wider sound stage recreates the ambience and spaciousness of a live performance. There is more space between musicians, more depth and richness to the overall sound. You get the feeling of live sound without the expense of add-

SPATIAL EXPANDER

5
6
7
OFF
8
ON

ing extra speakers or amplifiers. The Spatial Expander works with any good stereo source material. Phono, FM or tape. For the first time you can enjoy the feeling of sitting front row center at your favorite concert.

X-Amplifier for more power and cleaner sound.

The R-2000 with our new X-Amplifier is more efficient and

more faithful to music than any receiver we've ever built. The circuit design evolved from the nature of music itself. We discovered that true musical crescendos, which require full amplifier power, occur only about 2% of the time. Conventional amplifier designs operate at full power all of the time in anticipation of those loud musical passages. The remaining 98% of the time, full power isn't required. That means conventional designs waste electricity and produce huge amounts of heat — which shortens component life.

The new Yamaha X-Amplifier works at low power most of the time. A unique (patent pending) comparator circuit switches the amplifier to high power when a loud passage is detected, and back to low power when the peak has passed.

As a result, the amp runs significantly cooler than conventional designs, which measurably increases component life. And the X-Amplifier of the new R-2000 is the most

LOUDNESS

And the X-Amplifier of the new R-2000 is the most powerful we've ever built into a receiver. It delivers 150 watts RMS per channel with 0.015% THD, at 8 ohms from 20 to 20,000 Hz. So the new X-Amplifier will easily handle the wide dynamic range of the newest digital and direct-to-disc recordings.

Yamaha's R-Receivers bring you sophisticated features and unparalleled convenience.

Continuously variable loudness control.

At low levels, music sounds like it's missing something. That's because at low volume your ear loses its ability to hear high and low frequencies.

and low frequencies.

Most "loudness" controls compensate
for this by boosting the high and low frequencies. This can lead
to increased distortion. Yamaha found a smoother way. By
suppressing the mid-range. And unlike everybody else, we let
you adjust the amount of loudness compensation to suit your
taste. So at low listening levels you get full, balanced sound
without distortion.

Auto phono.

Now you can have continuous music without getting up to switch sound sources. For example, you can set the R-2000 to a favorite FM station. Then, you can put on a record and the receiver will automatically switch to the phono mode. Once the record is over, the receiver automatically switches back to your

ard 47,000-ohm preamplifier input resistance, only the capacitance can be varied by the user to control the cartridge response. Usually, a slightly high capacitance value will *increase* the cartridge's output in the frequency range up to its mechanical resonance but will cause it to fall off more rapidly at higher frequencies.

Each cartridge manufacturer specifies (or should specify) the value—or range of values—of load capacitance with which his product will deliver its rated frequency response. This is usually in the range of 100 to 300 picofarads, with a few cartridges being designed for operation with 400 to 500 picofarads. In most cases, a moderate departure from the recommended value (say, ±50 per cent) will have only a minor effect on the frequency response. This is fortunate, for it

is frequently impossible for the consumer to know the actual capacitance in his phono-input circuit since it consists of the turntable's total wiring capacitance plus the input capacitance of the phono preamp.

Our test reports state the load capacitance we find gives the flattest frequency response with each cartridge, and we usually indicate the effect of variations about that value. We also report on the measured cable capacitance of the record player and the phono-input capacitance of amplifiers, which is about all we can do to provide guidance in a difficult area.

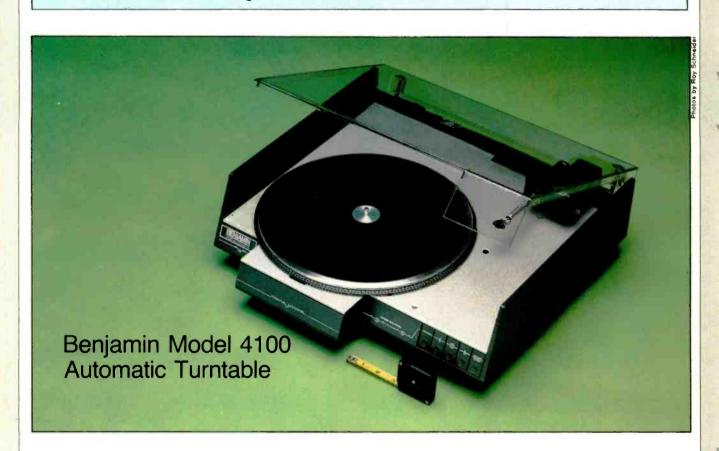
A number of amplifiers are now equipped with switchable phono-input capacitance (and sometimes resistance as well). This makes it easy to determine the audible effects of capacitance changes without worry-

ing about the characteristics of the system's components. I might add that the response flatness of some cartridges can be *improved* by departing from the recommendations of the manufacturers.

Several accessory manufacturers make "add-on" capacitors that can be plugged into the phono inputs to adjust the total cartridge load. Or you can try adding capacitance experimentally across the cable terminals beneath the record player or even in the preamplifier. I do not recommend soldering capacitors into the preamplifier (even if you can find the correct locations in the circuit), since this will probably invalidate the warranty. Another way to avoid the question of cartridge loading completely is to use a non-inductive cartridge such as an electret or moving-coil type.

Equipment Test Reports

By Hirsch-Houck Laboratories



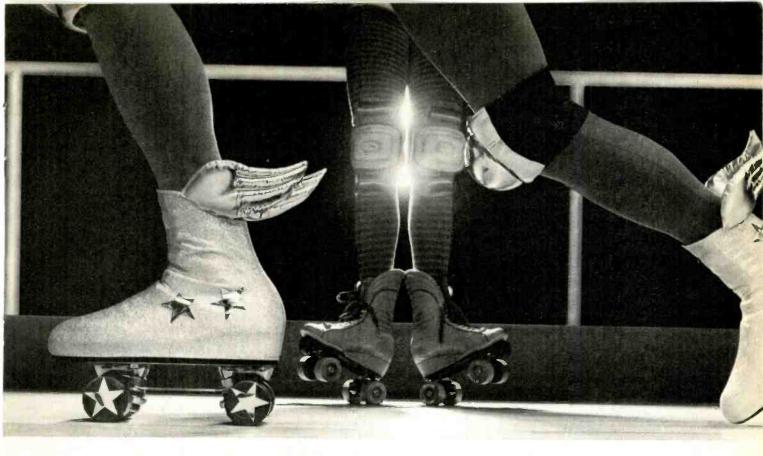
THE Benjamin 4100 linear-tracking turntable, manufactured in Spain and imported by Benjamin Electroproducts, is a fully automatic record player with a two-speed, belt-driven platter (weighing about 3 pounds with its rubber mat) and a short radial-tracking tone arm that maintains tangency to the record groove as it moves across the record.

The tone arm, which is about 5 inches long, is mounted on a carriage that is moved

along rails by a servomotor. The arm tube plugs into a socket on the carriage, where it is retained by a knurled locking ring. Any cartridge having standard ½-inch mounting centers can be installed in the arm. Tracking adjustment is made with the aid of a cardboard jig which is also used to set the correct vertical-tracking angle. Additional plug-in arms can be purchased for use with other cartridges.

Attached to the rear of the arm is a small

vane that interrupts the optical path between a LED and a photoelectric sensor when the arm pivots on the horizontal axis of its gimbal bearings (the pivots give it a few degrees of freedom). This allows for normal record eccentricity as well as the usual variations of groove pitch among records. The optical sensor supplies error signals to the servomotor which drives the arm carriage so as to continually reduce the (Continued on page 34)



If you think "pads and rollers" are just a California craze, you're not ready for New Memorex.

Pads and rollers are key components of a cassette's tape transport system.

This system guides the tape past your deck's tape head. It must do so with unerring accuracy.

And no cassette does it more accurately than totally new Memorex.



The new Memorex tape transport system is precision engineered to exacting tolerances.

Flanged, seamless rollers guide the tape effortlessly and exactly. An oversize pad hugs the tape to the tape head with critical pressure: firm enough for precise alignment, gentle enough to

dramatically reduce wear.

Our unique ultra-low-friction polyolefin wafers help precisionmolded hubs dispense and gather tape silently and uniformly. play after play. Even after 1,000 plays.

In fact, our new Memorex cassette will always deliver true sound reproduction, or we'll replace it. Free.

Of course, reproduction that true and that enduring owes a lot to Permapass™, our extraordinary new binding process. It even owes a little to our unique new fumble-free storage album

But when you record on new Memorex, whether it's HIGH BIAS II, normal bias MRX I or

METAL IV, don't forget the importance of those pads and rollers. Enjoy the music as the tape glides unerringly across the head.

And remember: getting it there

is half the fun.



tracking error toward zero. Benjamin claims a maximum error of ± 0.05 degree while playing a record.

The 12-inch platter, which is belt-driven by a small motor whose speed is electronically controlled through a phase-locked loop (PLL), has two rows of stroboscope marks cast into its rim, where they are illuminated by a neon lamp through a window in the motorboard. The Benjamin 4100 can be operated from 60-Hz power sources between 125 and 220 volts. To the right of the platter is a soft brush over which the stylus passes every time the cartridge moves on or off the record. This automatically removes dust from the stylus, but the brush can be removed if desired.

All the operating controls of the Benjamin 4100 are on or below the slightly tilted front panel of its grey molded-plastic base. Its power is turned on by a lever under the left front of the panel (its location, like those of the other hidden controls, is clearly marked on the panel). This turns on the stroboscope light and a red LED on the front edge of the motorboard above the "33" speed marking. The other controls are flat, rectangular, flush-mounted pushbuttons at the right of the panel.

The SPEED button changes the operating speed to 45 rpm, as indicated by the red LED above the "45" marking. Below the speed LEDs are SPEED CONTROL markings whose arrows point down to show that the speed-adjustment wheels are below the front edge of the panel. They provide a nominal ±3 per cent variation around each speed.

To play a record, the START/STOP button at the right of the panel is pressed momentarily. This starts the platter turning, and

the arm moves from its rest position to the index diameter of the record (12 inches for 33½ rpm, 7 inches for 45 rpm). When it reaches the correct diameter, it stops and descends smoothly to the playing surface. The 4100 has a protective system that prevents the pickup from descending to a recordless platter. At any time, a touch on the "up/down" button (whose functions are indicated by arrows) raises the arm instantly, and a second touch lowers it rapidly but smoothly to the record.

The tone arm of the Benjamin 4100 cannot be moved by hand. Therefore, two fast-slew buttons marked with arrows to indicate the direction of movement are located to the left and right of the up/down button. Pressing either one first raises the arm, then slews it in the selected direction until the button is released. A touch of the up/down button then lowers the pickup and playing is resumed. At the end of the record the arm lifts and returns to its rest position, shutting off the motor.

The features described are similar to those found on several other servo-driven linear-arm record players. However, the Benjamin 4100 is unique in that it is a front-loading design which can be installed in places where the plastic cover cannot be lifted. It can also be operated in the conventional manner where there is room to lift the cover. About three-quarters of the front of the plastic cover is absent, leaving only a slightly curved "lip" along its upper-front edge. The front panel is marked FRONTAL LOADING in the platter area, with an arrow pointing downward. The underside of the front panel serves as a drawer pull, and with it the entire turntable platter and drive-motor assembly can be pulled out of its normal position so that the center spindle is just forward of the front of the cover. In this position, a record can easily be placed on the platter. The curved upper front edge of the cover eliminates any possibility of scratching the record against the cover, since it can contact the disc only on its edges.

When the turntable is in its extended loading position, its operating controls do not function, and when it is pushed fully inward and is in operation, the platter drawer is mechanically locked and cannot be shifted. The entire Benjamin 4100 is supported on four soft rubber feet. It is 181/4 inches wide, 16 inches deep, and 53/4 inches high with the cover lowered. The 4100 weighs 20 pounds. Its suggested retail price is \$600.

● Laboratory Measurements. Installation of a cartridge in the tone arm of the Benjamin 4100 is relatively straightforward, although setting the correct vertical position may require some experimentation with spacers and screws of different lengths. Balancing is non-critical, and the free-floating action of the arm in a balanced condition indicates the very low friction of its bearings pivots.

[The output cable on the early sample submitted to us had two problems. The capacitance was too high (500 picofarads per channel) and it lacked a hum-suppressing ground lead. Both cable problems have been corrected in subsequent production units. If you have one of the earlier models (which can be easily identified by the lack of a separate ground lead), write to Benjamin Electroproducts and they will arrange for a nocharge replacement of the cable.]

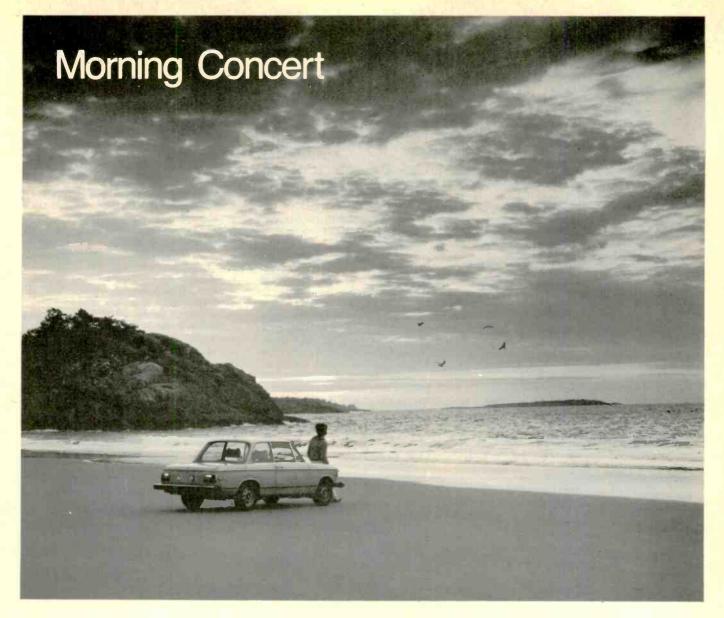
We chose an Ortofon M15E Super cartridge for our tests on the turntable. The actual tracking force was within 0.1 gram of the scale readings at all settings. When the START button was pressed, the platter reached its correct speed in a second or two, but the tone arm traveled at a more leisurely pace, producing soft but audible whirring sounds until it reached the lead-in diameter and descended rapidly but gently to the record. The arm lift was essentially instantaneous, and the descent time was only about I second. Since the linear arm has no offset angle, it has no skating force and always descends to the same point from which it was raised. The audio outputs are muted at all times when the pickup is off the record.

When a 12-inch, 331/3-rpm record was played there was an elapsed time of 5.5 seconds between the pressing of the START button and the beginning of play. This is relatively fast for an automatic record player, but the shut-down cycle was much slower, depending on the part of the record from which it was initiated. Except from the outer grooves of the record, the shut-down requires the arm to move in to the record center before returning to its rest position. This required some 27 seconds when the operation was commenced from the outer parts of a 12-inch record and a still rather lengthy 15.5 seconds from its inner grooves. Manual slewing, between radii of 3 and 6 inches, required some 12.5 seconds.

The turntable speeds were exact with stationary stroboscope patterns and could be (Continued on page 36)



".... Just keep applying cold compresses to the power transformer and call me in the morning."



You've driven to the end of the world. Alone.

The engine is still warm.

Amid the roar of the waves and the cries of the gulls, you fire up your mobile high-fidelity system for a morning concert.

What will it be? Bach? Mozart? Perhaps some Keith Jarrett.

Whatever you choose, your system is equal to the task because you've chosen ADS.

The ADS Power Plate 100 Automotive Amplifier and the ADS 300i Automotive Loudspeaker System deliver the kind of power it takes to be heard above road noise, engine noise, and ocean waves. And it's not just brute power, but power with performance, subtlety and nuance — qualities collectively known as musical accuracy.

Easily the most sophisticated automotive audio components available today, the Power Plate 100 amplifier and 300i speakers are exactly what you'd expect from ADS, the company that literally invented mobile high-fidelity.

To find out more about putting an ADS system in your automobile, write ADS, Department SR24, or call 1-800-824-7888 (California 1-800-852-7777) toll free and ask for Operator 483.

The more time you spend with your automobile, the more you owe it to yourself to listen to ADS.





Audio for the critically demanding

varied from +5.6 to -2.9 per cent at 331/3 rpm and from +7 to -6.7 per cent at 45 rpm. The speeds were not affected by line-voltage changes.

The flutter readings agreed closely with the manufacturer's ratings, measuring 0.07 per cent weighted rms and ±0.08 per cent weighted peak. The major flutter component was at about 3 Hz, with a much smaller one at 20 Hz. The rumble was low, -38 dB unweighted and -61 dB with ARLL weighting, and its spectrum showed a broad peak between 15 and 20 Hz and another around 30 Hz.

The effective arm mass was about 10 grams, a relatively low value which resonated with the highly compliant Ortofon stylus at about 10 Hz (a nearly ideal frequency in terms of overall tracking considerations). The radial arm, like others we have tested, was very good at tracking warped records. The soft mounting feet of the Benjamin 4100 provided effective isolation from base-conducted vibration, and the 4100 ranked among the better units we have tested in this respect. Its principal transmission mode was at 35 Hz, and higher-frequency responses were at a far lower amplitude.

Unlike some servo arms, which respond only to an arm's departure from tangency, the Benjamin unit is constantly driven inward at a rate that is being continually modified by the short-term arm movements in the horizontal plane. Benjamin states that the maximum tracking error is ±0.05 degree, but this would correspond to a position error of only 0.005 inch at the stylus, a figure beyond our ability to verify. We did note that when the arm-tangency error reached about 0.7 degree (corresponding to a stylus offset of about 1/16 inch), the sensing system interpreted this as the effect of the eccentric groove at the end of the record and immediately lifted the arm and returned it to its rest.

• Comment. Operationally, the Benjamin 4100 behaved very well. The front-loading feature was convenient and easy to use (definitely not a gimmick), and we can see how it could be one of the strongest advantages of this product over its competition. We installed it on a shelf barely high enough for the closed record player, yet were able to operate it with ease (although one cannot see the position of the tone arm unless the record player is at eye level and well lit). The 4100 was stable, and even fairly vigorous jarring or bouncing usually did not displace the pickup during play.

The plug-in arm was easy enough to insert, being tightly drawn into its socket as the locking ring was turned. Considerably

more effort was required to remove it, and care is necessary to avoid damaging either the cartridge or the arm pivots. Benjamin indicates that this is normal and prevents any side play in the arm. We suggest practicing inserting and withdrawing the arm before a cartridge is installed to master the technique of safe withdrawal.

The automatic protection system for the stylus consists of an electrical contact in the rear of the arm carriage, positioned so that if the stylus descends closer to the platter than would be possible if a record were in place, the rear of the arm will touch it and immediately cause the arm to lift and the record player to shut off.

In its normal operation, we found that the Benjamin 4100 worked flawlessly as a record player, and there was little one could criticize in its actual performance. Though its external appearance and finish are not quite up to the aesthetic standard set by some other radial or servo-driven tone-arm record players we have tested, it must be remembered that most of them are considerably more expensive than the 4100, which will match any of them in actual recordplaying performance and probably surpass any of them in versatility of operation and installation.

Circle 140 on reader service card



pioneer's new line of integrated amplifiers and FM/AM tuners is distinctively styled, the components compatible with each other both visually and electrically. The amplifiers feature Pioneer's "nonswitching" output circuit, a design that re-

duces distortion to insignificant (and often unmeasurable) values: Model A-8, in the middle of the amplifier line, is rated to deliver 90 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.005 per cent total harmonic distortion.

A-8 Integrated Amplifier

The signal path of the A-8 is direct-coupled from its high-level inputs to the speaker outputs, and the "non-switching" output

(Continued on page 38)

The Third Fundamental Difference



Environmental Design: Moisture-Resistant Bose® Car Speakers.

The Bose Car Stereo System is fundamentally different from conventional car stereo components. It is designed as an integrated system. It is tested to withstand changing temperatures, road contamination and vibration in your car. And it is engineered to include innovations like Active Electronic Equalization and Moisture-Resistant Speakers.

This is the third in a series examining each of the fundamental differences more closely.

Everyday moisture is hostile to car stereo speakers. Conventional cone materials and suspension

systems can literally disintegrate under the continuous assault of humidity, condensation and leakage in your car. So Bose developed an exceptionally rugged car speaker to survive the effects of moisture in the automotive environment.

The Bose 1401™ Car Stereo

Speakers in the photograph are actually operating under water.

Yet even after complete submersion,
Bose's moistureresistant suspension system does
not lose its structural integrity or support the growth of fungus and
old. This exclusive Bose design

mold. This exclusive Bose design lets you enjoy years of clear, high fidelity sound reproduction without deterioration.

Ask your authorized Bose dealer for a live demonstration of the Bose Direct/Reflecting® Car Stereo System. Compare it to any other car stereo. The difference is fundamental.

For more information and the name of your local dealer, dial toll-free 1-800-528-6050, Ext. 1401. In Arizona, 1-800-352-0458, Ext. 1401.

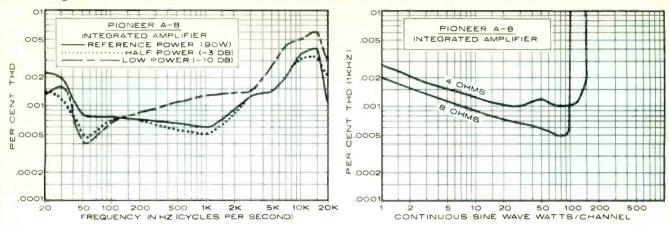
Better sound through research.

Covered by patent rights issued and/or pending

© Copyright 1981 Bose Corporation

Bose Corporation Dent SR The Mountain Framionham Massachusetts 0170

testreports



stage is specifically designed to be free of crossover distortion, giving the distortion-free performance of a class-A amplifier with the higher efficiency of a class-AB design. It is actually a variable-bias system, controlled by the signal level, that adapts the amplifier's output-stage operating conditions so as to suit the requirements of the signal.

The front panel of the Pioneer A-8 has been visually simplified by locating most of the little-used controls behind a hinged door (the left third of the panel). Protruding slightly through the closed door are the two tone-control knobs. The right third of the panel contains only a large volume-control knob, a muting pushbutton (it reduces the amplifier's gain by 20 dB), and the headphone jack.

The center third of the panel is largely devoted to a pictographic display that shows the signal path and operating mode of the amplifier at all times. It is dark brown, with white lines to show the signal paths and colored lights that identify the various inputs, outputs, and modes of operation. At the right of the panel is a vertical row of square, flush-mounted buttons that select the program source (PHONO, TUNER, AUX, TAPE 1, TAPE 2). A green symbol next to each button lights when it is engaged. Also next to the PHONO button are lights indicating the MM (moving-magnet) and MC (movingcoil) operating modes. To the left of the selectors is a twin vertical LED power-output display covering a range of 0.01 to 100 watts into 8-ohm loads.

When the top of the left panel section is pulled outward, it hinges down and can be slid under the amplifier to permit full access to the normally concealed operating controls. There is a balance control and a REC OUT SELECTOR that determines the signal source feeding the tape-recording output jacks. In its SOURCE position, the tape recorders receive the same program being heard through the amplifier. Other positions (PHONO, TUNER, AUX) supply those sources to the recorder outputs regardless of which program is being heard. Two COPY settings connect a pair of tape decks for dubbing from either machine to the other (the playback from either can be monitored by pressing the appropriate TAPE button in the playback-selector group).

The other concealed controls are small buttons, many of which perform their indi-

cated switching functions through relays. In its out position, LINE STRAIGHT bypasses the tone-control circuits, as shown by an orange arrow on the display panel. Pressing it in lights the indicators for BALANCE, MODE, and TONE, showing that those functions are usable.

Three phono buttons select the MM or MC preamplifier gains (lighting the corresponding letters next to the phono-input selector button) as well as the cartridge load terminations. The MC LOAD (R) button changes the MC-input resistance from 100 to 33 ohms, while the MM LOAD (C) button sets the input capacitance at either 200 or 400 picofarads when a moving-magnet cartridge is used.

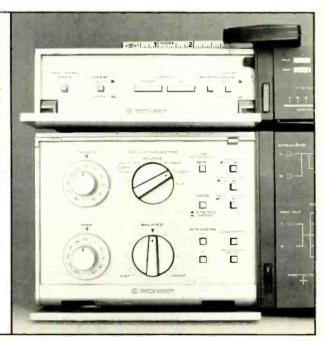
Other lights show the operation of the amplifier's protective circuits and when the muting switch is engaged. Thus, when the controls are hidden behind the hinged door, the pictographs on the panel show the complete operating status of the amplifier. The small brown pushbutton power switch, barely visible on the dark-brown strip to the left of the panel, is not illuminated. However, at least some of the lights on the display

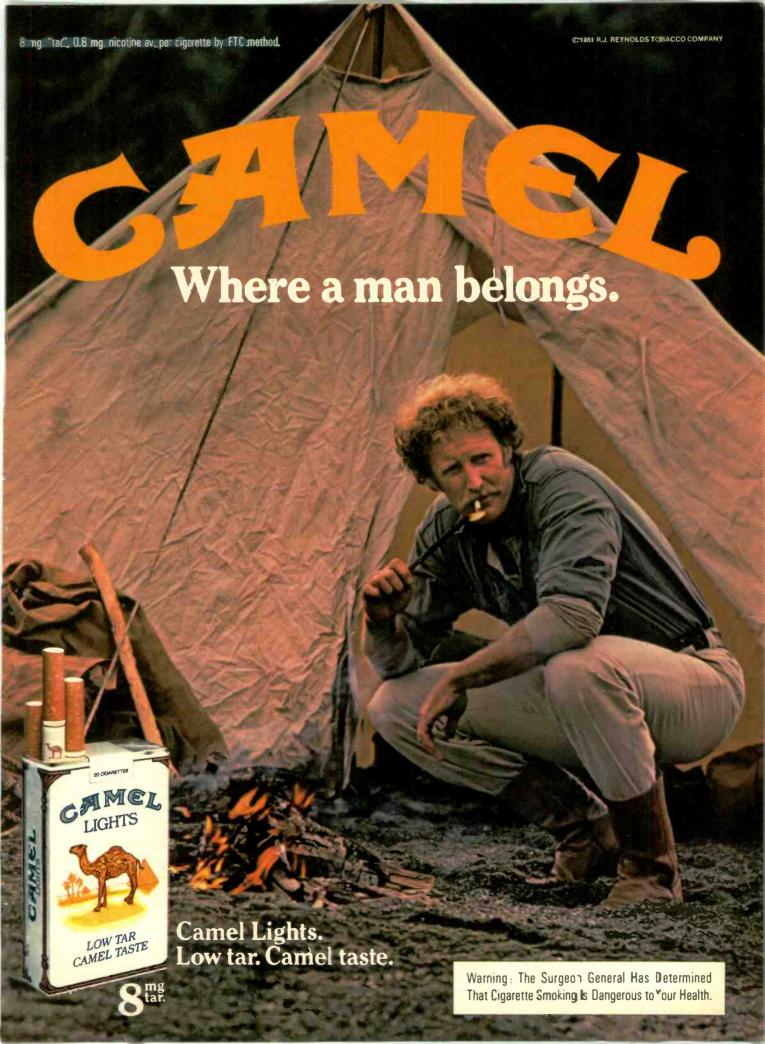
will be lit whenever the amplifier is on. The two sets of speaker outputs are activated by individual buttons, and the loudness and infrasonic-filter buttons complete the control lineup.

The rear of the Pioneer A-8 contains the various signal-input and -output jacks, two sets of insulated binding posts for the speakers, and three a.c. outlets, one of which is switched. The A-8 amplifier is about 16½ inches wide, 16¾ inches deep, and 5¼ inches high. It weighs about 30½ pounds. Price: \$550.

● Laboratory Measurements. The top of the Pioneer A-8 became only moderately warm during the preconditioning period and subsequent testing; elsewhere the exterior of the amplifier remained cool. Pioneer's claims for extremely low distortion were completely confirmed by our measurements. At 1,000 Hz, with both channels driving 8-ohm loads, the distortion decreased linearly from 0.002 per cent at I watt to 0.0005 per cent in the 50- to 90-watt range, and the waveform clipped at just (Continued on page 40)

With their masking sub-panel covers folded under, the less frequently used controls of the Pioneer F-7 tuner (top) and A-8 amplifier (below) are revealed. The A-8's tone-control knobs remain accessible through cutouts even when the panel cover is closed (see lead photo, page 36).





over 100 watts (the IHF clipping headroom was 0.52 dB). Although the A-8 is apparently not rated for driving loads of less than 6 ohms, we tested it with loads of 4 and 2 ohms. Driving 4 ohms, the A-8 performed much as it did with 8-ohm loads, with the distortion dropping from about 0.003 per cent at 1 watt to 0.001 per cent between 20 and 100 watts, and with clipping occurring at a 148-watt output. The amplifier was even able to drive 2-ohm loads to 130 watts per channel at the clipping point, but the distortion was somewhat higher, between 0.01 and 0.045 per cent over the full power range. This level of distortion can hardly be considered serious except in comparison to the amplifier's normal performance.

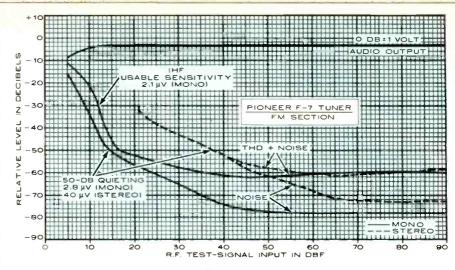
Driving 8-ohm loads, the distortion was typically 0.0005 to 0.001 per cent from 40 to 2,500 Hz, reaching 0.002 per cent at 20 Hz and a maximum of roughly 0.005 per cent at 15,000 Hz. When we drove the amplifier with the tone-burst signal of the 1HF dynamic-power test, the outputs clipped at about 130 watts with 2-ohm or 8-ohm loads and at 198 watts with 4 ohms. The 8-ohm dynamic-headroom rating, therefore, was 1.56 dB.

The input sensitivity for a reference output of 1 watt was 16 millivolts (mV) for the AUX input and 0.23 mV for the PHONO (MM) input. The respective A-weighted noise levels were -82 and -81 dB, both very good figures. The phono preamplifier overloaded at 260 mV at 1,000 Hz. At 20 Hz the equivalent overload input was even higher (350 mV), but it fell to 92 mV at 20,000 Hz. The phono-input impedance (MM) was 50,000 ohms in parallel with either 200 or 400 picofarads, as rated. No measurements were made in the MC mode.

The IHF overload-recovery time (from a 10-dB overload) was about 20 microseconds. The amplifier was stable with simulated complex reactive speaker loads and had a rise time of 2.5 microseconds. A phase-correcting network in the amplifier output limits its ability to sustain high-power outputs at ultrasonic frequencies, as we discovered during the IHF slew-factor measurement. We estimate that the slew factor is probably greater than 10.

The outstanding high-frequency linearity of the Pioneer A-8 was demonstrated by the IHF intermodulation-distortion measurement using equal-amplitude inputs at 19 and 20 kHz. Their combined peak value was equivalent to that of a 90-watt sine wave. For the first time since we began making this test more than a year ago, we were unable to detect any distortion on our spectrum analyzer (down to the instrument's residual level at about -96 dB, or 0.0016 per cent).

The tone controls had conventional response characteristics, with a sliding-bass turnover frequency and the high-frequency curves hinged at about 3,000 Hz. The loudness compensation boosted the low frequencies as the volume-control setting was reduced, with no change in the high-frequency response until the control was at least 30 dB below its maximum setting. Even there, the high-frequency boost was very slight. The infrasonic filter began to roll off the response below 100 Hz; it reached —3 dB at 35 Hz. The RIAA phono equalization was



flat within ± 0.6 dB from 20 to 20,000 Hz. It interacted very slightly with the inductance of moving-magnet phono cartridges, increasing the output slightly at high frequencies to a maximum of ± 0.5 dB in the octave from 7,000 to 14,000 Hz and rolling it off slightly above that frequency. With relatively low-inductance cartridges the overall response was still within ± 1 dB up to 20,000 Hz, but with some others the output dropped more sharply at the highest frequences to ± 0.2 or ± 0.3 dB at 20,000 Hz.

F-7 FM/AM Tuner

The Pioneer F-7 AM/FM stereo tuner is a companion to the Model A-8 integrated amplifier. Its external styling and width match those of the A-8, although the tuner is only 2% inches high and 14% inches deep. The F-7 is a digital-synthesis tuner covering the FM band in steps of 0.1 MHz and the AM band at intervals of 10 kHz (this can be changed to 9 kHz by a switch in the rear of the tuner to match European frequency assignments).

Like the A-8 amplifier, the F-7 tuner has most of its controls behind a hinged door that forms the left third of its front panel. Behind the door are narrow pushbuttons marked TUNING (up or down) that step the frequency in the indicated direction when pressed. A smaller TUNING MODE button has AUTO and MANUAL settings; in MANUAL, each touch of one of the tuning buttons moves the frequency by one increment, and holding the button in produces a rapid scan that covers the FM band in less than 15 seconds. In the AUTO mode (which also activates the interstation-noise muting) the tuner scans rapidly and silently until a signal is acquired, at which point it stops and unmutes. This is normally the most convenient way to search the FM (or AM) band for listenable signals.

The Pioneer F-7 has digital memories in which the frequencies of six FM and six AM stations can be stored and recalled instantly at the touch of a button. The buttons are on the right third of the panel, where they are accessible with the door closed. To store a frequency in a memory, a MEMORY button next to the TUNING MODE button is pressed, followed by one of the STATION

CALL buttons. The memories are retained when the tuner is shut off as long as it is plugged into a powered a.c. outlet (and for up to three days otherwise).

The hidden controls also include a MODE button with AUTO and MONO settings, plus a REC LEVEL CHECK which replaces the tuner's audio output with a (nominal) 330-Hz tone, whose level corresponds to 50 per cent FM modulation, for setting tape-recorder gains in advance of recording off the air.

When the door is closed, the dark-brown center third of the panel contains all the visible operating displays: illuminated identifiers to show which preset memory is in use, a digital frequency display with arrows indicating whether the tuner is on FM or AM, a five-segment horizontal signal-strength indicator, and the word STEREO, which lights when a stereo signal is received. The plastic strip containing the station identifiers can be removed and the "FM 1, AM 2," etc. markings can be replaced with the actual station call letters or frequencies.

The power switch is a button on the darkbrown strip that separates the display panel from the hinged door. To the right of the display panel, in the position corresponding to the amplifier's input selectors, are the two square buttons that select AM or FM reception. On the rear of the tuner there are antenna binding posts for AM and 300-ohm FM antennas and a coaxial jack for a 75ohm FM antenna. There is also a hinged ferrite-rod AM antenna. In addition to the 9/10-kHz AM selector switch, there are L and R audio outputs and an AM stereooutput jack. The latter is intended to be used with an external stereo adapter once a stereo AM broadcasting system has been authorized in this country. The Pioneer F-7 weighs about 10 pounds. Price: \$325.

• Laboratory Measurements. The IHF usable sensitivity (FM) of the Pioneer F-7 tuner was 11.8 dBf (2.1 microvolts, or μ V) in mono. The stereo sensitivity was set by the switching threshold of 21 dBf (6 μ V). The 50-dB quieting sensitivity was 14.3 dBf (2.8 μ V) in mono and 37.8 dBf (40 μ V) in stereo. The signal-indicator lights came on at input levels from 24 to 55 dBf (8.5 to 300

(Continued on page 42)



system that automatically measures every tape you use. Then sets bias, EQ and noise-reduction values to achieve ruler-flat response with lowest possible distortion. While JVC's heralded Sen-Alloy (SA)*
Heads give you supremely low distortion plus rugged durability, all in a three-head

silence you'll hear a greater resolution of musical details, especially with wide-

There's other JVC magic in the DD-9, too. Like our compute B.E.S.T.

configuration.

* Dolby is a trademark of Dolby Laboratories

range source material.



USJVCKOFP

41 Slater Drive, Einswood Park, NJ 0*407 JVC CANADA, INC., Scarberough, Ont. μ V). Thus the first light corresponds to a marginally useful signal, and a reasonably strong signal will cause all the lights to be illuminated.

The distortion at a 65-dBf (1,000-µV) input was 0.1 per cent in mono and 0.09 per cent in stereo. The respective noise levels were very low, reading -78 and -71.5 dB. The intermodulation distortion was measured by modulating the signal generator with 14- and 15-kHz tones of equal amplitude to a peak deviation of 75 kHz. Spectrum analysis of the tuner output (with a 65-dBf input level) showed third-order products at 13 and 16 kHz at -51 dB (referred to the primary modulating tone levels) in mono and -53 dB in stereo. The second-order difference-tone IM product at 1.000 Hz was 65 dB below 100 per cent modulation in both modes.

The tuner's frequency response was ruler-flat, within ± 0.4 dB from 30 to 15,000 Hz. The multiplex filters reduced the 19-kHz pilot carrier in the audio outputs to -61 dB (the 38 kHz to -67 dB) yet had no effect on the tuner's audio response at 15,000 Hz. The stereo channel separation was relatively uniform over the audio frequency range, increasing from 32 dB at 30 Hz to 40 dB at 15,000 Hz and averaging between 35 and 38 dB over most of the range.

The FM capture ratio was about 1.5 dB at a 45-dBf (100- μ V) input, and the AM rejection was 60 dB. Both figures improved somewhat at a 65-dBf signal level. The image rejection was a fair 56 dB, and alternate-channel selectivity was also fair at about 52 dB (adjacent-channel selectivity was 6 dB, a typical figure for FM tuners).

The muting threshold was at 23.8 dBf (8

 μ V). The tuner's hum level was -65 dB. The REC LEVEL CHECK output signal was at a -4.5-dB level relative to a fully modulated FM signal, equivalent to 60 per cent modulation. The only measurement made on the AM tuner section was of its frequency response, which was down 6 dB at 35 and 2,600 Hz.

• Comments. The Pioneer A-8 proves that the front panel of a flexible integrated amplifier need not look like the flight engineer's station in a 747 jet. Without any sacrifice of flexibility or control functions, it can be designed to look "at home" in almost any listening room and not like a fugitive from an electronics testing laboratory.

If one concedes that most of the controls found on today's integrated amplifiers do serve a useful function and deserve to be retained, it is equally true that most of them are used but rarely, and some may never be used by an individual user. There have been numerous efforts to hide little-used controls behind doors or fit them with small and unobtrusive knobs or buttons. Pioneer has done both, and with considerable success.

The pictographic panel display is genuinely useful (and would have been equally desirable even if all the controls had been exposed to view). Literally at a glance, and from a considerable distance, one can determine the complete operating status of the amplifier. It is both a functional and an attractive feature.

There is not too much to be said about the electrical performance of the A-8 amplifier. It is not only distortionless by any reasonable criterion one could apply, but even by what we consider to be downright unreasonable criteria. We specifically refer to the total absence of detectable IM distortion, even at the highest audio frequencies, which sets the A-8 apart from any other amplifier we have tested. Not only is the amplifier "distortionless," but it is hundreds of times better than that by any subjective criterion. The Pioneer A-8 is an outstanding product in performance and appearance, and one we would be pleased to have in a home music system.

The Pioneer F-7 tuner is one of the simplest to use (and, to our eyes, one of the most functionally designed) units we have had the pleasure of testing. One could hardly ask for a less cluttered panel, with no exposed controls other than a nearly invisible power switch, equally unobtrusive band-selector buttons, and six small station-selector buttons. In spite of its seemingly spartan control lineup, the tuner's information display contains everything that anyone will need to know—frequency, signal strength, and even the call letters of the station if they have been inserted into the station display windows.

The operation of the tuner was flawless, with the completely silent station selection that is characteristic of digital-synthesis tuners. Our performance measurements generally ranged from good to excellent, the most impressive being the noise levels, which were well below those of most FM tuners we have tested to date. The Pioneer F-7 provides good evidence that it is still possible to combine fresh styling, compact dimensions, and a moderate price with fine performance.

Circle 141 on reader service card



THE Harman Kardon hk300XM is a front-loading, two-motor, two-head cassette deck whose features include full solenoid control, a sophisticated automatic program-search function, and the Dolby HX "headroom-extension" system.

Available in relatively few cassette decks thus far, Dolby HX is an addition to—rath-

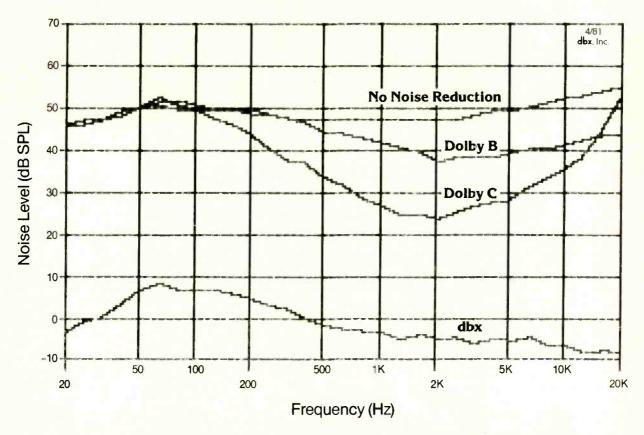
er than a substitute for—normal Dolby-B noise-reduction circuitry. While Dolby-B reduces low-level high-frequency hiss, the HX system is designed to use the Dolby-B's internal control signals to increase the high-level, high-frequency capabilities of the recorder by simultaneously varying the bias and record equalization to meet the mo-

mentary demands of the signal being recorded. Any HX-recorded tape is completely compatible in playback with all Dolby-B equipped decks.

Cassettes are inserted, tape openings downward, into slides behind the smoked-plastic front cover of the hk300XM. Rear

(Continued on page 44)

dbx has been silent too long.



Noise from biased Chromium Dioxide cassette tape, comparing Dolby and dbx noise reduction systems. One third octave analysis. Tape noise level referenced to 200 nWb/m = 110dB SPL.

For years Dolby* has been trying to reduce tape noise.

First came Dolby B. Then Dolby HX. Now there's Dolby C.

At dbx, we think it's time to set the record straight. You see, we've never tried to reduce tape noise. We've never had to.

Because from the beginning, dbx has done what Dolby keeps trying to do: *eliminate* tape noise. Just compare Dolby's latest

attempt with dbx.

Where Dolby C reaches a maximum noise reduction of 20 dB, dbx reaches 50 dB. In a CCIRweighted noise measurement analysis, Dolby C manages only 18 dB, while dbx achieves 55 dB.

What do these numbers actually mean? Simply this. When you push the Dolby C button, tape noise decreases. When you push the dbx button, tape noise disappears. (You can perform this test yourself using any blank cassette tape.)

The dbx system reduces tape noise so effectively, that it's beneath the noise floor of even the quietest living rooms. Unlike Dolby C, dbx is effective in more than just the mid-range. It operates across the entire frequency spectrum. There's no low-frequency noise. No high-frequency noise. No noise, period.

No wonder Technics, Onkyo, Yamaha, TEAC and others have designed their newest generation of tape decks with dbx. There's more to this story, too. With the dbx tape noise reduction system, you're also equipped to play the widely acclaimed dbx Discs, the world's only Full Dynamic Range Records — and the first discs that eliminate record surface noise.

In addition, when digital playback technology finally arrives, dbx is the only system that will faithfully reproduce that sound on tape. You'll even be able to hear the sound of digital in your car, because we've developed a dbx decoding system for car stereo.

So before you rush out to buy a tape deck with Dolby C, we have a suggestion.

Listen to the new tape decks with dbx, Or hear what a dbx Model 222 or 224 can do for your existing system.

At dbx, we've been silent too

long.
The fact is, Dolby just reduces

noise. dbx eliminates it.

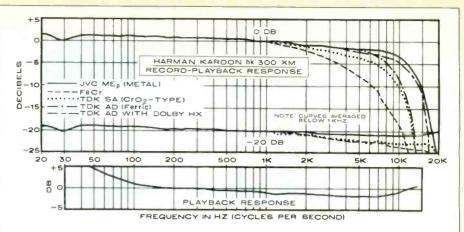
dbx

dbx[®] is a registered trademark of dbx, Inc.
*Dolby[®] is a registered trademark of Dolby Laboratories, Inc.

test reports

illumination is provided to gauge how much tape is left on a side, and the cover is removable for routine head cleaning and demagnetization. Directly beneath the cassette well are light-touch pushbuttons, with LED indicators, that control tape motion. Four pushbuttons activate the FJECT RECORD MUTE, POWER on-off, and ELECTRONIC AUTO SEARCH functions, the last of which puts the deck in fast-forward operation, stopping and playing about eight seconds of each recorded selection before going on to the next. Individual pushbuttons set the bias/equalization for metal, CrO2, ferrichrome, and ferric-oxide formulations, and a BIAS FINE TRIM control, together with a pushbuttoncontrolled BIAS TONE generator, permits the user to compensate for the bias differences between different brands of the same tape type. To adjust for different tape sensitivities, a 400-Hz RECORD CAL tone is provided, together with small openings for left- and right-channel screwdriver-adjusted controls. Separate controls are provided for microphone and line levels, as well as an output-level control that also affects the level fed through the headphone jack. Additional pushbuttons activate the Dolby-B and HX circuitry, a multiplex filter for taping from stereo FM, and a memory rewind and reset, as well as selecting either a slow or a normal decay time for the record-level indicators.

The record indicators are twelve-segment LED displays, calibrated from -40 to +8 dB, with 0 dB corresponding to the standard cassette Dolby-level of 200 nanowebers/meter. In addition, three LED indicators (color coded in green, yellow, and red) are



provided to assist the recordist when he is using the HX system. These are sensitive to frequency as well as level, so the user is appropriately warned when the treble content of the signal becomes excessive for the HX circuits.

The rear panel of the hk300XM contains the usual line-in/line-out phono jacks, together with a DIN connector for an optional remote-control accessory. Overall, the deck measures approximately 43/4 x 173/8 x 13/2 inches; it weighs 19 pounds. Suggested retail price: \$449.

• Laboratory Measurements. Our sample of the hk300XM was factory-adjusted for TDK AD (ferric), Sony FeCr (ferrichrome), TDK SA (CrO₂-type), and 3M

Metafine (metal) formulations, so we used these as our primary basis for evaluation. Checking other tapes, however, we found that the newly introduced JVC MEp metal tape gave marginally better results, so we substituted it instead. The Metafine had a slight (0.8 dB) advantage in signal-to-noise ratio, but it had less high-frequency response, sensitivity, and ability to handle overloads.

Playback equalization, as shown in the accompanying graph, was checked using Teac MTT-216 (ferric) and MTT-316 (CrO₂-type) test tapes. Both showed a somewhat elevated bass response that was just audible in our listening tests of prerecorded material, but both extended out smoothly to the 14-kHz limit of the test tapes.

Record/playback frequency response was excellent with all but the ferrichrome tape, which fell off slightly at the highest frequencies. The TDK AD (ferric) and JVC MEp (metal) were within +0.5, -1.5 dB from 20 to 20,000 Hz, and TDK SA reached the -3-dB point at 18,000 Hz. This is exceptional performance in a two-head deck. The responses of the tapes below 1,000 Hz differed by less than 2 dB and were averaged for clarity.

With a 1,000-Hz, 0-dB input, the third-harmonic distortion measured 1.2 per cent for TDK AD, 1.8 per cent for TDK SA, 0.8 per cent for JVC MEp, and 2.15 per cent for Sony FeCr. To produce 3 per cent third-harmonic distortion required an input level of +3, +2, +5, and +2 dB, respectively, for the four tapes, and their unweighted signal-to-noise ratios at this output measured 48.2, 51.4, 54.3, and 50.7 dB. Adding Dolby-B noise reduction and using CCIR/ARM weighting increased these figures to the very good values of 64.6, 67, 68.2, and 68.2 dB, respectively.

Wow and flutter, measured by recording and replaying a 3,150-Hz tone, measured 0.04 per cent according to the customary weighted-rms rating and 0.05 per cent when using the stricter DIN standard. To produce a 0-dB indication required a 0.17-volt input at the high-level jacks and 0.4 millivolt at the microphone inputs. Microphone overload occurred at a reasonably generous 85 mV. Accuracy of the Dolby-circuit calibration was exact, and tracking at a - 30-dB level was within 2 dB. With a C-60 cas
(Continued on page 46)



"... Off the record, sir, the 'memory' on this model leaves a lot to be desired."

Stereo Review's

"HOW TO" REPRINT SERIES

Whether you are about to buy your first high-fidelity component or your fifteenth, you need to have all the facts you can get your hands on if you want to insure your complete satisfaction. Yes, the audio field is a complicated one, but *Stereo Review* has been running a kind of monthly seminar on the subject for almost two decades now, furnishing the kind of basic buying, installation, and operating guidance you can get nowhere

else. Today, over 525,000 readers use it monthly as the first, best textbook in their on-going audio educations. If you have come a little late to class, here's your chance to catch up. Any questions you may have about *How to Buy, How to Set Up, How to Use,* or *How to Understand* audio equipment are probably answered in one or more of the current reprints listed below. Reprints are \$2.00 each. Minimum order \$6.00.

40896	ROOM ACOUSTICS (How to Correct Your Room Acoustics) 10/66
40897	GUIDELINES TO SPEAKER SHOPPING 8/69
40898	RECORD DEFECTS (Their Causes & Cures) 6/71
40900	HOW IMPORTANT IS AUDIO-COMPONENT COMPATIBILITY? 1/74
40901	GUIDE TO UPGRADING YOUR COMPONENTS 6/76
40902	HOW TO SELECT A MICROPHONE 3/75
40904	HI-FI TROUBLESHOOTING CHARTS 7/75
40905	SPEAKER MYTHS (How to Avoid Bad Choices) 8/75
40907	HOW TO SELECT AN FM TUNER 12/75
40908	HI-FI DEMONSTRATION DISCS 4/76
40910	CLEAN UP AND TUNE UP YOUR AUDIO SYSTEM 6/76
40912	USING FM INTERSTATION HISS TO TEST RECORDERS AND SPEAKERS 11/76
40914	HOW TO BUY A PHONO CARTRIDGE 1/77
40915	THE PROFESSIONAL APPROACH TO TAPE RECORDING 3/77
40916	HOW TO ELIMINATE RADIO-FREQUENCY INTERFERENCE 5/77
40926	ALL ABOUT NOISE REDUCERS 10/77
40961	HOW TO BUY HI-FI (A Beginners Guide To Hi-Fi) 12/77
41066	HOW TO MAKE YOUR OWN DEMO TAPES (Semi-pro Recording) 3/78
41088	HOW TO BUY A RECEIVER 5/78
41091	DIRECT-TO-DISC RECORDINGS 7/78
41092	LOUDSPEAKER FORUM—(Answering Questions On: Electronic Crossovers, Biamplified
	Systems, Wide vs. Limited Dispersion, Power Ratings.) 8/78
41365	ANTENNAS 9/78
41366	TIME-DELAY SYSTEMS 10/78
	HI-FI EQUIPMENT RACKS 12/78
41368	HOW TO UNPACK, HOOK UP, TEST AND INSTALL YOUR NEW EQUIPMENT 12/78
41369	UNDERSTANDING PHONO CARTRIDGES 2/79
41370	UNDERSTANDING RECORD PLAYERS 6/79
	SUBWOOFERS 10/79
50041	A DOZEN RECOMMENDED DIGITAL DEMO DISCS 1/80
	A BUYER'S GUIDE TO AMPLIFIERS 2/80
50043	A BASIC VOCABULARY OF TAPE RECORDING 3/80
50044	A BUYER'S GUIDE TO CASSETTE DECKS 3/80
50151	AUDIO EQUALIZERS (Understanding and Choosing Equalizers) 4/80
	BUYING GUIDE TO AUTO SOUND EQUIPMENT 6/80
	LOUDSPEAKER POWER REQUIREMENTS 8/80
50162	LOUDSPEAKER PLACEMENT 8/80
	DATE FOLLOWING EACH LISTING INDICATES ISSUE IN WHICH ARTICLE APPEARED
	Reprints are \$2.00 each. Minimum order \$6.00.

CHARGE ORDERS (Minimum \$10)—For your convenience PHONE TOLL FREE 800-431-2731.

NY State only 800-942-1940.

Reprint #	Quan.	Reprint #	Quar

U.S.-Shipped First Class. Add 50c per order Post. & Hand Outside USA-Shipped AIR MAIL ONLY. Add \$2 per order.

STEREO REVIEW REPRINTS

☐ CHARGE (MINIMUM \$10): ☐ American Express ☐ Master Charge	☐ Visa ☐ Diners Club		
_ Master Charge	Dillers Club		
Account #	Exp. Date		
Signature			
Print Name			
Address			
City State Zip			
*Residents of CA, CO, DC, FL, IL, MA, MI, MO, NY STATE, UT, and VT add applicable sales tax.			

sette, fast-forward time measured 68 seconds, 72 seconds for rewind.

• Comment. The extended high-frequency response and high signal-to-noise ratio of the hk300XM practically guarantees that the deck is able to make virtually impecca-

ble copies of existing program material. The Dolby HX system does, indeed, make ferric tapes sound very much like metal tapes in terms of high-frequency potential, but some distortion of strong mid-frequencies is occasionally audible in the presence of equally strong high-frequency tones. Such a situa-

tion is extremely rare, however, and we had to search to find recordings with which the HX system did not work perfectly. We have no hesitation in recommending the hk300XM for both performance and value.

Circle 142 on reader service card



Reference Series of speaker systems, which is headed by the refined and highly regarded Model 105.2. Externally, the 103.2 appears to be a rather small "bookshelf" speaker with a handsomely finished wood-veneer cabinet and a black grille cloth. Behind the grille, on a surface finished like the rest of the enclosure, are mounted its two drivers: an 8-inch Bextrene-cone woofer and a 1-inch soft-dome tweeter. The crossover is at 3,000 Hz. The sealed enclosure has no user-adjustable controls, and the spring-loaded input connectors are recessed into the rear of the cabinet.

In the 103.2, KEF engineers sought to achieve the well-recognized spatial (imaging) qualities of their 105.2, as well as its smoothness and overall sonic balance, in a much smaller and less expensive system that would be suitable for rooms where larger speakers would be unacceptable. Like the other Reference Series speakers, it

has the "S-Stop" electronic protection system that prevents damage to the drivers even under severe overload conditions.

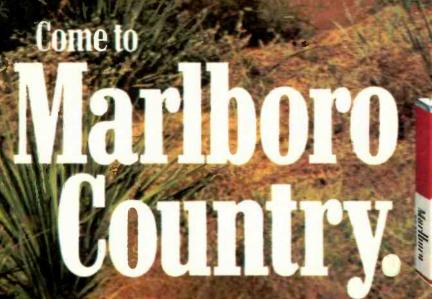
One of the basic factors behind the performance (and price) of the KEF Reference Series speakers is the extraordinary quality control (plus special driver and component measurement and matching) that goes into their manufacture. The 103.2 (and its still smaller relative, the 101) undergoes the same rigorous process as the 105.2, which includes a computerized response measurement of each driver and the subsequent matching of drivers within each speaker and between pairs (they are sold only in matched pairs). The crossover-network components are also matched to the individual drivers in each system, assuring the amplitude and phase-response characteristics that KEF has designed into the speakers.

The anechoic frequency response of the KEF 103.2 is specified as 60 to 20,000 Hz ± 3 dB on axis, with the output down 10 dB

at 37 and 30,000 Hz. The off-axis response is also specified: within 1 dB of the axial output over a \pm 5-degree vertical-angle change up to 20,000 Hz and over a \pm 20-degree horizontal-angle change up to 10,000 Hz. This ensures that the full performance of these speakers will be heard throughout a typical home listening area.

The rated sensitivity of the KEF 103.2 is 86 dB sound-pressure level (SPL) measured at a 1-meter distance for a pink-noise input of 1 watt under anechoic conditions. Its maximum output under typical listening conditions is 106 dB SPL on program peaks. The KEF 103.2 is rated to handle up to 150 watts of program power or a continuous-sine-wave input of 20 volts between 100 and 2,500 Hz, falling to 8 volts maximum between 4,000 and 20,000 Hz. The nominal impedance of the system is 8 ohms.

The S-Stop protective system (the acronym stands for "Steady State and Transient
(Continued on page 48)



Marloro Marloro 100%

Mariboro Red or Longhorn 100's you get a lot to like.

Warning: The Surgeon Genera Has Determined That Cigarette Smoking Is Dangerous to Your Health.

17 ms "rar" 1 "hun Ticotine av nes cinarette ETC Report Dec. 79

Overload Protection") is powered by the audio signal itself. It monitors both the instantaneous program peaks (which could damage the tweeter) and the integrated long-term power input (which could overheat the voice coil of either driver). Should the input exceed safe limits, a relay instantly reduces the drive level to the speaker, simultaneously lighting a red LED on the front of the cabinet. When safe levels have been restored, the speaker automatically returns to normal operation. The level reduction is designed to protect the drivers against any continuous or intermittent fault signals up to 60 volts peak, from d.c. to 50,000 Hz, without affecting the speaker's normal operation. The KEF 103.2 measures 20 inches high, 101/2 inches wide, and 91/2 inches deep. It weighs about 19 pounds. The available cabinet veneers include walnut, teak, rosewood, and black ash. Price: \$900 per pair.

● Laboratory Measurements. The KEF 103.2 is designed for upright (vertical) mounting, preferably at least 20 inches from a wall and about 3 feet high, which places the tweeter close to ear level for a seated listener. It can also be installed against a wall, in the conventional "bookshelf" placement, as we did for our measurements and much of our listening.

Although our live-room measurement method cannot be expected to correlate with the anechoic measurements used by KEF to derive their specifications, it did show the averaged energy response in the reverberant field of the room to be very smooth, with no sign of any drop in output

up to our 20,000-Hz measurement limit. In fact, the output rose steadily from 4,000 to its maximum at 20,000 Hz.

The close-miked woofer response was maximum at 100 Hz, falling off at both lower and higher frequencies. When we spliced the close and distant miked curves, the composite response curve was within ±3 dB from 57 to 20,000 Hz, closely matching the KEF specifications. At a 1-watt input the bass distortion was well under 1 per cent down to 70 Hz, reaching 2.2 per cent at 50 Hz and only 8 per cent at 30 Hz. At a 10-watt drive level the distortion was higher, but still quite low for a system of this size. It rose from about 1 per cent at 100 Hz to 2.3 per cent at 70 Hz and 7.5 per cent at 40 Hz.

The system sensitivity was very close to the rated value, measuring 87 dB at 1 meter with 1 watt of random-noise input in an octave centered at 1,000 Hz. The system impedance reached its minimum value of 8 ohms at about 40, 175, and 4,000 Hz. Its maximum values were 20 ohms at 75 Hz (the bass-resonance frequency) and 50 ohms at 1,200 Hz.

• Comment. Our first reaction on hearing the 103.2 speakers (in a wall-mounted position) was that we had forgotten to switch the comparator to them and were therefore listening to the 105.2 just in front of them. A check confirmed that we were hearing the 103.2s, however. Repeated comparisons with careful level matching showed that the tonal quality and general sound of the KEF 103.2 were so similar to those of the KEF 105.2 that we could never be sure which of

the two pairs of speakers we were listening to without checking the setting of the comparator switch!

They did not sound identical, of course. Still, they were so similar that non-comparative listening could not disclose which was which. The differences were principally in the mid-bass. To our surprise, the 103.2 seemed to have a heavier and slightly warmer quality than the larger 105.2. Later, when we had made our measurements, the reason was apparent: a slightly emphasized output from the 103.2 in the 80- to 150-Hz range. The 105.2 was flatter in that octave as well as going down another octave into the deep bass. With most program material, the bass extension of the 105.2 was not obvious, but the mid-bass emphasis of the 103.2 was.

To anyone not familiar with the sound of the KEF 105.2, this comparison may convey little information. We can say about the 103.2 that its sound is unusually smooth, balanced, and utterly easy and unstrained. You can pick almost any favorable adjective and it would apply equally to the sound of this speaker. The imaging was certainly excellent, although this quality can be appreciated only with suitably recorded program material, and we prefer to judge a speaker with all kinds of programs including ordinary "multi-miked" records and FM broadcasts.

Like its big brother, the KEF 103.2 can handle large power inputs without damage or distortion. Although we tend to be cautious when driving small speakers with large amplifiers, previous experience with S-Stop led us to cast caution to the winds and see what it took to activate the circuit in the 103.2. Well, it took everything a 200-watt-per-channel amplifier could deliver, and more. The amplifier was clipping before the S-Stop lights came on. Just short of that point the sound was clean, completely listenable, and not nearly as loud as one might expect.

Even when the S-Stop lights came on, we heard no obvious change in volume level or any other speaker characteristic. The action of the S-Stop is apparently subtle to the point of being undetectable under most conditions, but it does save the speakers. This is a very important consideration with speakers as costly as these.

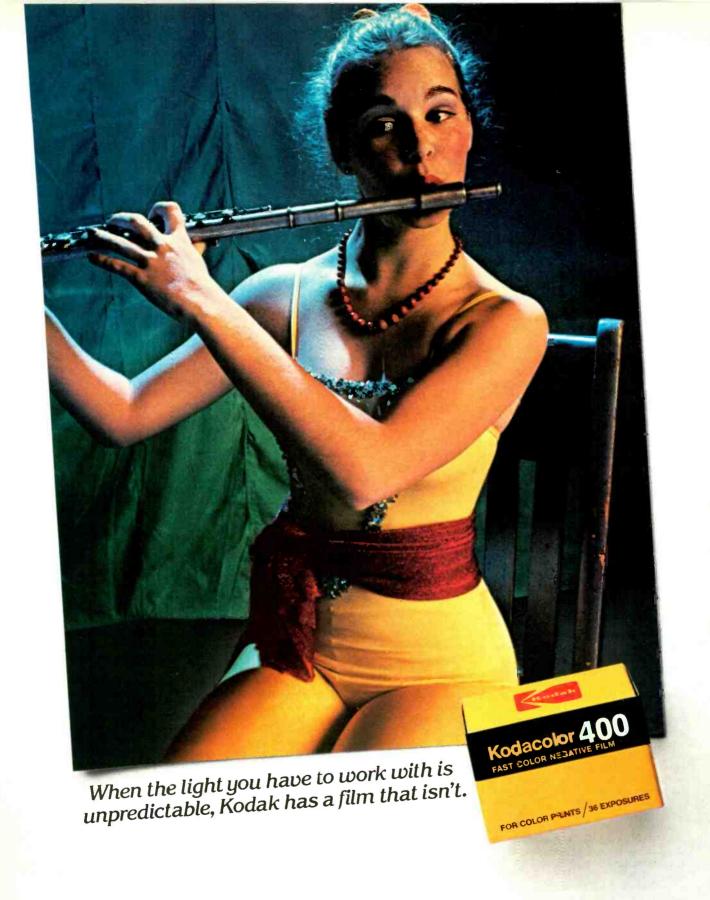
There are many good \$200 speakers, none of which is clearly superior to its competition. At higher prices, speakers may be able to handle a bit more power, go a little deeper into the bass, or deliver some other special quality, but they do not necessarily sound "better" than a number of good \$200 to \$250 speakers we can think of. The KEF 103.2 is a notable exception to this rule. We think it is well worth its extra cost (if sound is what you are interested in) compared with most of the other good speakers we have heard that sell for less. If one were to consider only its size and appearance, it might be hard to justify the price of the KEF 103.2. However, judged (as it ought to be) by its sound, it appears to be a very good buy.

Circle 143 on reader service card

(Continued on page 50)



"Oh yes, we're rather small now, of course, but we feel that in a few years"



Kodacolor 400 film, our fastest 35 mm color print film, lets you tell your story in low light, high light, or any light in between. So you can shoot indoors, outdoors, wherever the light is

low, and still capture all the beauty and subtlety that make your story worth telling.

The less you can count on the light, the more you need Kodacolor 400 film.



THE Yamaha R-700 stereo receiver combines excellent basic performance with above-average operating convenience and has one feature—a "Spatial Expander"—not previously encountered in any receiver. It has a power rating of 50 watts per channel into 8-ohm loads from 20 to 20,000 Hz with no more than 0.015 per cent total harmonic distortion. Despite this modest power rating, the R-700 is capable of sustaining high undistorted listening levels because of its high dynamic-headroom rating.

The tuner section of the R-700 is controlled by what Yamaha calls a "station-locked synthesizer." This appears to be not a frequency synthesizer, but rather a voltage-controlled local oscillator that scans up or down in frequency with a momentary touch on one end of a center-pivoted tuning bar on the panel. The tuning continues to scan until a station stronger than the receiver's muting threshold is captured. At that point the scan stops and the receiver locks onto the station frequency. The frequency is displayed continuously by a four-digit readout operating from a digital frequency counter.

Yamaha claims that their station-locked synthesizer is superior to the commonly used PLL synthesizer because it introduces less noise into the tuner circuits. The same tuning system is used on the AM band (either FM or AM can be selected by means of momentary-contact buttons). While scanning is taking place on either band, the receiver's output is muted. It has a digital memory system in which the control-voltage analogs of five AM and five FM stations can be stored. At any later time, a touch of one of the numbered buttons will recall that station instantly. The receiver has a "back-up" for its memory circuits, and if power is lost or interrupted the memorized frequencies will be retained for at least two days.

To the left of the digital frequency readout is a display window containing a "signal-quality" indicator consisting of a number of green LEDs which form a horizontal line proportional to signal strength. The display is designed to flicker in the presence of multipath reception, hence its designation as a signal-quality rather than a signalstrength indicator. A green LED shows when the tuning synthesizer has captured a station (STATION LOCK), and a red light is the FM STEREO indicator.

The R-700 has signal-controlled switching between its NORMAL and DX modes. A signal whose strength is above about 40 dBf will switch the receiver to NORMAL, as indicated by one of two green LEDs in the display window. In this condition it has its full channel separation and lowest distortion, but only moderate selectivity. If the signal level is below about 35 dBf, the receiver goes into its Dx mode. This inserts a highselectivity i.f. amplifier into the signal path, greatly increasing the selectivity, and also produces some stereo channel blending, which reduces noise while retaining some audible stereo effect. The Dx light shows that the receiver is in this mode.

A BRIGHT red bar lights up above the pushbutton power switch when the receiver is on. The other operating controls form a row across the bottom of the panel. They include conventional bass and treble tone controls, each with eleven detented settings, and a center-detented balance control. Two of the most useful features of previous Yamaha receivers have been retained in the R-700. There are separate volume and loudness knobs, the former being a large knob to the right of the tuner frequency readout. With the loudness knob set to its maximum (flat) position, the volume control is set for the loudest listening level one expects to use. The loudness knob can then be rotated counterclockwise to reduce volume and simultaneously boost both low and high frequencies. Very few receivers and amplifiers have such an arrangement, and few can match the subjective effect of Yamaha's compensation curves

The separate recording and listening program selectors are another early Yamaha innovation. On the R-700 they are slender bar knobs. The INPUT knob has positions marked AUX, PHONO, TUNER, TAPE 1, and TAPE 2. The REC OUT knob is marked for AUX, PHONO, TUNER, TAPE COPY 1-2, TAPE COPY 2-1, and OFF. The OFF setting disconnects the tape outputs from the program sources to prevent any loading effects from

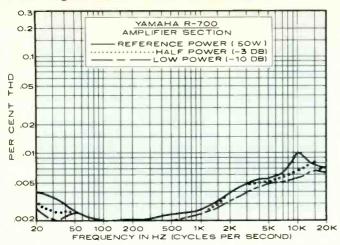
the tape recorders or connecting cables. The TAPE COPY positions connect two tape decks for dubbing from either one to the other (the playback from either can be monitored with the INPUT switch, or one can listen to another program from the tuner or record player while dubbing a tape).

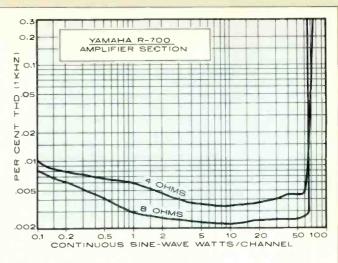
Small, square pushbuttons connect the two sets of SPEAKER outputs and the HIGH FILTER. Another converts the stereo output of the receiver to mono by paralleling the two channels. A separate FM MUTING button, when depressed, turns off the muting, simultaneously disabling the multiplex decoder to give a mono output from the FM-tuner section. There is also a stereo headphone jack on the front panel.

The remaining knob on the panel of the R-700 is associated with one of its unique features, the SPATIAL EXPANDER, which is an ambiance-enhancement circuit that expands the stereo sound field beyond the limits set by the placement of the two speakers. This is accomplished by blending an adjustable amount of each channel, reversed in phase, with the opposite channel signal. As the SPATIAL EXPANDER knob is rotated clockwise from its off setting, it injects more of the out-of-phase signals and the left and right limits of the sound stage appear to move outside the line joining the two speakers. Like other, similar enhancement systems, this gives best results when the listener is on the center line of the listening area, equidistant from the two speakers. The SPA-TIAL EXPANDER has no effect on mono signals, and its only effect on headphone signals is a sometimes beneficial reduction of apparent channel separation.

In the rear of the Yamaha R-700, in addition to the jacks for the signal inputs and outputs already described, there are binding-post terminals for a 300-ohm FM dipole antenna and for an AM loop antenna (supplied with the receiver) as well as a coaxial connector for a 75-ohm FM-antenna system. The AM antenna is not the usual ferrite rod, but a true loop antenna in a molded-plastic housing that can either be mounted on the rear of the receiver or located up to several feet from it. The speaker outputs are insulated spring-loaded connectors. There are three a.c. convenience

test reports





outlets, one of them switched. The Yamaha R-700's silver-colored panel and knobs have a satin finish, and its wooden cabinet is finished in dark stain. It is 187% inches wide, 1314 inches deep, and 434 inches high; it weighs about 20 pounds. Price: \$450.

● Laboratory Measurements. Operating the amplifiers of the R-700 at one-third rated power for I hour left its top (over the output-transistor heat sinks) only moderately warm. However, subsequent operation at higher power levels made the grille area uncomfortable to the touch.

When we drove 8-ohm loads with a 1,000-Hz signal, the output waveform clipped at 67 watts per channel. Into 4 and 2 ohms, the respective clipping power levels were 77 and 30 watts. We noted that the R-700 is rated only for 8-ohm loads. Our tests indicate that it should have no difficulty handling 4-ohm loads (or two sets of 8-ohm speakers) but that lower load impedances will probably result in limited output and increased distortion as well as possible overheating of the amplifier, though only when it is operated continually at very high power levels.

With a dynamic-power pulsed test signal, we measured a maximum unclipped output of 103 watts into 8 ohms, 132 watts into 4 ohms, and 41 watts into 2 ohms. The IHF clipping headroom for 8-ohm operation was 1.3 dB, and the dynamic headroom was a very good 3.2 dB (surpassing the rated 2.5 dB by a comfortable margin). The amplifier recovered in about 4 microseconds from a 10-dB overload.

With 8-ohm loads, the harmonic distortion of a 1,000-Hz test signal was about 0.0025 per cent at most power outputs and only 0.0028 per cent at 65 watts, just short of clipping. With 4-ohm loads, the distortion was still quite low, about 0.004 to 0.0045 per cent at most power outputs up to 60 watts and increasing to 0.04 per cent at 70 watts and 0.18 per cent at 75 watts. With 2-ohm loads it was obvious that the amplifier was "over its head," with the distortion measuring between 0.21 and 0.69 per cent for power outputs between 0.1 and 30 watts

Our intermodulation-distortion measurements with 19,000- and 20,000-Hz inputs at an equivalent sine-wave output of 50

watts into 8 ohms showed a third-order product at 18,000 Hz of -69 dB and a second-order product at 1,000 Hz of -90 dB. The IHF slew factor was 6.5. These are very good figures.

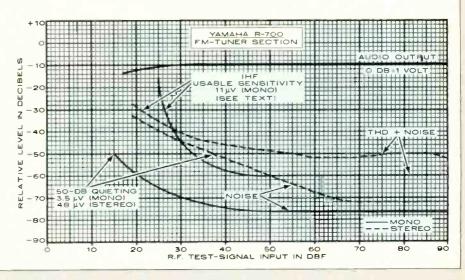
The input sensitivity for a reference output of 1 watt was 18 millivolts (mV) for the AUX input and 0.38 mV for PHONO. The respective A-weighted signal-to-noise ratios were 85.5 and 80.7 dB, both excellent figures. The phono preamplifier overloaded at 360 mV at 1,000 Hz (considerably better than the rated 250 mV). At 20 and 20,000 Hz the overload input, converted to equivalent 1,000-Hz values, was 185 and 173 mV, respectively. The phono-input impedance measured 55,000 ohms in parallel with 230 picofarads.

The tone controls had fixed turnover frequencies of 500 and 4,000 Hz, with a very adequate control range. As the LOUDNESS knob is turned down from maximum (no compensation) the overall level drops in small steps of 1 or 2 dB, and there is virtually no frequency contouring until the control is about halfway through its range. At the bottom of its range, the loudness compensator has dropped the midrange level by 25 dB, with an effective low-bass boost of 13 dB and about 7 dB at the high frequencies. The subjective effect, if the initial volume

setting is correctly done, should be quite pleasing to most ears.

The phono equalization was very accurate, deviating by less than $0.5 \, dB$ from the RIAA characteristic between $100 \, and \, 20,000 \, Hz$ and with an overall variation of $\pm 0.75 \, dB$ from 20 to 20,000 Hz. Measured through the inductance of a typical moving-magnet phono cartridge, the high-frequency equalization rose slightly, increasing by about 1 dB from 2,000 to 15,000 Hz and dropping slightly above that frequency. The "worst-case" overall change in equalization was $\pm 1 \, dB$.

The Spatial Expander uses phase reversal and mixing, but no time delay. With only the left channel driven and the Spatial Expander off, the left-channel frequency response was flat and there was no output from the right channel. As the expander control was rotated clockwise, an out-ofphase signal began to appear in the undriven channel output, with a falling frequency response at the extremes. The driven channel had a similar response, and its total level increased as well. With maximum expansion the output of the driven channel had gone up some 8.5 dB; the output of the other channel was only 3 or 4 dB less, but opposite in phase. In both channels, the highs rolled (Continued overleaf)



off above 2,000 Hz and the lows below 50 Hz, with the -3-dB frequency points being about 25 and 3,000 Hz.

Subjectively, the effect was of a louder sound across an apparently wider stereo stage. At a point on the line midway between the speakers, the perceived expansion was greatest, but the increase in "spread"—and even to some extent in depth—was apparent through most of the listening area.

The unconventional nature of the FM-tuning system made some normal measurements difficult or impossible without tapping into the R-700's internal circuitry. However The 50-dB quieting sensitivity was 16 dBf (3.5 μ V) in mono and 39 dBf (48 μ V) in stereo. With a fully quieting signal of 65 dBf (1,000 μ V), the mono distortion was 0.26 per cent and the respective noise levels -76.5 and -70.5 dB.

When measuring the sensitivity of the tuner, we also had to allow for the fact that the i.f. bandwidth changed automatically from wide to narrow at some low signal level, which complicated our usable-sensitivity measurements. The threshold was in the range of 35 to 38 dBf (30 to 40 μ V), so we measured all distortion and noise levels up to and including 35 dBf in the DX mode and above that level in the NORMAL mode.

Another important signal-level threshold of the receiver was in the 15- to 18-dBf (3-to 4.5-\(mu\)V) range, at which point the MUT-ING.STATION LOCK, and STEREO/MONO operations were affected under suitable operating control settings. When we tried to measure the tuner selectivity, we discovered that it could be measured only in the DX (narrow) mode, since the signal levels required for this measurement were not sufficient to switch the tuner to its NORMAL mode. The alternate-channel selectivity of 91.5 dB was extremely good, and the adjacent-channel selectivity of 18.5 dB was also exceptional. The FM capture ratio of 0.7 dB was one of

the best we have measured (although we cannot be sure how this was affected by the AFC action and therefore cannot vouch for the accuracy of the figure). The AM rejection was an excellent 67 dB at 45 dBf (100 μ V) input. The image rejection of 57 dB was adequate if not particularly high.

The FM frequency response was flat within ±0.4 dB from 30 to 15,000 Hz, and the 19-kHz pilot-carrier leakage was at -54 dB. The tuner hum level was -61.5 dB. Stereo channel separation in the NOR-MAL mode (wide i.f. bandwidth) was close to 50 dB in the midrange, falling to 45.5 dB at 30 Hz and 30 dB at 15,000 Hz. In the DX (narrow) mode the separation was radically lower, varying from 5 dB at low frequencies to 10 dB at 15,000 Hz.

The "signal-quality" indications covered only a rather limited range of signal levels, with the lights coming on at inputs from 6 to 31.5 dBf (1.1 to 20 μ V). We also noted that when a station was selected with the tuner's MEMORY buttons, it would frequently come on in the reduced-separation DX mode in spite of having more than enough strength to switch the tuner to NORMAL. A momentary touch of the TUNING button and then the MEMORY button for that station would cause the NORMAL light to come on. The AM frequency response was down 6 dB at 60 and 2,800 Hz.

• Comment. The Yamaha R-700 proved to be, in most respects, an outstanding performer. The FM tuner section (in its DX mode) had exceptional selectivity, plus notably good AM rejection, capture ratio, distortion, and signal-to-noise characteristics. The stereo channel separation for strong signals was also excellent, but it was only minimal for weaker signals because of the automatic DX/NORMAL mode switching.

Many stations with more than adequate strength for quiet reception would not read-

ily switch the tuner to its NORMAL mode. The result was a distinct loss of separation, resulting in close to mono reproduction. Sometimes we were able to "force" the tuner to switch by repeatedly tuning on and off a signal, but it appeared that the DX/NORMAL threshold was set too high in our sample, and it is likely that it will be modified in future production.

Like those of many recent receivers and amplifiers, the audio section of the R-700 had extremely low distortion—it was, in fact, close to the limits of measurability with standard laboratory instruments.

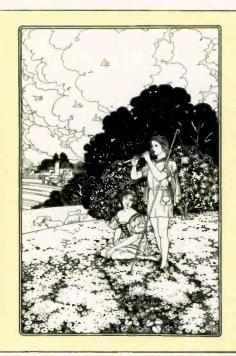
Operation of the R-700 is simplified by its clearly identified and functional controls, including Yamaha's familiar (and highly desirable) separate program selectors for recording and listening and the separate volume and loudness controls. The preset station memories are not only in vogue these days but are genuinely useful. The Spatial Expander provides the same sort of expanded sonic image achieved by some other add-on "imaging" accessories. Although it cannot match the effects obtained from some of the more expensive separate and combined products that employ inter-aural time-delay compensation, it does work and is a worthwhile feature.

Although, as mentioned, the automatic control and switching circuits of the Yamaha R-700 prevented us from making some FM-tuner performance measurements, those we did make were generally excellent, and we have no hesitation in accepting Yamaha's ratings for those specs we could not measure. Aside from the difficulties a test lab might have with it, the Yamaha R-700 is a very easy receiver to use from the consumer's point of view. It is also compact and attractive, and its listening quality is without question first-rate.

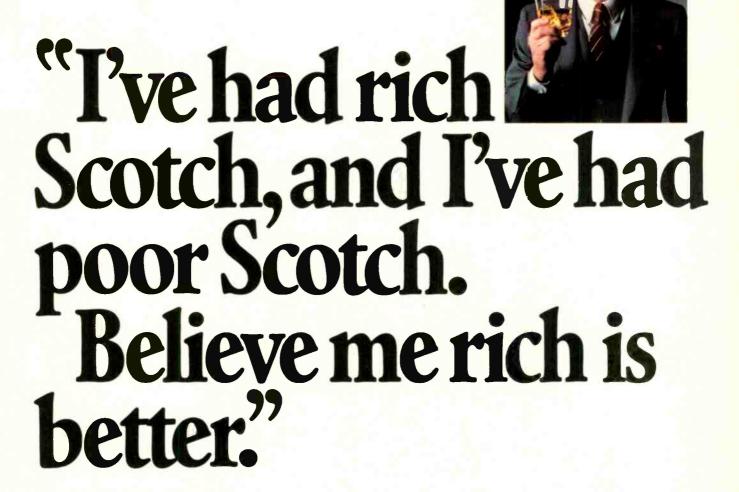
Circle 144 on reader service card

The New 1981 Basic Repertoire

STEREO REVIEW again presents the annual revision of the Basic Repertoire. In pamphlet form, the 1981 updating includes disc and tape recommendations for over 180 standard musical works. For your copy, send \$1 in cash, plus a stamped (35¢), self-addressed No. 10 envelope (9½ x 4½ in.), to Esther Maldonado, STEREO REVIEW, 1 Park Avenue, New York, N.Y. 10016.



David R. Wilson President & Treasurer Personal Economics Securities, Corp. New York, N.Y.





Teacher's Scotch.
is better.

TEACHER'S® IS A REGISTERED TRADEMARK OF WM. TEACHER & SONS LTD. 66 PROOF BLENDED SCOTCH WHISKY ® 1981 BACARDI IMPORTS, INC., MIAMI, FLAND NEW YORK, NY



Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

ULTRA LIGHTS 100's: 5 mg. "tar", 0.5 mg. nicotine, 100's: 9 mg. "tar", 0.8 mg. nicotine, av. per cigarette by FTC method.







Seven new digital releases add to our highly acclaimed collec-tion of direct-to-disc and digital tion of direct-to-disc and digital recordings: RT-301 Don Menza and His RT-301 Don Menza and His RT-301 Don Menza and His RT-301 Don Menza and His

RT-301 Don Menza and His '80's Big Band: Burnin' RT-302 Joe Marino Plays 28 All-Time Greatest Hits RT-303 Jack Sheldon: Playin' it Straight

RT-30.3 Jack Sheldon: Playin RT-30.4 The John Dentz Reunion RT-30.4 The John Dentz Reunion RT-30.5 Freddie Hubbard: Back RT-30.5 Freddie Hubbard: Back RT-30.6 Wild Bill Davison and Eddie to Birdland RT-30.6 Wild Bill Davison and Eddie Miller Play Hoagy Carmichael Miller Play Hoagy Carmichael RT-30.7 Highlights: a prime cut RT-30.7 From each

RT-307 Highlights: a prime cut
from each
Lower distortion, improved frefrom each
Lower distortion, improved freguency response, and reduced highquency response, and reduced highwow and flutter are generic to digital
quency response, and reduced highwow and flutter are generic to digital
quency response, and reduced highrecordings.
RealTime Records takes this state-ofrecordings.
RealTime Records takes this state-ofrecordings.
RealTime Records takes this state-ofrecordings.
RealTime Records takes this state-ofrecording into our
microphoness a few steps further.
Into our microphoness of the state-ofrecording into our
microphoness and passive mixe our
microphoness degradation into our
microphoness degradation into our
microphoness on pure further insure
light into our
microphoness on the master discs on our
microphones for master discs on our
microphones for master discs on our
microphoness on current
microphoness on correct
microphon

Many digital albums available dbx encoded.



FOR DUKE: BILL BERRY & **ELLINGTON ALL-STARS** Classic Ellington played by former sidemen



DON MENZA & HIS'80s BIG BAND

JACK SHELDON: PLAYIN IT STRAIGHT All Stars from the Tonight and Merv Griffin bands



FREDDIE HUBBARD: BACK Brilliant bebop featuring Freddie Hubbard and Richle Cole



THE DIGITAL MASTERPIECE SERIES Six volumes of orchestral classics



REALTIME RECORDS **AVAILABLE AT:**

ARIZONA

CALIFORNIA Audio Ecstasy

Century Stereo Dexter's Camera

Genesis Audio

Havens & Hardesty Henry Radlo

Hi Fi Shoppe Jonas Miller Sound

Licorice Pizza Mateo HI Fi

Music Plus

Northridge Audio Pro Audio

Rare Records Serra Stereo

Sound Celiar

Sound Center Stereo Hi Fi Center Stereo Unlimited

Los Angeles: Henry Radio Music Odyssey Stereo Plus

W. B. S.
COLORADO

Roulder Sound Gallery

Budget Tapes & Records Listen-up inc

Profound Sound Sound Tronix U.S. Stereo

Al Franklins

Audiotronics J. Robert Barry Sounds Incredible Sound of Music

Take 5 Audio

New Haven
IDAHO
Budget Tapes & Records
ILLINOIS
Apple Tree Records
Columbia Hi Fi

Record City Rose Records

Sound Wherehouse Victor's Stereo

R.J. Records LOUISIANA Leisure Landing

Paul Kadair's Audio Three Phase Audio

MASSACHUSETTS Harvard Coop

Natural Sound Sound and Music Sound West

Strawberries Tweeter Etc

MICHIGAN

Harmony House School Kids Records

MINNESOTA Audio King Stores Minneapolis
Hi Fi Sound Electronics The Sound Environment MONTANA

Budget Tapes & Records
Team Electronics NEW JERSEY
American Audio

Armands Sound Odyssey

Hi Fl Haven Leonard Radio of

PlatterPuss Records Sam Goody Sight and Sound Stereo City

NEW MEXICO

Budget Tapes & Records
Sound Ideas

NEW YORK

Audio Breakthroughs

Crazy Eddie Record & Tape Asylum Eardrum Stereo Gerber Music

Gordon Electronics
J. B. Sound

Listening Room Lyric Hi Fi Music Box Record Theatre Record Town Record World

Sam Goody New York City: Classic Electronics Harvey Sound King Karol Lyric Hi Fi Metro Electronics Park Ave Audio Sound Chamber

Stellar Stereo

Square Deal Audio

OREGON Chelsea Audio Music Millenium

RHODE ISLAND (Warwick)

TEXAS Audio Trend Audio West

Bjorn's Stereo Designs El Centro Sound Centers High Fidelity

Marvin Electronics San Antonio Audio Concepts Stereo Den

The Electric Ear The Sound Room

Amarillo

UTAH (Salt Lake City)
Bob's Audio Salon
Broadway Music

WASHINGTON

5th Ave. Records

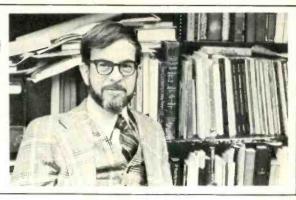
Hal's Stereo SpeakerLab Tower Records
WISCONSIN (Milwaukee)
Radio Doctor's

WYOMING Audio World

Rock Springs
Budget Tapes & Records
CANADA
Ontario:
Globe Discount
Sam the Record Man Quebec: Audiorama Filtronique Rotac Sonoclub

Going on Record

By James Goodfriend



CLOSING THE COPYRIGHT OFFICE

DEAS don't occur to just one person. Not more than a few weeks ago I was telling almost anybody who would listen that the real problem with writing music today is that it has all been written already. More recently, conductor Klaus Tennstedt was quoted to the effect that, at least so far as music for conventional instruments is concerned, it has all already been composed. I wonder how many others have been espousing the same thought.

Such ideas are brought on by a combination of experience, intuition, and disillusionment. There are more composers today than at any time in the history of the world, an insanely odd situation when one realizes that there is probably less public demand for their services than at any previous time. Composers, having learned to write music, write music, and many of them write a good deal of it. To music-loving people who are not composers, most of this music seems to elicit one of two reactions: (1) I've heard it before, or (2) I haven't heard it before and I don't want to hear it again.

Such experience leads one to intuit two things: first, though all the nearly infinite possible combinations of tones have not been used up, many of them have (I've heard it before); and second, of the vast range of tonal possibilities that exist, some, maybe most, are not as good as some others (I never want to hear it again). The disillusionment sets in, then, because most of the new music is either derivative or ugly.

Now, any composer (or aficionado) of new music who has followed my train of thought this far has a perfect right to be incensed; the case is overstated. The truth of the matter is not that all music has been written already, or even that all good music has been written already, but that most of it has. Given the Western musical language from plainchant through, let's say, Stravinsky, Schoenberg, Bartók, Webern, and Ives, and all the "dialects" encompassed therein, there is a shrinking, if indeterminable, number of pieces that can still be composed without sounding too much like other pieces that have already been composed. How much is too much? That seems to depend on the particular musical dialect involved, on the richness of its possibilities.

I am not among those who feel that the Western tonal system with its complex interrelationships of keys and harmonic areas is the God-given norm of music and that music composed on any other basis is doomed to failure. But there is no question that this tonal language (or "dialect") had potentialities for the expression of different moods, feelings, and personalities unmatched by any prior or any subsequent musical dialect. No one mistakes Haydn for Grieg and no one denies the necessity of the Beethoven Fifth because we have the Beethoven Third. But most composers today would agree that that musical dialect is used up; anything written in it now would be not only anachronistic and derivative but superfluous (in spite of this, some composers try). Other musical dialects-dodecaphony, modality, the "poly-"s, free atonality, dissonant counterpoint, et al.—have not proved to have that degree of richness. Which means that pieces written in these dialects are even more likely to sound secondhand than the last-gasp tonal pieces. There still are pieces to be written in these dialects-one comes along every once in a while-but composers are filling up vacant lots here, not staking out new territory.

F course, one can find new territory, create a new dialect, turn one's back on the vocabulary of the past, and that is where all this "I haven't heard it before but I don't want to hear it again" music comes in. For, although there are occasional pieces of power and interest, the new vocabularies are based largely on what great composers chose to leave out of the old. All possibilities are not equally valid (and certainly not equally beautiful) to our ears. One can also combine vocabularies, mixing the old and the new. Again, certain good pieces come out of this, but isn't the very attempt a confession that all other possibilities are closing down fast?

Perhaps the worst of this situation is that the pressure on composers to write what they do is largely self-applied. The public expresses little desire or need for new music. I wonder sometimes just where composers today get the confidence to compose; for most of them it's not even a good living.



THE SHORTER GUIDE TO

CARTRIDGE SHOPPING

By Peter Mitchell

ECAUSE your stereo system can be no better than its weakest link, and because the phono cartridge is usually the first link, the selection of a cartridge is critically important. If the stereo signal leaving the cartridge is distorted, nothing in your amplifier or in your loudspeakers can restore the lost fidelity. Moreover, the task of the cartridge is extraordinarily difficult: its stylus must be able to resolve groove wiggles that are microscopically small, and it must be agile enough to accurately trace a groove that may change direction 40,000 times per second, all without damaging the fragile groove walls it is moving along.

Phono-cartridge performance has greatly improved during the past decade, in both obvious and subtle ways, and the pressure of competition has induced every major manufacturer to incorporate these improvements in his products. So you can hardly go wrong: virtually any pickup you buy from a reputable manufacturer will prove to be very good in absolute terms and probably audibly better than the cartridge you bought five or six years ago.

As cartridges have gotten better, they sound more nearly alike than formerly—they are, in other words, more closely competitive in performance. But significant, audible differences still remain, and as you shop for a cartridge you should consider not only the inherent virtues of various models but also their suitability for your audio system. For instance, there is the delicate question of . . .

Price

It may seem obvious, but it's worth repeating: if you have a \$100 record changer, it would be a mistake to install an exotic \$300 imported cartridge in it. You won't hear the special virtues claimed for the pickup because your tone arm can't provide the delicate guidance the cartridge requires, assuming it would play at all. Conversely, if you have a \$400 turntable with a fine low-mass arm, a \$30 pickup would likely under-utilize the investment you

have made. A rough but generally reliable rule of thumb suggests that a suitable phono cartridge will usually cost one-third to one-half the price of your turntable (although ratios from 20 to 100 per cent have yielded fine results in some cases).

Tracking Force

The recommended vertical tracking force (VTF) of a phono pickup is a good index of its compatibility with your record player's tone arm and also a pretty good guide to the relative quality of the various models in a manufacturer's line. Inexpensive record changers typically are designed to function best with a cartridge tracking at 2 to 3 grams; cartridges designed to operate with a VTF below 1½ grams should be used only in high-quality tone arms with low-friction bearings.

Some pickup manufacturers specify a single optimum VTF while others specify a range of suggested settings. In the latter case the optimum VTF (yielding the least record wear as well as the cleanest sound) nearly always turns out to be in the *upper* half of the suggested range. In other words, if the manufacturer's rated VTF range is from, say, 1 to 2 grams, don't expect satisfactory performance at 1 gram unless you have an exceptionally fine tone arm and, perhaps, play unwarped recordings of flute solos. In most arms you'll need a VTF setting between 1.5 and 2 grams in order to track the loudest, most heavily modulated grooves without distortion.

Using a very low tracking force in an attempt to minimize record wear is a mistake. A VTF that is too low cannot maintain the stylus in secure contact with the undulating groove wall during loud passages. When a mistracking stylus bounces off the groove wall (with a burst of harsh, shattering distortion) it produces permanent groove damage. With a VTF setting near the upper end of the recommended range, the stylus sinks into the groove wall a few millionths of an inch as it passes, but the elastic vinyl quickly springs back to its original shape.

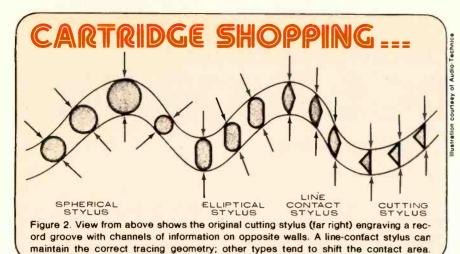
CUTTING ELLIPTICAL STYLUS SPHERICAL CONTACT STYLUS SPHERICAL CONTACT CONTACT AREAS

Figure 1. Upper: lateral view of a groove wall showing contact areas of different stylus shapes. Lower: vertical cross section of a record groove showing the comparative fit of spherical and line-contact styli.

Stylus Shape

The simplest and least costly styli have spherical (also called "conical") tips. (All styli are actually cone-shaped overall; what matters is the contour at the tip of the cone.) Spherical styli have another advantage besides low cost: they make contact with the groove wall over a relatively large area (called the "contact patch" or "footprint"), thus spreading out the tracking pressure and allowing VTFs as high as 3 or 4 grams to be safely employed without excessive groove wear.

When records are made, the grooves are cut with a sharp-edged stylus, but because of its rounded shape the spherical stylus tip cannot follow exactly the groove contour made by the sharp cutting stylus (see Figure 1), especially in the congested inner grooves near the label. So, in order to provide more accurate tracing of the groove, the majority of cartridges today employ an "ellipti-



cal" or "bi-radial" stylus tip with a narrowed front-to-back dimension. Be-

cause this results in a smaller contact area, elliptical styli should generally be used only with tracking forces of 2

grams or less.

In recent years manufacturers have developed a variety of "line-contact" styli (Shibata, Stereohedron, Hyperbolic, etc.) which combine a very small lateral "scanning radius," for accurate tracing, with an elongated vertical contact span that distributes the tracking force over a larger area of the groove wall (see Figures 1 and 2). The most extreme form is the Van den Hul stylus, which is nearly as sharp-edged as a cutting stylus. Line-contact styli have two drawbacks: high cost and a greater need for critical alignment of the stylus as it rides in the groove.

Transducer Types

Any phono pickup is a transducer, meaning that it converts one kind of energy (mechanical motion of the stylus) into another (an electrical signal). Much of the vocabulary used to describe how cartridges work concerns how this transduction is done. Of course, as is true elsewhere in hi-fi. how it is done is much less important than how well it is done. Moreover, it is important to remember that the transducing mechanism itself is not tracing the groove: the groove vibrates the stylus jewel which is cemented or otherwise mounted on a thin bar or tube (called the cantilever) which transmits the vibration to the transducer in the cartridge body. Many of the improvements in cartridge sound in recent years have resulted from lowering of mass in the tip and reducing distortions caused by cantilever bending and twisting at high frequencies, rather than from any transducer improvement. Still, you'll

probably want to know what kind of transducer you're buying. A few veryhigh-quality cartridges employ nonmagnetic designs—the electret, for example. However, most transducers operate on a magnetic principle, meaning that a magnetic field is moved through a coil of wire to produce a flow of current in the coil. Cartridges vary mainly in what is being moved—the magnet, the coil, or something between them.

• Moving coil (MC). Two tiny coils, one per channel, are mounted on the end of the cantilever so that they vibrate within the magnetic fields of large stationary magnets. Many of the best cartridges are of this type, but they tend to be expensive, stylus re-

placement may have to be done at the factory, and the miniature coils usually produce a low output voltage, requiring a special transformer or pre-preamplifier to step up the signal to normal cartridge voltage levels. Some makers have developed "highoutput" MC cartridges that don't need a step-up device. Still, MC pickups are-at least in the U.S.—in the minority; most cartridges are one of the next four versions of the moving-field principle.

• Moving magnet (MM). A magnet (sometimes two, one per channel) is mounted on the end of the vibrating cantilever. The magnetic impulses are transmitted through "pole pieces" (magnetically permeable iron rods or laminations) which transmit the magnetic flux through large coils wound around the pole pieces. This is the most common design.

• Moving iron (variable reluctance). The pole pieces include stationary magnets on either side of an air gap which the magnetic flux is reluctant to cross. A bit of non-magnetized iron is mounted on the cantilever so that it vibrates within the gap, varying the flow of magnetic flux across the gap.

• Induced magnet. Similar to the moving iron, except that the small iron sleeve on the cantilever is specifically designed to be magnetized by adjacent magnets.

. Moving flux. Similar to the moving magnet, but the pole pieces are eliminated and the coils form a close arch around the magnet to pick up its flux directly.

Moving-magnet pickups in particular can be designed to provide large output at low cost (which accounts in part for their popularity), and they can also be refined (usually with lower output) for very good performance.

A SHORT **GLOSSARY OF** CARTRIDGE TERMS

Compliance—A measure of the elastic restoring force that recenters the stylus when it is deflected. The higher the compliance, the less the stylus resists being moved, the less force the groove wall need exert to move the stylus, and the better the low-frequency tracking.

Contact radius—see Scanning radius

Effective tip mass-A measure of the inertia of the vibrating parts of the stylus assembly and thus of the tendency of the stylus to continue in a previous direction rather than changing direction when the groove wall does. In recent years tip masses have been halved in many designs, yielding much better high-frequency tracking ability.

Electret-A permanently charged capacitor used as a sensitive transducer in microphones and some phono cartridges. Varying pressure on the electret surface produces a varying voltage output.

Magnetic flux-The energy in a magnetic field. Magnetic flux is conducted efficiently through metals such as iron but comparatively inefficiently through

Mechanical impedance—A measure of the tendency of the stylus to resist being moved back and forth by the groove walls. Essentially determined at low frequencies by the compliance (low compliance equals high mechanical impedance) and at high frequencies by the effective tip mass plus the resistance of whatever damping is included to suppress ultrasonic resonances. The higher the mechanical impedance, the greater the vertical tracking force required to hold the stylus in contact with the undulating groove walls. (See this month's "Technical Talk" column, page 28.)

Modulation velocity—The strength of the recorded signal is described by the speed (velocity) of the back-and-forth vibration of the stylus (which is not re-

Compatibility: Impedance

Although it is less true today than previously, most moving-magnet cartridges tend to have a mechanically determined frequency response that rises at high frequencies toward an underdamped ultrasonic resonance. However, the many turns of wire on the cartridge's coils have a fairly high inductance which, coupled with the capacitance of the turntable's signal cables and the input impedance of the preamp, becomes a filter rolling off the pickup's high-frequency output.

If everything has been designed correctly, the rising mechanical response and the falling electrical output neatly nullify each other, producing a flat system response. But if you use significantly different values of cable capacitance and preamp input impedance than the cartridge designer intended, you may alter the effective frequency response by several decibels at high frequencies. Some pickups work best with around 400 picofarads of total capacitance (including both the signal cable and any capacitance in the preamp input), while other cartridges work best with less than 200 pF. Still others don't seem to care at all. If your amplifier has adjustments for phono-input resistance and capacitance, you can experiment to find the combination of settings that sounds best with your cartridge.

Low-inductance cartridges, a category that includes some moving-magnet

designs, all moving coils, and electrets (which have no inductance), are unaffected by cable capacitance and preamp impedance. Since a low-inductance pickup doesn't filter its own output, its frequency response is essentially that of the stylus assembly, which must be well controlled if the cartridge is to be accurate. (In fact, the perceived brilliance and "clarity" of some low-inductance designs probably result from a rising high-frequency response produced by an under-damped ultrasonic mechanical resonance.)

Compatibility: Sensitivity

Exact matching of cartridge-output and preamp-input sensitivities is not necessary. Modern amplifiers generally have enough extra headroom to accommodate cartridges with higher-than-average output and enough extra sensitivity for pickups with lower-than-average output. But if the cartridge output is substantially lower than 2 millivolts (mV) at the standard test level of 3.54 cm/sec, be prepared to use a relatively high volume-control setting, and expect to encounter audible hum and hiss unless your preamp has a better-than-average signal-to-noise ratio.

Test reports are your best guide to phono signal-to-noise (S/N) figures; manufacturers' specs are often misleading, usually having been measured with a short-circuit input instead of a cartridge. Of course, if you plan to use a

low-output moving-coil cartridge, you will need an amplifier that has an MC input (as many do these days) or an outboard step-up device.

Compatibility: Mass and Compliance

The stylus system in a phono cartridge has a springy resilience which is measured as its "compliance." The tone arm has an "effective mass" consisting mostly of the net weight of the headshell assembly, plus the weight of the cartridge itself. The mass and compliance jointly form a resonant system which tends to vibrate at some very low (infrasonic) frequency. The higher the mass and/or compliance, the lower the resonant frequency; if it is too low (below about 8 Hz) it will tend to be stimulated by motor rumble, disc warps, footfalls, and acoustic feedback. Too high a resonant frequency can peak the low-end frequency response. Try to avoid the troublesome combination of a high-compliance cartridge in a highmass arm. (Generally speaking, a highcompliance cartridge is one whose optimum VTF is 11/2 grams or less.) Many recently designed tone arms have relatively low mass and are fine for use with high-compliance cartridges, but if you have an older tone arm (or even a new one) with medium-to-high effective mass, stick to cartridges with medium compliance—which is to say those with an optimum VTF above 1½ grams.

lated to the longitudinal speed of the stylus traveling through the groove). The standard reference level used for calibrating phono-cartridge output is a mono (that is, laterally cut) signal with a velocity of 5 cm/sec. The corresponding motion along the 45-degree axes used for stereo is 70.7 per cent of that figure, or 3.54 cm/sec. Loud passages in music can produce peak velocities more than ten times higher than that level.

Rake angle—The tilt of the stylus forward or backward from the vertical as it rests in the groove. Ideally it should match the tilt of the cutting stylus, which is angled a couple of degrees back from the vertical in order to scoop material out of the groove as it cuts. Adjustment of the rake angle is said to make an audible difference with line-contact styli, but it is relatively unimportant with spherical and elliptical styli.

Rise time—A measure of response speed, usually tested with a square-wave signal. In a cartridge with approximately flat frequency response, rise time depends simply on bandwidth: the more extended the response, the shorter the

rise time. Since low-inductance cartridges (including electrets and moving coils) don't filter their own output, they usually have extended ultrasonic response and the shortest rise time.

Scanning radius—The horizontal radius of curvature of the sides of the stylus. The smaller the scanning radius, the sharper the stylus edges contacting the groove walls, the narrower the contact patch, and the more accurate the tracing of the finest groove modulations. The contact radius, on the other hand, describes the curvature of the stylus edge in the vertical direction; the larger its radius, the longer the zone of contact up the groove wall.

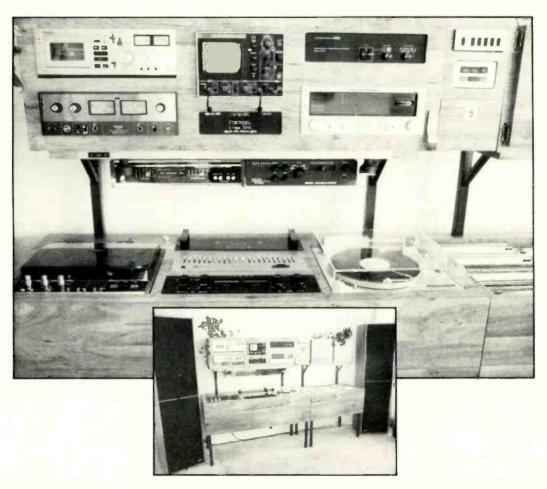
Transients—Sudden changes in a signal—such as the beginning of a note or a percussive impact—as opposed to continuous steady-state tones. A square-wave signal is actually a continuous tone, but it involves sharp changes of direction in the groove, so it simulates the difficulty of reproducing transients.

Tracing distortion—A geometric distortion due to the difference in shape between the cutting stylus and the playback stylus. The narrower the contact patch where the edge of the stylus touches the groove wall, the lower the tracing distortion.

Tracking ability—The ability of the stylus to stay firmly in contact with the undulating groove wall. With any cartridge, the tracking ability improves somewhat with an increase in vertical tracking force, up to the pickup's maximum VTF.

Vertical tracking angle (VTA)—Stereo involves a mixture of lateral and vertical groove modulations, but, because the cutting stylus is pivoted from a point above the disc surface, its "vertical" modulations actually follow an arc tilted back from the vertical by 15 to 20 degrees (the exact angle depends on the cutter used). For minimum distortion, the playback-stylus assembly should also be designed to swing in the same tilted arc. In actual operation the VTA may be affected by the mounting of the cartridge in the headshell, the height adjustment of the tone arm on the turntable, and the setting of the tracking force.

Installation of the Month By Robert Greene



ALTHOUGH he's now in the restaurant business, Florida resident Sheldon Delsack had training in design and mechanical drawing that was an asset in making his hi-fi installation not only attractive but practical. Weighing a staggering 800 pounds (including the equipment and stored records), the 9-foot-long cabinet is made of 34-inch plywood (veneered with wood-grain Formica) on a framework of welded 1-inch-square steel tubing.

The lower section is accessible for servicing from underneath, but the upper section presented something of a problem. This was solved by building a special dolly (again, out of 1-inch-square steel tubing) and mounting it on 500-pound-capacity swivel rollers. Asked how he manages to get his unit *onto* the dolly, Mr. Delsack replied, "Carefully—with four strong men." Fortunately, the necessity for this arises only infrequently.

Starting at top left in the picture above and moving across, the cabinet contains a Technics RS-676US cassette deck, a B&K Model 1474 dual-trace oscilloscope (which can be connected to any of the units for test

purposes), a B.I.C. Beam Box antenna, and accessory remote-control units for both tape decks. The second tier is made up of a Teac AN 180 Dolby noise-reduction unit, an SAE 5000 impulse-noise-reduction unit, a Marantz Model 125 tuner, and a storage drawer. The small item to the right of the tuner is a record brush. The two units at the bottom of the upper section are a dbx Model 2bx dynamic-range expander and an Audio Pulse Model Two time-delay system.

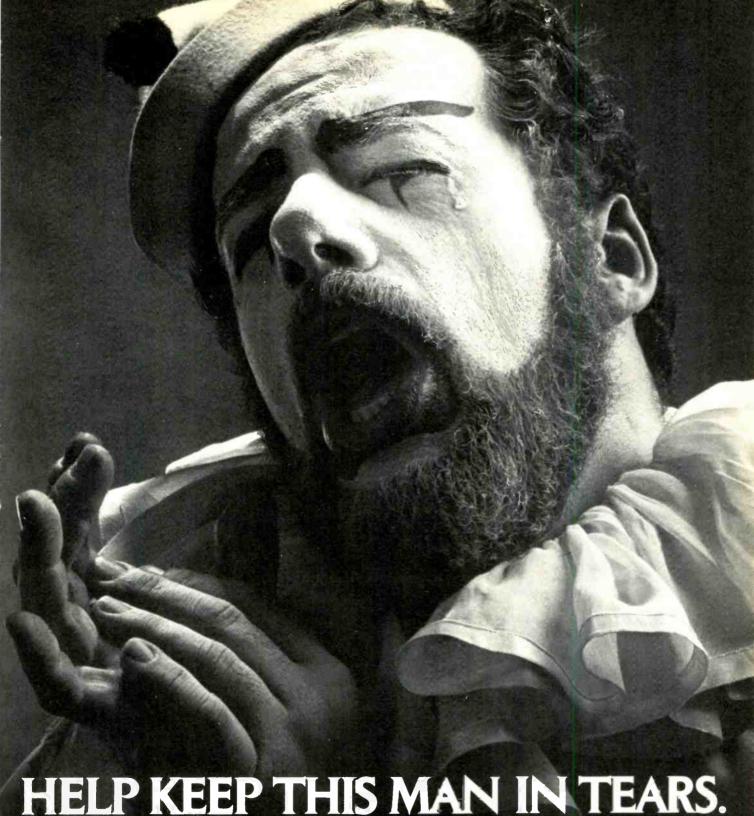
At the left end of the horizontal section is a Teac 2300S open-reel tape deck, behind which are speaker-selector switches and controls for the four small fans used to keep everything cool. In the center, back-to-front, are located an SAE 2200 power amplifier, a Soundcraftsmen RP2212 equalizer, and an SAE 1M preamplifier. The Harman Kardon ST-7 Rabco-arm turntable at the right is equipped with a Promethian (custom-reworked Grado) cartridge. At the far right is record-storage space.

Each of the open-backed speaker enclosures is made of the same veneered plywood as the equipment cabinets and houses a stacked pair of ESS AMT-1A speaker sys-

tems. The time-delay system employs a pair of Realistic Minimus speakers. To complete the picture, small lamps are built into the equipment cabinets, and the planter at the top right is really "growing space" for new equipment.

The entire system took a month to design and about eight months, on and off, to build. Quite obviously, Mr. Delsack's hobbies include cabinetmaking and metal and foundry work. He also dabbles in photography and spends a good deal of time designing and building motorcycles.

Have you installed your system in some special or interesting manner that might contain ideas other readers could use for their setups? For us to judge whether your system qualifies as an "Installation of the Month," send a clear snapshot and a brief description of the components to Stereo Review, Dept. IOTM, One Park Avenue, New York, N.Y. 10016. Please include return postage.



Canio, the tragic f gure in Pagiacci, has brought tears of joy to rillions.

et these tears of joy could easily turn to sorrow.

he Metropolitan Opera's task of maintaining its standard of excellence is becoming more cost y. And that's where you can play an important role.

Pioneer will double the

amount of whatever you can gire. Your gift will help the Met > po itan Opera match its grants from the National Endownent for the Arts. That way the Met can put more into each performance

and you can get more out of the So help us help the Matropo itan Opera. Or people who en oy a great tragedy will really have something to cry about

Enclosed is my donation of \$ Should be made payable to: The Metropolitan Opera/Pioneer Fund. Mail the coupon with your donation to: The Met, c/o L.S. Pioneer Electron cs Corp., 85 Oxford Dr., Moonachie, N.J. 07074.

NAME

ADDRESS

CITY, STATE

THE MET

A Stereo Review Forum on WHAT MAKES A GOOD PHONO CARTRIDGE

Sixteen industry experts discuss the engineering aspects of performance for one of audio's most highly developed technologies

Moderated by Robert Greene

T has been said that the wonder of modern recordplaying equipment is not that it works so well, but rather that it works at all. This is really a tribute to that marvelous device, the phono cartridge. Given the hypothetical problem of designing-from scratch-a mechanism to play today's highly refined and complex records (assuming that they somehow existed in a cartridgeless world), engineers might say it couldn't be done. Elsewhere in these pages you'll get some idea of the Herculean tasks (on a minuscule scale, to be sure) these units must perform. They require the highest level of the watchmaker's and lapidary's art exquisitely combined with the sciences of metallurgy, physics, magnetics, and electronics.

Fortunately, however, the cartridge evolved along with the phonograph record. Perhaps the present level of performance could have been reached only through such a process; without the incentive of constantly improving records, cartridge improvement would have been unnecessary, and without car-

tridges to realize their virtues, improved records would be useless. As a perhaps inescapable by-product of this complex process, the audiophile finds himself inundated with cartridge information and misinformation.

To help our readers see what these problems are, how they are being solved, and how the designers feel about them, STEREO RE-VIEW conducted a survey among the chief technical personnel of a number of cartridge manufacturers. As in previous symposia of this kind, our questions were designed to draw out fact, opinion, and even emotion. What follows was extracted from nearly fifty pages of technical (and some notso-technical) comments from our respondents. For the sake of brevity and clarity, we have distilled and at times paraphrased the original remarks. We have, of course, done our best to present accurately the content and intent of our forum contributors' responses. If we have at any point gone astray, we tender our apologies to the parties involved; insofar as we have succeeded. some light should be shed on a much misunderstood subject.

From the standpoint of audible performance, what cartridge measurements are most meaningful?

The great variety of opinion elicited by this seemingly simple question was explained succinctly by Denon: there are no agreedupon standards for the cartridge specifications quoted by manufacturers. Sonus concurred, adding that "unfortunately, with today's high-quality cartridges, measurements and specifications are often of little help in defining the subtleties of audible performance." Despite a somewhat pessimistic opening, Denon did note that effective tip mass and stereo separation are the two key specifications from a listening point of view. The tip-mass specification implies a veritable flood of data on how well the cartridge will couple with the record groove, its ability to provide high-frequency detail, the quality of stereo imaging, etc. Nagatronics' position on specifications was that a good frequency response is important and reflects the overall quality of the cartridge, but distortion figures, not frequently published, would be far more revealing and provide considerable insight into the performance potential of the cartridge.

Astatic was explicit, listing the measurements in descending order of importance: trackability (see the Glossary on page 60), frequency response, separation, output level, and inductance. The thread of "trackability" ran through most of the replies. Since Shure has been concentrating on just this factor for some time, their reply was not surprising: "Trackability is generally the least understood, the most taken for granted, and the single most important cartridge characteristic. It is the result of a judicious balance of design factors. Insufficient trackability will result in gross distortion. It is analogous in a more complicated way to a low clipping level in an amplifier. Of course, once good tracking is achieved, other factors such as uniform frequency response and reduction of geometric distortion must be dealt with."

The regard for tracking is implicit in B&O's comment as well: "The obvious fact that, to reproduce a record correctly, the stylus must remain in constant contact with the groove and deform it as little as possible is often forgotten in today's world of fashionable, exotic phono cartridges. In spite of many suggestions, no single measurement adequately specifies this ability. Assuming stylus/groove contact, the next most important specification is still probably frequency response." Stanton did not disagree, but their emphasis was different: "A cartridge may track flawlessly, but internal resonances of the moving system and the electrical resonance may change the sound of the pickup. Tracking ability is a basic condition which should be met. From the standpoint of audible performance, frequency response and ability to respond to transients are key specifications once the condition of positive tracking is achieved."

ADC detailed different points, but central to them was good tracking: "Assuming no mistracking, a cartridge, in order to be free of the common audible problems, would have no significant amplitude or phase errors in either its mechanical and

electrical systems, a fast but well-controlled transient response, and no distortion, particularly odd harmonics." Empire cited low distortion (both phase and amplitude), low noise, a flat frequency response, and good crosstalk, but qualified these concerns: "However, these are directly affected by tracking ability, stylus design, shape and polish, etc."

Adcom and Audio-Technica both underlined frequency response, but with different emphases. Adcom: "Linearity or flatness of frequency response under actual performance conditions is a critical specification. Of course, linearity isn't everything, but lack of linearity is nothing! No amount of money spent to achieve linearity in the rest of the system can overcome the lack of it in the transducer which transfers the sonic image from the record groove. Who today would seriously consider a non-linear preamp or amplifier?"

Audio-Technica's position was slightly different: "The overall smoothness of the frequency-response curve is important—more so than the flatness of the curve—because abrupt changes in response are undesirable. Tracking ability also is a key specification because it shows the ability of a cartridge to perform without distortion and record wear. The high-frequency separation measurement is critical since it indicates how well the stereo image is presented."

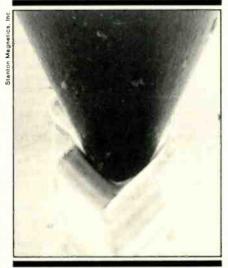
Micro-Acoustics brought in a point not previously mentioned, and with it an interesting explanation: "Audible performance can be predicted by frequency response, separation, distortion, and rise-time measurements. Frequency response measures the balance between low-, mid-, and high-frequency levels. Separation response is an indicator of stereo-image fidelity, and distortion measurements check the fidelity of the reproduced waveform. Rise-time measurements allow evaluation of transient response. Although test records for most measurements use sine-wave signals similar to the simplest musical sounds, actual recorded program material is full of sudden bursts of sound or transients, hence rise time is a key measurement. It is also important that listening tests be carried out with the cartridge operating under the same conditions used during test-record measurements. Improper alignment or mistracking could add sufficient distortion to completely alter a listener's judgment."

And, finally, Ortofon cited frequency response, tracking ability, channel separation, and phase as the most important phono-cartridge measurements and specifications. They did not judge that any one of these is more important than any other, but rather that all must properly interact in order for the phono cartridge to perform properly.

How do tracking-force ratings and tracking ability relate to each other?

Micro-Acoustics answered this question with an explanation that included some historical perspective: "The stylus must exactly follow or scan the mechanical waveforms of the record groove, and unless the stylus/groove contact is continuous, we cannot

even begin to reproduce the recorded signals accurately. Tracking ability, then, is a prime quality factor. When our design experience began thirty years ago, 5- to 8gram tracking forces were not unusual. In an effort to prevent record damage and avoid the need for frequent stylus replacement (every ten hours or so) tracking-force reduction became a prime design objective." Ortofon agreed with the importance of tracking ability and added that "in general, tracking ability improves as tracking force is increased. Tracking ability is also a direct function of the equivalent stylus-tip mass. The lower the tip mass, the greater the tracking ability of the cartridge." Stanton also picked up on this point: "Because of current long-contact-area/large-bearingradius stylus shapes, pressure per unit area may be much lower than with conical styli; the groove wear is reduced, and distortion products are minimized."



Denon took a very practical point of view: "Such problems as turntable resonance, acoustic feedback, and record warp effectively establish the lower limits on tracking forces. It's clear that cartridges should track below 21/2 grams to avoid excessive record wear, but the specific force used should be consistent with overall cartridge/ tone-arm mass and cantilever compliance. Cartridges and tone arms are part of a complex system that must function as an integrated working whole." Audio-Technica pointed out that, in addition to the other advantages attained by reducing the cartridge's moving mass, the stylus' resonant frequency is shifted above the audible range, thereby reducing the need to damp it. Reduced record wear is an additional

Shure commented simply that stylus force is a prime ingredient of trackability, so the maximum tracking ability at the minimum stylus force is a prime quality factor. Sonus felt that tracking ability and tracking-force requirements are significant in that they tend to indicate whether a cartridge has high enough compliance and low

enough mass that it can track at relatively low forces. Although tracking ability is seldom a problem per se in modern cartridges, mistracking of a more subtle kind may still be encountered, particularly with some of the new audiophile discs.

Empire's terse comment was that, whatever its origin, any form of mistracking generates considerable distortion.

What influence does cantilever material and construction have on cartridge performance?

Audio-Technica's response to this question provided considerable insight into the problem: "The cantilever transmits to the generating element the vibrations which the stylus tip picks up from the record. In order to do this with accuracy, it is necessary for the cantilever to be at once as light as possible and as rigid as possible. The less tendency a cantilever has to flex, the greater its ability to transmit the information in the record groove accurately. However, increasing cantilever stiffness without a corresponding mass reduction may not result in improved performance. Likewise, reduction in mass taken to an extreme may result in a cantilever of insufficient stiffness."

Pickering's view was that exotic cantilever materials should be evaluated on the basis not only of their cost, but on their mechanical performance: "The cantilever should be light, strong, non-resonating, electrically conductive, reasonably easy to manufacture, dimensionally precise, and durable. Cantilever materials like diamonds and sapphires do not meet these requirements in several areas. Most of the exotic materials being used in a relatively small number of very expensive cartridges exhibit fairly high dynamic tip mass. Such a cantilever assembly has sharp resonances at ultrasonic frequencies, and the vibration can damage the groove walls. Solid diamond and sapphire cantilevers are non-conductive, extremely difficult to manufacture, and excessively expensive. The strongest and lightest cantilever shape is a hollow tube. No matter how much lighter than aluminum the basic material is, it is heavier when the cantilever is made of solid diamond or sapphire rod. Other exotic metals may offer better alternatives than diamond or sapphire, but their stiffness-to-weight ratio is not much better than aluminum and their cost is extremely high."

Adcom agreed, adding that "sapphire, ruby, and diamond materials offer great promise for future designs, but they offer maximum advantage only when formed into thin-walled tubes (laser drilling is one method)." Astatic agreed, and Shure pointed out that the mechanical characteristics of the cantilever become increasingly significant in respect to a cartridge's tracking ability as the frequency of the recorded signal goes higher. Ortofon indicated that the desirable combination of low mass and extreme rigidity can be achieved by combining different cantilever shapes (stepped designs, tapered designs, etc.) with various construction materials.

Looking at another physical aspect, Empire cautioned that using some exotic space-

CARTRIDGE FORUM

age material may actually degrade performance unless the material can be fabricated to a design that takes advantage of its special properties.

Denon takes a pragmatic approach, stating that their present use of a vapor-condensed boron cantilever just happens to be their way of arriving at the desired result: "The choice of cantilever material should depend on the overall cartridge design. If it works well, then the material is good. We don't believe there is any magic cantilever material."

How important do you find stylus-tip shape in respect to (1) the ability to trace high frequencies, (2) distortion, and (3) the tendency to accumulate dust and groove debris?

Ortofon, ADC, and Empire all mentioned that the best performance can be obtained through the use of styli that have a large contact area and small scanning radii, ADC explaining that the former distributes tracking force over enough groove-wall area to prevent excessive groove indentation and the latter extracts high-frequency information from the innermost grooves. But within this general agreement the thinking differed somewhat. Denon and Nagatronics felt that no single tip shape is best for all purposes, and reactions from users of Denon cartridges (which have five different tip shapes available) seem to indicate that preference for the sound and type of distortion produced by each tip shape is essentially a matter of taste. For example, conical tips track worn surfaces with less noise and distortion, but they do so with some loss of musical information.

Astatic and Audio-Technica held that playback-stylus shape resembling that of the cutting stylus is desirable, the latter adding that unfortunately "the greater the conformity, the greater the difficulty in aligning the cartridge precisely." On this point, Sonus indicated that the more exotic tip shapes are very critical with regard to form, polish, and accuracy of mounting: "If great care is not taken with these criteria, one is better off with simple spherical or biradial tips." Shure pointed out that one important result of the better tracking ability of such shapes is that it minimizes the veryhigh-frequency distortion that could be shifted down into a more audible part of the audio spectrum through intermodulation.

The only respondent differing somewhat on this issue was B&O, who observed that though shape was vital in the heyday of CD-4 and though it remains a factor in the highest-quality applications of today, other design parameters are more important to basic performance. In regard to the dust problem, B&O said, "Dust accumulation is a function of the polish on the entire stylus surface, not just of the very tip or of the shape of the tip." Shure stated that if the stylus' projection from the cantilever is too short it will tend to retain dust and debris

and so necessitate frequent cleaning; if it is too long, torsional (twisting) effects may occur. Stanton commented that accumulation of debris at the stylus tip may be due to electrostatic attraction of the cantilever or to the kind of liquid cleaner used on records or stylus, but that the shape of the stylus tip has little to do with this unless it starts scraping the bottom of the groove. In any case, all panelists agreed that records should be kept scrupulously clean.

Do you believe that any one type of cartridge transducer design (moving magnet, moving coil, etc.) is inherently superior?

As expected, a number of companies extolled the virtues of their proprietary designs in terms not much different from those found in their ads. What was a surprise was the number of respondents who, like ADC, felt that state-of-the-art cartridge design is possible with any type of generating system, and that the quality of a phono cartridge resides in the execution of the design.

Shure put their emphasis on "the design of the cantilever, tips, and suspensions, major parts of the cartridge's performance. All designs share these elements, which are not associated with any particular transducer principle." B&O agreed, stating that the means used to transfer stylus movement to the armature is much more important than the type of transducer. Denon makes both moving-coil and moving-magnet types, so they conduct continuing research on both; they assume that the question will remain unresolved indefinitely—except in the mind of the end purchaser.

Stanton felt that the moving-coil designation is frequently a misnomer. In their view, most moving-coil cartridges are actually moving-iron types due to the bobbins (small spools) on which the coils are wound. If the soft metal bobbins were removed there would be almost no signal produced.

"... all panelists agreed that records should be kept scrupulously clean." They claim that the difference in sound heard from many moving-coil designs is due to "loose wires in the bobbin and those connecting the coil. That extra brightness is due to the harmonics generated by these wires working as an artificial reverberation device." Despite the fact that this effect is pleasing to some listeners, Stanton prefers that signals be reproduced "without enhancement or alteration."

Audio-Technica, ADC, Sonus, Shure, and Empire were largely in agreement that the use of a particular transducer type isn't the absolute key to good sound, that good design and proper application are the important factors. Or, as Audio-Technica summed it up: "What type you make is less important than how well you make it."

How does tracking force affect record and stylus wear, and what other factors are involved?

ADC pointed out that either too high or too low a tracking force can cause groove-wall damage; for minimum wear and proper tracking, a figure at the center of the manufacturer's specified range should usually be used. Micro-Acoustics commented that tests have shown that dust on the records played can cut record and stylus life in half. They mentioned that other factors such as arm mass, arm friction, unbalanced skating force, and warped records can all demand increased tracking force for good performance. And Denon also cautioned that too low a tracking force is detrimental to records and styli. After all, a diamond flailing through the groove at massive G forces is all the vinvl needs as an excuse to deteriorate. The simplest and most effective way to preserve both stylus and record is to keep them both immaculate.

Ortofon started by pointing out that there is an inverse relationship between record wear and stylus wear that has to be taken into account. They feel, however, that a more important factor is the amount of actual stylus-contact area over which the tracking force can be distributed; the larger the stylus-tip contact area, the lower the record wear. Astatic was generally in agreement with this and with the slightly-heavier-is-better thinking mentioned earlier, and Audio-Technica commented that stylus pressure is the more important consideration: a line-contact stylus permits an increased tracking force with decreased stylus pressure compared to other stylus configurations. Stanton noted that pressure per unit area applied over the correct part of the groove is the key factor in low record wear. High compliance is a must for large, lowfrequency excursions, and low dynamic tip mass is essential for high frequencies; record and stylus wear are in direct proportion to both of these properties.

Sonus played down tracking force per se as a factor in record wear, stating that as long as it doesn't exceed 1½ to 2 grams and the stylus is well-polished and -mounted, then groove contamination, a damaged stylus, and mistracking are much greater wear factors. Empire held that the shape and polish of the diamond tip are just as important as tracking force.

Do you have objections to or preferences for any of the currently available test discs? In general, how valid in respect to revealing cartridge quality are they?

While there was a certain division of opinion among the panelists, the consensus seemed to be that test records can be useful provided one is familiar with their limitations. Audio-Technica felt that their own test discs as well as those from JVC and Shure are "reliable" and those from B & K "useful," but that those from CBS aren't "state-of-the-art." Ortofon was rather neutral, stating that they don't find any of the present test records to be either deficient or superior. Micro-Acoustics provided a "laundry list" of test records (mostly CBS) they like, but each for a specific purpose. Stanton felt that too much doctoring of test records takes place—and that the most accurate test records commercially available are those from JVC.

Adcom liked at least two of the CBS test records but found that many other records can give unreliable results. Nagatronics commented: "Most currently available test discs involve a great many compromises, but they do serve as comparison standards within the laboratory." The limitation they find, however, is that because the consumer is unfamiliar with the discs' defects, the required lengthy explanations make the presentation of test results difficult. Shure continued along somewhat the same lines when they said that all test records can give usable results if their calibration is known, but that some aspects are hard to know. For example, there are significant differences in crosstalk with the same pickup measured on CBS STR-100, B & K QR 2009, and JVC TRS 1003, and it is difficult to know which is closest to the 45-degree standard. Test records, they concluded, are useful, but they are no substitute for listening. Astatic and Denon pretty much went along with Shure. ADC's comment was that an almost insoluble problem is created not only by the differences between different records but between different pressings of the same record. Their solution is to choose one record and supplier and then press the supplier to maintain quality and particularly uniformity in his product over time.

Two other respondents were also fairly negative. B&O: "Even test discs cut and pressed under laboratory conditions are often inadequate to determine many of the performance limits of the best cartridges. Use of commercial records as a test of absolute quality is therefore not recommended unless a statistical method can be used to remove the differences." And, finally, Empire, summing up for the cons: "The industry is in dire need of a good standard test record and procedure, particularly for tracking ability, distortion, and crosstalk."

What qualities do you feel are most important in a tone arm? Is there an optimum tone-arm mass?

The laws of physics being the governing factors here, all engineers have to work within the same limitations; they may point up

varying aspects, but, by whatever means, they must deal with the same problem. Stated briefly, in order for the cartridge to produce a signal the stylus must move relative to the body of the cartridge, not with it, so the cartridge and tone arm must together provide enough mass to resist being driven by the stylus. At the same time, the total mass must be low enough to be relatively unaffected by such extraneous elements as record warp, off-center (eccentric) records, and external shock and vibration. However, a given combination of arm mass and stylus compliance will inevitably produce a mechanical resonance at some low frequency. Below this resonant frequency the arm and cartridge will tend to follow the stylus deflection, resulting in a loss of output; above this resonant frequency the arm and cartridge remain stable relative to the stylus and the cartridge is able to produce a normal signal. At the resonant frequency, the cartridge overreacts and can jump grooves if the resonance coincides with record-warp frequencies, which are mostly concentrated below about 10 Hz. The engineering trick, then, is to work out the best possible mass/ compliance compromise in order to keep the resonant frequency at the least objection-

According to Shure, the optimal combination of effective arm mass, cartridge weight, and stylus compliance should result in a resonance in the range of 8 to 15 Hz. Stanton pointed out that there is no specific magic resonant frequency but only an approximate range (8 to 12 Hz), since tonearm and cartridge weights and stylus compliances vary considerably. A number of the panelists mentioned figures around 10 Hz.

Audio-Technica felt that while there are optimum tone arms for specific cartridges, there is no optimum arm for all cartridges. They also stated that the stylus tip should be vertical to the record surface and that the cartridge must be installed firmly.

ADC noted that desirable characteristics in a tone arm are accuracy and stability: "It should be possible to set up a tone arm to

"... either too high or too low a tracking force can cause groove-wall damage."

meet the proper conditions and then have it remain that way."

Empire summed up the situation succinctly: "An ideal tone-arm/cartridge system would have the stylus tracking only the groove modulation, while the tone arm would track only the warp and wow components on the record."

How critical, in general, is cartridge installation in respect to sonic performance?

B&O, Pickering, Empire, Astatic, Shure, and Stanton appeared to feel that optimum installation is important, but not a matter of life and death. Shure held that while installation should be done as carefully as possible, minor misalignments do not seem to produce audible disasters. Stanton pointed out that though cartridge installation is important for maximum separation and lowest distortion, even the most careful lateral alignment can be negated by incorrect antiskating compensation, physically biasing the cantilever off its centered position.

Adom, however, stated that proper installation is vital, and Ortofon held that it is extremely critical in order for the cartridge to perform at its design parameters. Sonus felt that if both the arm and cartridge are correctly designed, correct installation, although very important, should be simple and non-critical.

Denon's response was the strongest: "Cartridge installation is absolutely, positively, undeniably *critical*, and never let anyone tell you otherwise. With geometric factors as small as we are dealing with, what else could anyone expect?"

Considering the about-to-bereleased all-digital audio discs, what do you feel about the future of conventional LPs and the devices that play them?

Many of STEREO REVIEW'S readers will probably be relieved to learn that the panelists were in virtually universal agreement that, as Audio-Technica put it, "conventional phonograph recordings will be around for many years to come."

Shure's reasoning was that the LP will be with us for a considerable time because it affords good value for the money and has many practical conveniences. ADC pointed out that the vast amount of existing softwear (records) in the present form will continue to require high-quality devices to play them. Stanton, Astatic, Nagatronics, Micro-Acoustics, Pickering, and Ortofon all held pretty much the same opinion. B&O felt that the digital disc will ultimately replace the present analog type (they didn't say whem), and Denon's respondent, despite being very high on digital, says he wouldn't stop buying records in the near future.

Empire felt that a practical digital-disc system will provide little performance advantage over a good analog LP system. They added, however, that "since many technocrats in large organizations believe that a complex state-of-the-art design is always better, we will have to accept the inev-

CARTRIDGE FORUM

itability of considerable lobbying for videodisc-derived technologies" but that acceptance of a final system may take longer than presently anticipated because of the inevitable major confrontations between different digital systems.

Sonus envisioned somewhat the same kind of future and elaborated: "To be economically viable, industry standards must be adopted, and that will probably not happen without a considerable struggle between the giants of the industry. Furthermore, there is a great danger that when such standards are agreed upon, they will be such as to limit the highest attainable fidelity due to considerations of cost. Meanwhile, the analog disc is still capable of enormous improvement and may render the pure digital disc either unnecessary or economically unjustifiable."

Do you have any suggestions to pass on to record-player and preamplifier manufacturers that would make your job as a cartridge designer easier?

Aside from the single simple request (from Astatic) for a permanent mark on the turntable to indicate optimum tip position, the items our engineers wanted to find in their technological Christmas stockings were complex but fairly uniform. As Ortofon put it, standardization of such parameters as cartridge/headshell overhang and tracking angle, and a standard mounting socket for the headshell, would yield better cartridge and tone-arm interfacing and performance. Concurring with this point of view to one degree or another were Audio-Technica, Shure, and ADC.

Standardized load capacitance in turntable cables and in preamplifiers was called for by Ortofon as well as Audio-Technica and ADC. Pickering would be happy if preamp manufacturers would publish (or even be aware of) the input capacitance of their preamplifier circuits. Also in the preamp area, B&O requested that manufacturers stick to standards established for input impedance and not make "improvements" with oddball values.

Stanton suggested that record-player manufacturers should specify the dynamic mass of their tone arms correctly and without exaggeration. This would permit the cartridge maker to suggest proper cartridge/tone-arm combinations with specific tracking-force recommendations.

Denon and Adcom were somewhat pessimistic, Denon stating that suggesting standards that will not be met is useless and that it is up to the cartridge manufacturer to make his product workable in as many situations as possible. Adcom's comment was: "Standardization obviously would be helpful, but given the biases of competing manufacturers and differing technologies this is highly unlikely.'

Are there any other matters you think should be commented on in this subject area?

Audio-Technica brought up quality control: "Intensive quality control is a vital part of manufacturing uniform consumer products. The real measure of quality is whether the same performance attained in a lab report is consistently available to consumers who purchase the product in retail stores."

Astatic pointed out that phono-cartridge specifications must be carefully considered in relation to the total system and particularly to the tone-arm/turntable combination in which a cartridge is mounted. They felt that it's their job to give the consumer reasonable choices and recommendations. but that it's also up to the consumer not to misuse equipment for which he has such information available if he expects reasonably good performance.

ADC, Denon, and Empire saw transducer design and execution as an evolutionary process that can only get better. Many of the problems, said ADC, are extremely complicated, and all are interrelated, but they are solvable. Empire closed with an old but still valid truism: the most cost-effective improvement you can make in your hi-fi system is to upgrade your cartridge.

THE FORUM PANEL

Duane E. Punkar, The Astatic

John Kuehn, James O'Neill, and Eric Park, Audio Dynamics Corp. (ADC)

S.K. Pramanik, Bang & Olufsen a/s (B&O)

Robert Heiblim, Denon America,

Roland Wittenberg, Empire Scientific Corp.

Newton A. Chanin, Adcom Norman H. Dieter, Micro-Acoustics COLD. David B. Monoson, Nagatronics Согр. George Alexandrovich, Pickering & Co., Inc.

Bernhard W. Jakobs, Shure Brothers, Inc.

Peter E. Pritchard, Sonic Research, Inc. (Sonus)

Norman Levenstein, Audio-Technica Walter O. Stanton, Stanton Magnetics, Inc. Henry A. Roed Jr., Tannoy-Ortofon, Inc. (Ortofon)

Note: Space limitations precluded our canvasing all existing cartridge manufacturers for this forum. Those selected, we feel, present a representative sampling of viewpoints.



PUNKAR



KUEHN



O'NEILL



PARK



PRAMANIK



HEIBLIM



WITTENBERG



DIETER



MONOSON



ALEXANDROVICH



JAKOBS



PRITCHARD



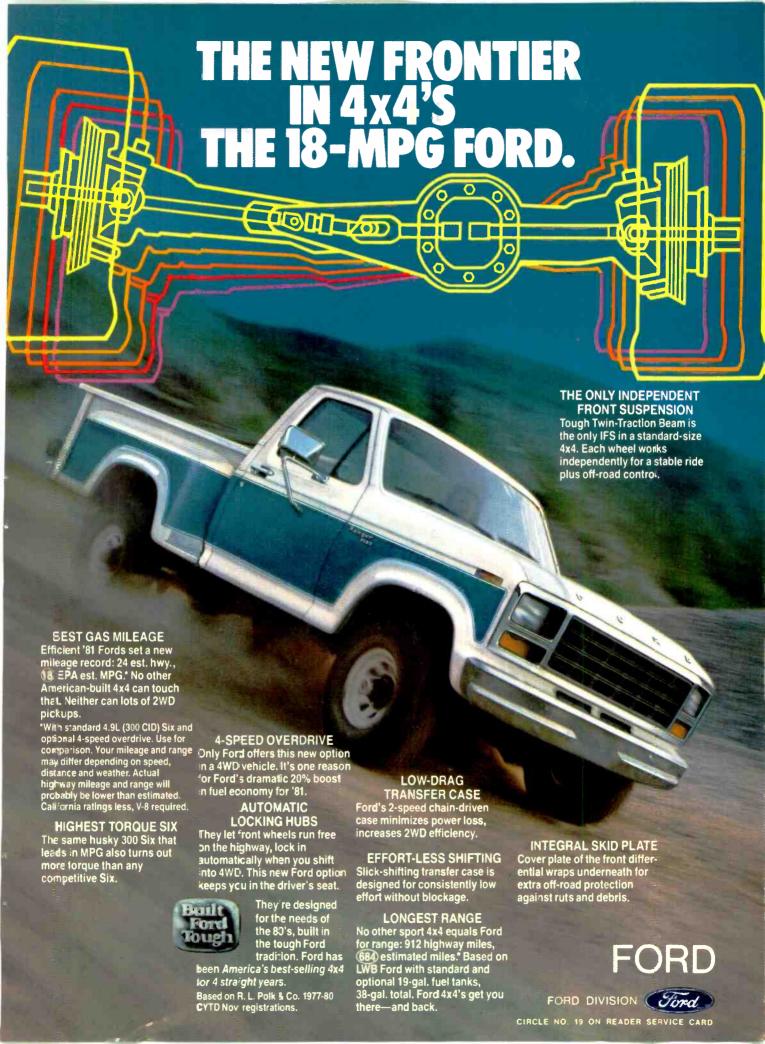
LEVENSTEIN





STANTON







Marilyn Horne as Isabella, *L'Italiana in Algeri* (Photo by James Heffernan/Metropolitan Opera Assn.)

STEREO REVIEW'S SELECTION OF RECORDINGS OF SPECIAL MERIT

BEST OF THE MONTH



Rossini's Sparkling L'Italiana in Algeri

IOACCHINO ROSSINI'S productivity was legendary, but what he managed to accomplish in a span of two years (1812-1813) seems unbelievable even by his remarkable standards. The magic of Venice might have had something to do with it: it was there that his L'Inganno Felice was introduced on January 8, 1812, with startling success. Before the year was out, two more Rossini operas had had their Venetian premières and another two had been introduced in Ferrara and Milan. Not one of them was a failure, and they seem to have set the stage for the even more remarkable harvest of 1813, which yielded apace Il Signor Bruschino (January), Tancredi (February), L'Italiana in Algeri (May), and Aureliano in Palmira (December). All except the last were introduced in Venice. Tancredi had one great tune that all Italy hummed and whistled ("Di tanti palpiti"), but it was L'Italiana in Algeri that was instantly embraced in toto. Its music, said Rossini biographer Stendhal, could not have been better suited to the pleasure-loving characteristics of Venetians, the most lighthearted public in the world.

Italian opera buffa was never a parade ground for male chauvinism: the outwitting of credulous males by clever females is a recurrent theme in these works, and it is enlivened in L'Italiana in Algeri by a somewhat exotic conflict of cultures. The opera's story is an old one. Shipwrecked on the shore of Algiers, where her lover Lindoro is held captive, Isabella, an Italian lady, pro-

ceeds to rescue him by captivating and outwitting Mustafà, the Bey of Algiers. The exoticism is merely a flavoring, of course, for the plot is too farcical to take geography and ethnicity into any but the most frivolous account. But the combination of a frequently hilarious libretto and Rossini's sparkling music results in a delightful comic totality that springs to triumphant life in a new RCA recording, the opera's third.

Isabella is one of Marilyn Horne's internationally admired characterizations. The role combines humor and fiery temperament, and Horne communi-

ROSSINI: L'Italiana in Algeri. Marilyn Horne (mezzo-soprano), Isabella; Samuel Ramey (bass), Mustafà; Ernesto Palacio (tenor), Lindoro; Domenico Trimarchi (baritone), Taddeo; Kathleen Battle (soprano), Elvira; Nicola Zaccaria (bass), Haly; Clara Foti (soprano), Zulma. Chorus of Prague; I Solisti Veneti, Claudio Scimone cond. RCA ARL3-3355 three discs \$26.98, ©ARK3-3355 \$26.98.

cates both with zestful vivacity, tonal richness, and an all-around bel canto mastery that is unfazed by the music's technical challenges. Her admirable foil Samuel Ramey (Mustafà) meets her on an equally high level. Not a true

buffo, yet anything but a stiff vocalist, he wisely stresses the ominous side of the character's personality, singing firmly, resonantly, and with admirably clear articulation.

Operagoers familiar with the often documented excellence of these two artists will not be startled to find them in such marvelous form here. They will be surprised, however, by Ernesto Palacio, a true tenore di grazia to the Rossinian manner born, who modulates his voice with extraordinary skill and executes the florid passages with rare finesse. In the highest reaches of the scale his otherwise pleasing tone takes on a slight "pinched" quality, but this happens in a range many others are unable to negotiate at all. Mr. Palacio is a find. So, of course, is Kathleen Battle, a soprano clearly destined for bigger things; even in the modest role of Elvira she is a joy to hear, her limpid notes ringing out clearly above the ensembles.

Nicola Zaccaria's bass is a bit dry, but he delivers Haly's aria "Le Femmine d'Italia" skillfully, and though Domenico Trimarchi's vocal resources are unspectacular, his expert comic timing supports them very well. Claudio Scimone's leadership is distinguished more for clarity and precision than any special Rossinian verve, but with these splendid principals to work with he could hardly lose.

This is the most complete edition of the opera's three recorded versions. It also offers (on side six) four alternate arias Rossini composed after the 1813 première. One of these ("Sullo stil de'

". . . a delightful comic totality springs to triumphant life in RCA's new recording."



PHOEBE SNOW: versatile stylist

viaggiatori") utilizes one of the overture's themes. Neither of the previous recordings of L'Italiana should be slighted, however. London OSA 1375 (recorded in 1962) boasts the always captivating Teresa Berganza, Fernando Corena in his irrepressible buffo prime, and Rolando Panerai, the best of all Taddeos. Seraphim IB-6119 (1954), on two discs, has decent if not resplendent mono sound to go with its low price, but it has high attractions: Giulietta Simionato, Cesare Valletti, and Mario Petri, all in top form and energized by

ELLEN FOLEY: remarkably gifted



Carlo Maria Giulini's high-spirited leadership. A really comprehensive opera collection should have them all, but the RCA set is the practical choice for starters.

—George Jellinek

Fancy Voice, Plain Songs Make Phoebe Snow's "Rock Away" A Real Charmer

Singer Phoebe Snow is a real, one might say almost arch, stylist, yet she displays a surprising versatility in her repertoire choices. She has just released "Rock Away," a—mostly—rock album replete with uncharacteristically straight-ahead little songs that (with two exceptions) have no higher ambition than to pass the time . . . and it all comes out as tasty as a fine homemade cheesecake.

Ironically, the title song, one of her own, is about the kind of rocking one does in one of those chairs with rounded lower extremities, and it is fittingly quiet and slightly jazzy. Otherwise, Snow's taste has led her to rock tunes that pass the time with a certain pert aplomb, starting smartly with Cheap Thrills by the ever-surprising Bob McDill. They are songs she can relate to and can do a little something with in what I've come to regard as the Phoebe Snow Idiom.

The two that actually try to say something are her own Down in the Basement, a suburban counter to Carole King's city-kid Up on the Roof, touching upon the matter of where a child goes to escape the noise of adults, and Bob Dylan's I Believe in You, probably the best of his born-again ditties and certainly the most intricately structured—but it took Snow's version to make me like it. This woman Snow, I have to tell you, does a thing well. I had already added her to my list of Real People some time since, and confirmation of this sort is, as they say, pure gravy.

The instrumentalists here deserve considerable praise as well, for they do a fine job of making Snow's fancy voice and these plain songs fit together. Richie Cannata, who plays the most lyrical tenor sax in all pop music, takes a couple of terrific solos.

Maybe a few people originally drawn to Phoebe Snow by the pretensions of

Poetry Man will feel themselves left high and dry by this album, but roughing it a little ought to be good for that bunch. They'll come around anyway, like the rest of us; this album is a real charmer.

—Noel Coppage

PHOEBE SNOW: Rock Away. Phoebe Snow (vocals, guitar); David Landau (guitar); Craig Doerge (piano); Doug Stegmeyer (bass); Richie Cannata (saxophone); Liberty DeVitto (drums); others. Cheap Thrills; Baby Please; Gasoline Alley; Rock Away; Mercy, Mercy, Mercy; Games; Down in the Basement; Shoo-Rah Shoo-Rah; Something Good; I Believe in You. MIRAGE WTG 19297 \$7.98, ©CS 19297 \$7.98

up with a most impressive album—repeat: most impressive.

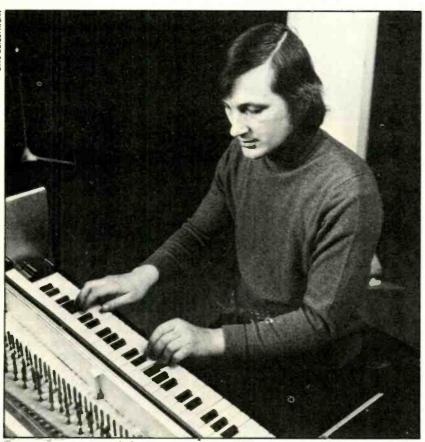
Just as impressive is the production by Mick Jones, who also (with Tymon Dogg and Jones' fellow Clash members Topper Headon and Joe Strummer) wrote most of the material. The songs are European rather than British or American in attitude, content, and outlook. The most arresting of them is The Death of the Psychoanalyst of Salvador Dali. It has appropriately surreal lyrics, and though like Dali himself it skirts the artsy-craftsy rather than the artistic at times, I admire Strummer and Jones' ambitious choice of subject matter. Foley's vocal is part melody

carefully controlled the better to define the character's inner agony. It is a beautiful piece of work, and to realize that it comes from the very same singer who gave us the volcanic What's the Matter Baby? on "Nightout" is to be astonished.

In short, Foley has a dramatic range possessed by few other singers of her generation. This album may make her a star, but I hope not too soon. Stardom is almost a prerequisite these days if a musician is going to earn a decent living, but it might foreclose on the development of a remarkably gifted singer into a real dramatic artist.

-Joel Vance

ELLEN FOLEY: Spirit of St. Louis. Ellen Foley (vocals); instrumental accompaniment. The Shuttered Palace; Torchlight; Beautiful Waste of Time; My Legionnaire; Theatre of Cruelty; How Glad I Am; Phases of Travel; The Death of the Psychoanalyst of Salvador Dali; M. P. H.; Game of a Man; Indestructible; In the Killing Hour. EPIC/CLEVELAND INTERNATIONAL NJE 36984 \$7.98, ©JET 36984 \$7.98.



TREVOR PINNOCK: a gift for contemporizing

Ellen Foley Delivers A Most Impressive Album in the Difficult Cabaret Genre

LLEN FOLEY had one of the best rock albums of 1980 with her "Nightout," but the new "Spirit of St. Louis" is a significant stylistic departure from it. The risk was great, but she took on the cabaret/art-song genre and came

and part a kind of recitative, and I admire her ambition too.

Beautiful Waste of Time, by Tymon Dogg, and How Glad I Am (listed as by Williams-Harrison with no further information given) are as close as the album comes to standard pop. Foley herself wrote Phases of Travel, an interior monologue set to music. But the knockout performance is My Legionnaire, the English-language version of a song made famous many years ago by Edith Piaf. Avoiding Piaf's bravura style, Foley gives the song a subtle reading in which outward emotional clues are

Bach's *Goldberg*s Again: A Thoroughly Seasoned And Mature Reading By Trevor Pinnock

TREVOR PINNOCK is without a doubt one of the finest of today's young harpsichordists. He espouses authentic performance practice, and his special gift is an ability to translate the mannerisms of early performance style into a contemporary mode that respects the past but is at the same time musically valid for a modern audience. Virtuoso technique, fine musicianship, and a sense of projection are all characteristics of his playing.

Pinnock has lived with J. S. Bach's famed Goldberg Variations for some years now and has performed them in public frequently; his reading for Deutsche Grammophon Archiv is therefore thoroughly seasoned and mature. His scaling of the work brings out Bach's intricate design of exploring the intellectual, the virtuosic, and the emotional aspects of the original aria. At first there is little contrast among these three aspects, but as the work progresses the design becomes more and more clear until it is almost painfully explicit in the last pages, where pathos,



STANLEY CLARKE AND GEORGE DUKE: no mere dabblers

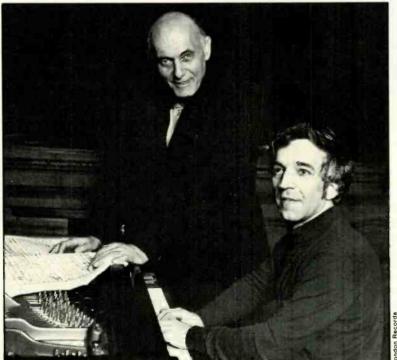
intellect, and technical brilliance are juxtaposed in all their extremes. Pinnock underlines this growth, masterfully sums it up in his solid reading of the quodlibet, and returns us to the serenity of the opening aria that precipitated these awesome musical events.

An additional point of interest in this new recording is the harpsichord Pin-

nock uses: it is a 1646 Andreas Ruckers (the younger) enlarged by Taskin in 1770-1780 and restored by Hubert Bédard in 1968. The tone is superb and the registrational possibilities are great. Pinnock takes fullest advantage of them, but only to enhance the structure of the music.

No matter how many Goldbergs you

SIR GEORG SOLTI AND VLADIMIR ASHKENAZY: electrifying Bartók



may already have, add this one to your Bachshelf immediately; it has something for everybody. Even though I recognize the dangers of the word, using it rarely and with the greatest caution, I will apply it here: this is a definitive performance.

—Stoddard Lincoln

J. S. BACH: Goldberg Variations (BWV 988). Trevor Pinnock (harpsichord). DEUTSCHE GRAMMOPHON ARCHIV 2533 425 \$9.98, © 3310 425 \$9.98.

The Clarke/Duke Project: A Wonderful Musical Splash in Some Deep Pop Waters

VER the past few years, the individual recordings of bassist Stanley Clarke and pianist George Duke have not always pleased me aesthetically, but I never doubted that the two had musical talent. In fact, if I was hard on them—and I have been at times—it was because it bothered me to see that talent wasted on meaningless strolls down Fusion Alley (not all treks down that path are without some merit, of course).

I must confess that when I learned Clarke and Duke had teamed up for an album, I expected a fusion effort of the monstrous kind, but that is not at all what Epic's new "The Clarke/Duke Project" has to offer. Aided only by John Robinson, a suitably versatile drummer, Clarke and Duke have left the fashionable poolside of jazz behind them and plunged headlong into some pretty deep pop waters. The result is a wonderful musical splash that should establish them as leading figures in a field with which they have previously only flirted. No mere dabblers here, the new team serves up a healthy round of music, proving—as both performers and writers-that when players of their experience and sophistication cross over with the proper enthusiasm they can play rings around many an inept pop striver. Clarke and Duke are a perfect team, and they are obviously having a ball working together.

Louie Louie—the only tune not written by either of the two—is a cleverly executed parody of white rock that has the erstwhile jazz fusioneers stepping so completely out of character that they risk having their clever disguise detract from the subtler merits of the performance. While I found Louie Louie appealing, I was even more impressed with what followed. Especially surprising is the high quality of the vocals on this album, all of which—often by way of multitracking—are the work of the two leaders: each does an admirable job as soloist, and their background work is far better than most we hear these days. If we combine all that with their instrumental abilities, the sum total—as evidenced here—is mighty impressive.

Though this by no means qualifies as a jazz record, it contains strong, if sporadic, evidence that George Duke and Stanley Clarke have the ability to excel in that field. I think, however, that they have at last found the musical language in which they can most comfortably express themselves, a language that owes much of its character to the Beatles, although it has rarely been spoken with such perfection. I have no doubt that we will be hearing more collaborative efforts by Clarke and Duke, and I hope that the popular success I predict for them will not dilute the joy and freshness with which this set is permeated.

-Chris Albertson

STANLEY CLARKE AND GEORGE DUKE: The Clarke/Duke Project. George Duke (keyboards, vocals); Stanley Clarke (bass, guitar, sitar, cello, vocals); John Robinson (drums). I Just Want to Love You; Louie Louie; Never Judge a Cover by Its Book; Finding My Way; Winners; Wild Dog; Touch and Go; Sweet Baby; Let's Get Started. EPIC FE 36918 \$8.98, © FET 36918 \$8.98, ® FEA 36918 \$8.98.

Solti and Ashkenazy Emphasize the Folk Roots in Two Bartók Piano Concertos

BARTÓK'S piano concertos have been extremely fortunate in their recordings, but perhaps never more so than in a new London pairing of Nos. 2 and 3 that represents Vladimir Ashkenazy's first recording of music by this composer. The conductor is Sir Georg Solti, the orchestra is the London Philharmonic, and the partnership is as complete and electrifying as in the Ashkenazy/Solti Beethoven concertos with Sir Georg's other orchestra, the Chicago Symphony. It was not too long ago that Deutsche Grammophon gave us a stunning disc from Chicago on which

Maurizio Pollini plays Bartók's First and Second Concertos, with Claudio Abbado conducting; if Ashkenazy and Pollini now are to pursue each other through Bartók, as they have through Beethoven, Brahms, and Chopin, listeners can only benefit from such duplications, and many will surely be happy to alternate between the two versions of the respective works.

In the case of the Second Concerto, Ashkenazy and Solti, abetted by London's especially brilliant sonics, seem at once more intense and more genial than the DG team, and, in case that seems self-contradictory, their performance impresses me as being more identifiably Magyar-flavored, which of course need not surprise us. There is a crisp, crackling quality which, combined with the sense of irresistible momentum and the marvelous clarity of the inner voices, gives the performance the character of earthy peasant jubilation. Every beat and tap on the drums makes its point, every flick of tone from clarinet or oboe, and the brasses sizzle without ever threatening to overwhelm the piano. The fine recording, too, allows one to appreciate the extreme delicacy and Innigkeit of the slow movement, which offers one of the most striking examples of Bartók's characteristic "night music" framed between the introspective opening and closing sections. Not a single gesture is lost: the delicate impishness of the work's conclusion shines as if newly discovered.

More than a year separated the recording of the two sides, and the Third Concerto is presented in a somewhat different sonic frame: the piano is more prominent and the sound is bigger all around. This bigness reduces the sense of intimacy that is felt so strikingly in the slow movement of the Second, and perhaps it robs the corresponding section of the Third of some of its mystery, but it is a superb performance nonetheless-the first one of this concerto, in fact, that has given me as much pleasure as the now twenty-year-old Anda/ Fricsay version (same coupling, DG Privilege 2535 262), which still sounds grand but cannot be compared with the new Ashkenazy/Solti in terms of sound quality. London advises that the same performers are to complete the Bartók concerto cycle (with the First Concerto and the Rhapsody, one assumes, but not the Op. 2 Scherzo); there cannot be any happier contribution to the observance of the composer's centenary.

-Richard Freed

BARTÓK: Piano Concertos Nos. 2 and 3. Vladimir Ashkenazy (piano); London Philharmonic Orchestra, Sir Georg Solti cond. LONDON CS 7167 \$9.98, © CS5 7167 \$9.98.



BEST OF THE MONTH: RECENT SELECTIONS YOU MAY HAVE MISSED

CLASSICAL

- J. S. Bach: The Six Partitas. ARABESQUE 6501-3. "A sensational comeback recording by João Carlos Martins." (June)
- Corigliano: Clarinet Concerto, Barber: Third Essay for Orchestra. NEW WORLD NW 309. "New creations that magnificently celebrate the New York Philharmonic." (May)
- □ Dvořák: Plano Quartets, Opp. 23 and 87. CBS MG 35913. "Superb chamber music in splendid performances and immaculate recording." (May)
- Franck: Les Djinns; Symphonic Variations; Prelude, Chorale, and Fugue. BIS LP-137. "Infectious spontaneity, superb sound." (April)
- ☐ Heinz Holliger: Chamber Music for Oboe and Strings.

 DENON OX-7185-ND. "Splendid performances by a simply wonderful oboist; superb digital recording." (April)
- Rossini: William Tell. LONDON OSA 1446. "An operation masterpiece gets the all-star cast it deserves." (April)
- Stravinsky: The Firebird, LONDON LDR 10012. "A must for the Stravinsky fan." (June)
- □ Verdi: Falstaff, PHILIPS 6769 060. "Karajan's control is absolute: the ensembles are polished to perfection, the orchestral tone is luxuriant." (May)
- Weber: Der Freischütz. LONDON OSA 13136. "A lovingly conducted realization of a glorious score." (June)

POPULAR

- Blondle: Autoamerican. CHRYSALIS CHE 1290. "An album of good tunes, stylish lyncs, and impressive performances." (April)
- Fleetwood Mac: Live. WARNER BROS. 2WB 3500. "All m all . . . a first-class way to go." (May)
- Emmylou Harris: Evangeline. WARNER BROS. BSK 3508: "Awesome music making." (June)
- □ Don McLean: Chain Lightning. MILLENIUM BXL1-7756. "A triumphant return . . . filled with wondering delight in musical discovery." (April)
- ☐ Jean Redpath: The Songs of Robert Burns. PHILO PH 1048. "Mostly sweet, sometimes saity, simply wonderful." (June)
- ☐ Tantra: The Double Album. IMPORTE/12 MP-310.
 "Fieldishly designed to get you on your leet." (May)
- ☐ Toots and the Maytals: Live at Hammersmith Palais. ISLAND MLPS-9647. "Reggae of a very special kind for people who like blues, soul, and r-8-b." (May)
- Leon Ware: Rockin' You Eternally, ELEKTRA 6E-332.

 "A fine showcase for a fine songwriter," (June)
- Warren Zevon: Stand In the Fire. ASYLUM 5E-519.
 "The first great live album of the Eighties. . . . could annihilate your house plants." (April)

Classical Music Briefs





At a ceremony in Paris, newly decorated Lorin Maazel is flanked by CBS vice presidents Peter de Rougemont (left) and Ervin Veg.

PRIZES and awards abound during late spring and early summer. American conductor Lorin Maazel was awarded the French Légion d'Honneur, and Dutch soprano Elly Ameling was given an honorary doctorate by the University of British Columbia. This year in Munich the annual Ernst von Siemens Musik Preis-a whopping \$78,500-was awarded to Elliott Carter. The first American composer to receive the prize, Carter said, "My cello sonata was excellently played at the ceremony and seemed to be liked by the large audience."

American composers did not fare so well back home. When the Pulitzer Prizes (\$1,000 each) were awarded this year, it was announced that none was being given in music on the recommendation of the nominating committee made up of composers Lester Trimble and Donald Martino and critic Donal Henahan of the New York Times.

We asked around and got a few reactions. Composer **Lee Hoiby** said, "I don't really think the prize means very much except perhaps in terms of pro-

moting a career. My Second Piano Concerto was submitted this year but without expectations because no composer who likes to write tunes or feels a commitment to memorable melody as an essential component of music will ever get anything but the most grudging recognition from the musical establishment."

Eric Salzman, who with Michael Sahl won the Prix Italia for the opera buffa Civilization and Its Discontents (just released on Nonesuch), said, "Interesting new music is not being heard in places where members of the Pulitzer jury are likely to be listening, and I think the spirit of the mandate, not the letter, should be observed. A composition shouldn't have to be an opera or a piano concerto to win the Pulitzer Prize."

Joan Peyser, author, critic, and editor of *The Musical Quarterly*, said, "I think it's an outrage. There are already enough people out there attacking the state of music today without having our own judges in the field state publicly and officially that in a whole year *nothing* was

played that was worthy of the prize. This is a stingy response. What are they trying to tell us? That music has declined in quality since the great ages of the past? Surely, this is not the best time for high art, but there are still composers working as effectively as the journalists and authors who did receive prizes. I can think of several pieces premiered in 1980 that I could have voted for with no embarrassment at all."—W.L.

HE young American operatio bass Samuel Ramey has built his repertoire and his reputation at the New York City Opera Company, performing in such works as Donizetti's Anna Bolena and Boito's Mefistofele. and he is now doing the Chaliapin roles on both sides of the Atlantic. Last fall, after switching from the title role to that of Leporello in Mozart's Don Giovanni at the NYC Opera, Ramey flew off to Europe to sing the lead in Massenet's Don Quichotte in France, Banquo in Verdi's Macbeth in Germany. and the title role in Mozart's The Marriage of Figaro in Holland.

Samuel Ramey as Attila



"The Don Quichotte went especially well," Ramey says, "and I've been trying to persuade Beverly Sills to put it on at the New York City Opera."

This spring Ramey returned to home base long enough to score a triumph in Verdi's Attila (see photo) and then flew back to Europe. After making his debut at Milan's La Scala as Mozart's Figaro (the conductor was Riccardo Muti) in May, he is scheduled to record that role for London Records with Kiri Te Kanawa, Lucia Popp, and Thomas Allen under conductor Georg Solti. Then he goes on to Vienna for a Staatsoper debut as Escamillo in Carmen.

All that travel does not bother Ramey. "I haven't yet gotten to the point of thinking that if today is Tuesday, this must be Brussels. My wife and I are enjoying the opportunity to see different places, and, when I go somewhere to sing, we are usually there for a few weeks. For the Scala Marriage of Figaro four whole weeks were set aside for rehearsals!"

Ramey can be heard on a variety of record labels at present. He is well represented on Philips with Bach's Mass in B Minor, Donizetti's Lucia di Lammermoor, Handel's Ariodante, Rossini's Otello, and Verdi's I Due Foscari, and he can be heard in Verdi's Rigoletto on Angel and Rossini's L'Italiana in Algeri on RCA (reviewed on page 70). There are others vet to come. "I've recorded the Bruckner Te Deum for Deutsche Grammophon and Bach's Cantatas Nos. 80 and 140 for Philips. I expect to record # Turco in Italia for an Italian company, and it will probably come out here on CBS.

This impressive list of accomplishments has not taken Ramey's breath away, and he speaks of his engagements almost matter of factly. Although he remains a member of the New York City Opera, he explained that he will not be able to sing there in the fall because he will be tied up at the Paris Opera with Carmen and Bossini's Semiramide. Asked if the Metropolitan is in his future, he answered simply, "Well, I don't have repertoire details to release yet, but I have just signed a contract with the Met to sing there in the centenary season of 1983-1984."

on the first time in its fifteenyear history, Lincoln Center's Mostly Mozart Festival is taking its act on the road. From July 7 to 11, the Mostly Mozart Orchestra will give guest per-



formances at the Kennedy Center in Washington under conductors Leonard Slatkin and Alexander Schneider. Soloists include such Festival stars as pianists Emanuel Ax, Alicia de Larrocha, Richard Goode, and Lee Luvisi, clarinetist Richard Stoltzman, cellist Yo-Yo Ma, and the Kalichstein-Laredo-Robinson Trio. The Tokyo String Quartet will also give a concert as part of the Washington visit.

Alicia de Larrocha, the unofficial Queen of the Mostly Mozart Festival, was absent in 1980, but she is compensating with extra performances this year. She will be the soloist at the opening concert on July 13 with conductor Slatkin, she will perform again the following week when Michael Tilson Thomas conducts, and she will give her traditional Mostly Mozart recital on July 28. This year Miss De Larrocha is not adding to her Festival series on London Records, which now consists of "Mostly Mozart, Vols. I-IV." but her recent concerto album with David Zinman conducting the London Sinfonietta includes (in addition to works by Bach and Haydn) Mozart's Piano Concerto No. 12, in A Major (K. 414).

Among artists appearing at the Festival for the first time this year is the Swiss oboist **Heinz Holliger**. Another name new to Mostly Mozart programs is that of Mozart's most successful rival, composer Antonio Salleri (1750-1825). Pèter Shaffer's current hit play Amadeus is about the rumor that Salieri poisoned Mozart. Today Mozart is the most frequently recorded composer (112 new listings in Schwann in 1980), and Salieri is

limited to one recording of his Sinfonia in D and four listings of his Concerto in C for Flute, Oboe, and Orchestra. One of those four recordings is Holliger's (Deutsche Grammophon 139152), and he is scheduled to perform the work with flutist Carol Wincenc at the Festival this summer.



To celebrate the release of their first album, Mozart's Sinfonia Concertante for Winds and ballet music from Idomeneo on Nonesuch, members of the Orpheus Chamber Ensemble made an in-store appearance at the Orpheus Record Store on Lexington Avenue in New York. The Orpheus Chamber Ensemble is the only American group of its kind that performs without a conductor;

the Orpheus Record Store is one of the few American record outlets that handles only classical recordings. Their sharing a name is coincidental. Members of the Orpheus Chamber Ensemble shown above are (left to right): Randall Wolfgang (oboe), Julian Fifer (cello), Ruth Waterman (violin), William Purvis (French horn), Frank Morelli (bassoon), and Guillermo Figueroa (violin).

Discand Tape Reviews

By RICHARD FREED • DAVID HALL • GEORGE JELLINEK • PAUL KRESH STODDARD LINCOLN • ERIC SALZMAN

© = siereo casseile

• = digital-master recording

= quadraphonic disc

eight-track stereo cartridge

① = direct-to-disc

⊕ = monophonic recording

The first listing is the one reviewed; other formats, if available, follow

J. S. BACH: Goldberg Variations (see Best of the Month, page 73)

BARTÓK: Piano Concertos Nos. 2 and 3 (see Best of the Month, page 75)

RECORDING OF SPECIAL MERIT

BARTÓK: String Quartets, Nos. 1-6. Tokyo Quartet. DEUTSCHE GRAMMOPHON 2740 235 three discs \$29.94.

Performance: Superb Recording: Excellent

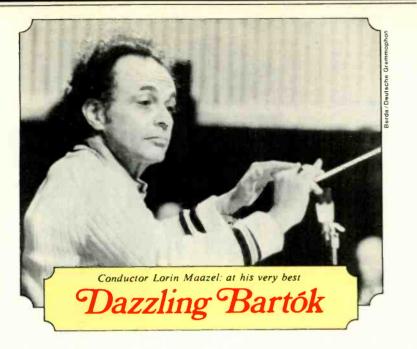
The Bartók string quartets have certainly never lacked for recorded representation. The Juilliard Quartet recorded them at least twice, Vox has had at least two complete sets over the years, Deutsche Gram-

mophon has done it before (with the Hungarian Quartet), and there are fairly recent versions from Telefunken (the Vegh Quartet) and RCA (the Guarneri). Even Brahms has hardly done as well.

Nevertheless, 1981 is the Bartók centenary year, and, despite the usual ups and downs of reputation, interest in Bartók's music has not waned. Indeed, these latest performances have a youthful beauty and freshness of approach that kicks up the spirit of the music more than a bit. The string quartet was not a stuffy contrapuntal/Classical medium for Bartók, and from the very First—supposedly the most traditional of the six—the Tokyo Quartet takes a lively view of these works. In fact, the performance of the First Quartet is in some ways the most impressive in the set, putting that

work, not always regarded as a prime one, in a new perspective. Even the difficult Second Quartet—Bartók's musical journey upriver from Budapest to Vienna—is almost enjoyable here.

The Third, Fourth, and Fifth Quartets, from the heartland of Bartók quartet country, are very impressive. These are not the fastest or the most dissonant or the most rough-skinned quartets, just the most dynamic and expressively beautiful. There is no need for ultrafast tempos or rough tone or harsh accents unless you're afraid of being thought too polite, too well mannered, not sufficiently intense or expressive. That's no problem for the Tokyo Quartet. Intensity and vigor in these performances come from inside, from phrase and accent and rhythmic vitality. They are strong and effective,



OMBINING Bartók's 1910 Two Pictures. Op. 10 (In Full Flower, Village Dance), with his 1944 Concerto for Orchestra makes for an unusually interesting listening experience, and in a new recording conductor Lorin Maazel, the Berlin Philharmonic players, and the Deutsche Grammophon production team all cover themselves with glory in their realization of both scores. This is quite the fullest sound I have heard from the Berlin Philharmonic on disc in many a moon, with the midrange in proper balance and a genuinely full bass, a nice clean high end, and magnificent presence for both the ensemble as a whole and the solo instruments and groups that are successively highlighted in the concerto.

Like some other analog-mastered discs I have heard over the past year, this one need defer in no way to digital technology, which suggests to me that the remarkable results achieved on the best digital and direct-cut discs have put analog recording teams on their toes. They've been forced to rethink such fundamentals as proper room acoustics, simplified microphone setups, and other ways of achieving the best possible sound at the recording session itself rather than leaving everything to the post-mix.

Interpretively, Maazel's reading of the Concerto for Orchestra is one of the three or four most satisfying I have encountered on LP. He preserves Bartók's rhythmic and

harmonic edge, goes for the big line all the way, and clearly takes a keen delight in the music's coloristic aspects; the Berlin players stay with him, responding with just the right combination of zest and refinement. The recording team has provided not only an appropriately warm and full-bodied sound but wonderful stereo imaging as well in terms of both depth and localization. The "couples" dancing across the sonic stage in the second movement are a delight, and the overtones of the drum strokes that propel them are all but palpable. I would criticize only a slight over-loudness in the brass chorale episode.

THE great slow movement of the concerto makes a shattering impact from its mighty opening cry onward, and the finale is dazzlingly brilliant, with Maazel more effective than most conductors in the molto ritenuto . . . accelerando passage just before the mad rush to the end. In short, this is a wonderfully satisfying record all around, displaying all concerned—composer, conductor, orchestra, and producers—at their very best. —David Hall

BARTÓK: Concerto for Orchestra; Two Pictures, Op. 10. Berlin Philharmonic Orchestra, Lorin Maazel cond. DEUTSCHE GRAMMOPHON 2531 269 \$9.98, © 3301 269 \$9.98.

but also beautiful and musical. Even the strange, reflective Sixth Quartet (it always seems to fall a little flat after the dynamism of its predecessors) here reveals itself as subtle, ironic, full of rough humor and inward depth—one of the composer's cleverest and most original works.

These recordings of Nos. 2 and 6 were first released in 1977; the others appear to have been made more recently for this set.

They are all models of clarity:

E.S.

BARTÓK: Violin Duos, Nos. 1-44. Itzhak Perlman, Pinchas Zukerman (violins). AN-GEL SZ-37540 \$9.98.

Performance: Polished Recording: Close-up

Bartók composed these duos in 1931 (about the time he was completing his Second Piano Concerto) as his contribution to the same pedagogical project for which Hindemith wrote his Fourteen Easy Pieces the

following year. The duos brilliantly transcend their occasion and are among the most intriguing products of Bartók's fascination with folk music; all but two of them are based on actual folk tunes (drawn from Arabic sources as well as from throughout East-Central Europe). The pieces are enjoyable in five-minute segments, but no less so heard complete in a single sitting. The variety and subtly increasing difficulty from the Teasing Song that begins the sequence to the Transylvanian Dance that ends it assure the listener of more than simply a jumble of bright miniatures; we might call the whole a Mikrokosmos for strings. The old Supraphon recording by Josef Suk and André Gertler, which circulated here on the short-lived Crossroads label, had, I think, a somewhat more idiomatic, folk-flavored approach, yielding qualities that are obscured in the very polished playing on the new Angel. But Perlman and Zukerman, as they could hardly fail to be, are highly ingratiating as well as highly polished, and their commitment is beyond question. The sound is close-up, very warm, and perhaps a little larger than life, but this enjoyable release is well timed to refill what had been a major gap in the Bartók discography. R.F.

RECORDING OF SPECIAL MERIT

BEETHOVEN: Septet in E-flat Major, Op. 20. Academy of St Martin-in-the-Fields' Chamber Ensemble. PHILIPS 9500 873 \$9.98, © 7300 873 \$9.98.

Performance: Outstanding Recording: Excellent

Since the very first release to bear the rather cumbersome name of the fine ensemble skimmed off the top of the famous chamber orchestra was an outstanding account of the Schubert Octet (Philips 9500 400, reviewed here in November 1978), it is fitting that we now have this companion-and eminently companionable-version of the early Beethoven work that served as Schubert's model. The performance is so extremely sympathetic, and at the same time so polished, that there is little to be said except to congratulate the players and thank Philips for recording it so handsomely. Some listeners may feel that the amiable pace of the final movement is not quite a true presto, but I'm quite comfortable with the tempos throughout the work, and most especially with the steadiness of tempo within each movement; how good it is to hear the cellist take the trio in the scherzo without the conspicuous down-shift affected in so many performances. It is curious that Schwann lists only two other recordings of this work at present, both of them on budget labels. The 1959 version by the Vienna Octet (London STS 15361) still more than holds its own, both musically and sonically, though without quite the rhythmic steadiness or beautiful detail of this new one, which strikes me as the most winning account of the work yet recorded. R.F.

RECORDING OF SPECIAL MERIT

CHOPIN: Cello Sonata in G Minor, Op. 65; Introduction and Polonaise Brillante, Op. 3. SCHUMANN: Adagio and Allegro in A-flat Major, Op. 70. Mstislav Rostropovich (cello); Martha Argerich (piano). DEUTSCHE GRAMMOPHON 2531 201 \$9.98, © 3301 201 \$9.98

Performance: Impassioned, brilliant Recording: First-rate

CHOPIN: Cello Sonata in G Minor, Op. 65. GRIEG: Cello Sonata in A Minor, Op. 36. Roger Drinkall (cello); René Lozano (piano). ORION ORS 80387 \$8.98.

Performance: Conscientious Recording: First-rate

For cello buffs the legendary Feuermann performance (issued originally on 78s and once available in LP format on Camden 292) has always been the touchstone for Chopin's Op. 3. But Mstislav Rostropovich need take no back seat to his illustrious predecessor, even though he adopts a more expansive and free way with the polonaise section. The collaboration of Martha Argerich, whose nimble fingers toss off the glittering passagework with the greatest of ease and rhythmic élan, adds something special to the performance. The same goes double for the far more musically demanding Cello Sonata, whose rondo-sonata last movement points, harmonically and formally, toward the new creative horizons Chopin might have explored had he lived another few years. The elegant Jacqueline Du Pré/ Daniel Barenboim reading on Angel has heretofore held the top position among available recorded versions, but in terms of keeping one's attention at highest pitch from start of finish, I find that Rostropovich and Argerich run all competition off the boards. There is terrific sweep and passion here, but not at the expense of musical structure. In short, I never realized before what a really fine work this is. The Schumann piece, with its wistful song-withoutwords opening section and energetic allegro, also gets a splendid workout. The recording job is outstandingly fine, particularly in the cello-piano balance and the fine room tone. Don't pass this one up.

Messrs. Drinkall and Lozano on Orion are no match for either Rostropovich and Argerich or Du Pré and Barenboim in the Chopin. Theirs is an honest and conscientious reading, but also one that is at times a bit labored. The rather infrequently recorded Grieg sonata fares better. The folkflavored finale outstays its welcome by dint of excessive repetition of its main motive, but there is strong music in the opening movement, and the slow movement, which recalls the Hommage March from Sigurd Jorsalfar, is a decided improvement on that rather banal piece. Drinkall and Lozano come through with a virile and warm-hued reading that is helped by very effective pacing in the finale. The Orion sonics are

CHOPIN: Waltzes. Claudio Arrau (piano). PHILIPS 9500 739 \$9.98, © 7300 824 \$9.98.

Performance: Simple is best Recording: Not brilliant

CHOPIN: Waltzes. Leonard Pennario (piano). ANGEL O DS-37332 \$10.98.

Performance: Fast and brilliant Recording: Brilliant

Well, sometimes simple is best, and certainly Claudio Arrau's light, delicate, gentle







INTERNATIONAL RECORD & TAPE CLUB SUMMER SALE

ON ALL RECORDS & TAPES LOWEST PRICES ANYWHERE

List	Sale	List	Sale
Price	Price	Price	Price
3.98	2.59	7.98	5.19
4.98	3.24	8.98	5.84
5.98	3.89	9.98	6.49
6.98	4.54	10.98	7.14

TO COMPUTE COST TAKE TOTAL OF LIST PRICES & DEDUCT 35%

DIRECT TO DISC, DIGITAL 15% DISCOUNT

USE OUR TOLL-FREE # 800-331-1750-OPERATOR 585

SALE ENDS AUG. 10, 1981 ORDER NOW—SEND LIST TO:

INT'L RECORD & TAPE CLUB

DEPT. SR 585 315 W. 36th Street New York, N.Y. 10018

*Send check or M.O. or *Charge to Visa or MC. State whether LP or Tape. Add 95¢ for first LP or Tape, 25¢ each additional LP or Tape, plus 50¢ for insurance for entire order. Max. charge is \$4.95.

*UPS if desired add \$1.75
SATISFACTION FULLY GUARANTEED



performances of the Chopin waltzes are winning. The earlier ones are played in quite a steady manner, as if they were actually meant for dancing (which they probably were). The later ones are freer, but the basic notion of a dance impulse is never entirely lost. These performances are not brilliant, not even perfectly polished, but they are a delightful tribute from one artist of sensibility to another.

Leonard Pennario's performances, in contrast, are brilliant and virtuosic. The tempos are dance steady, but any potential waltzers had better be ready to move. Waltz time here is a real swirl; everything goes fast and then a bit faster. Paradoxically, I much prefer Pennario's slow waltzes to all his flying-finger fandangos. Whereas in the fast waltzes he is constantly pushing ahead past the front edge of the beat, the slow waltzes-the A Minor, the C-sharp Minor, two or three of the posthumous ones-are steady and, curiously, much more dancey (usually the reverse is the case). I like the steadiness, but the trick is to hold the line on tempo and, if anything, lay the right hand a little back of the beata simple and almost universal formula for dance or dance-inspired music that classical performers seem to have forgotten. Pennario plays brilliantly, but Arrau is more sympathetic most of the time.

COPLAND: Piano Concerto. Leo Smit (piano); Rome Radio Symphony Orchestra, Aaron Copland cond. Danzón Cubano. Leo Smit, Aaron Copland (pianos). Our Town, Suite; Early Blues; Four Piano Blues, Nos. 1 and 4. Leo Smit (piano). Ukulele Serenade; Rodeo, Hoe-Down. Louis Kaufman (violin); Annette Kaufman (piano). Nocturne. Louis Kaufman (violin); Aaron Copland (piano). VARÈSE SARABANDE © VC 81098 \$8.98.

Performance: Authoritative Recording: Historical

Although Aaron Copland and his longtime keyboard associate Leo Smit have, between them, recently rerecorded about half the material on this record in up-to-date stereo for CBS, the restoration of these recordings made between 1947 and 1951 is of interest historically and fills in some actual gaps in the composer's current discography. Both Copland himself and Leonard Bernstein, who happened to be the pianists in the 1942 première of the Danzon Cubano, have conducted the orchestral version of that work on records, but there has been no recording of the original two-piano setting for some time, and it could hardly be in more authoritative hands than Copland's and Smit's; the sound quality is the dullest in this entire collection, but one adjusts to it. The very brief Early Blues, from the early 1920s, somehow missed being included in Smit's 1979 two-disc collection of Copland's works for solo piano (CBS M2 35901), and I don't think either the Ukulele Serenade or the Nocturne (both composed in 1926) has been around since these recordings by Louis Kaufman last circulated on the Concert Hall label. The piano arrangement of the Our Town music and the violin transcription of the Hoe-Down from Rodeo may not qualify as indispensable, but they haven't been available since then either. The Piano Concerto was taped in 1951; since then Copland has rerecorded the work as both

conductor (with Earl Wild, Vanguard VSD-2094) and soloist (with Bernstein, CBS MS 6698), but this collaboration with Smit is worth preserving, both musically and historically. The transfers have all been accomplished with great care for this Varèse Sarabande release, the sound quality ranging from deadish in the Danzón Cubano to surprisingly bright in the contemporaneous violin items.

R.F.

GLUCK: Orfeo ed Euridice. Julia Hamari (mezzo-soprano), Orfeo; Veronika Kincses (soprano), Euridice; Mária Zempléni (soprano), Amore. Hungarian State Opera Chamber Chorus and Orchestra, Ervin Lukács cond. HUNGAROTON SLPX 12100/101 two discs \$19.96 (from Qualiton Records, Ltd., 39-28 Crescent Street, Long Island City, N.Y. 11101).

Performance: Reverential Recording: Very good

Considering the many performing editions in which Orfeo may be heard, it is important to establish that this recording is based on the Bärenreiter Complete Edition and represents the original Gluck/Calzabigi version as performed in Vienna's Burgtheater in 1762. In this respect it resembles the Angel set (S-3717); all other current versions incorporate, to varying degrees, the additional material Gluck prepared for the opera's revised Paris production in 1774. From the historical point of view, going back to the first version is a very commendable undertaking, for it allows us to evaluate Gluck's concept of "azione teatrale per musica" in its original concise and dignified simplicity. On the other hand, many listeners familiar with the 1774 ballet sequence with its sublime flute melody, the aria "E quest' asilo ameno," and the expanded version of Orfeo's "Che farò senza Euridice" will miss them here. I, for one, find the opera's dramatic impact considerably weakened by their absence.

Whether Gluck conceived a performance along the statuesque lines favored here by Ervin Lukács is a matter for speculation. I find it an overly reverential approach in which the recitatives lack dramatic fire, and neither Euridice's death nor her subsequent miraculous return to life seems to alter the prevailing stately mood. Even the Furies at the opening of Act II are affected: they are not really furious and actually seem rather pleased by Orfeo's persuasive pleading. Julia Hamari sings that music appealingly indeed, with a smooth, creamy tone and exquisite legato. Like most mezzos, however, she finds the low tessitura occasionally uncomfortable. The roles of Euridice and Amore are relatively modest in the 1762 version, and the two sopranos here bring them off satisfactorily.

All five currently available recordings of Orfeo ed Euridice have something worthy to offer, though none is ideal in all respects. This opera has always been a problematic work to present to modern audiences. In fact, according to reliable accounts even the original male-alto Orfeo, Gaetano Guadagni, was found less than ideal in 1762. So how can we complain? In any case, Hungaroton deserves praise for its de luxe multilingual album presentation. G.J.

(Continued on page 83)

GRIEG: Cello Sonata in A Minor, Op. 36 (see CHOPIN)

RECORDING OF SPECIAL MERIT

HAYDN: Il Ritorno di Tobia. Barbara Hendricks (soprano), Raffaelle; Linda Zoghby (soprano), Sara; Della Jones (mezzo-soprano), Anna; Philip Langridge (tenor), Tobia; Benjamin Luxon (baritone), Tobit; Brighton Festival Chorus and Royal Philharmonic Orchestra, Antal Dorati cond. LONDON OSA 1445 four discs \$39.92, @ 4 1445 \$39 92

Performance: Very good Recording: Excellent

Il Ritorno di Tobia (The Return of Tobias) was written in 1774 for the Musicians' Aid Society in Vienna. It was a great success and was revived in 1784, when it was again very successful, and in 1808, by which time it was considered too old-fashioned even though the score had been "updated" by one of Haydn's pupils. (Revivals in those days, as in pop and show music today, were always brought up to date.) It is the 1784 version-revised, added to, and modernized-that we have on this new recording.

Even "fixed up," Il Ritorno di Tobia belongs to the genre of Italian oratorio. Such works were designed to be performed during Lent when the opera houses were closed. and they tended to be discursive, undramatic, bel canto treatments of sacred subjects. This one is no exception; it has almost no dramatic interest at all. Long, contemplative arias are separated by longish recitativo descriptions of off-stage events and relieved only now and then by instrumental numbers, choruses, or set ensembles. Haydn, like Handel, was later able to break away from the traditional forms and subjects, but here he was still bound by the lyric architecture of Alessandro Scarlatti, Jomelli, Hasse, and the other great Italian masters of a previous generation. Don't expect to be carried off anywhere by this music. Just sit back, relax, and enjoy; the lyricclassic beauties of the score will reveal themselves

The work has been recorded beforethere was a reasonably attractive Hungarian recording not too long ago-but this version should hold the field for a while. The cast is very good to excellent, with particularly notable contributions from the low voices: mezzo Della Jones and baritone Benjamin Luxon. The chorus is solid and well recorded, with nice balances between chorus and orchestra, and the generalship of Antal Dorati is impressive.

KODÁLY: Háry János, Suite, Op. 15; Concerto for Orchestra. Budapest Philharmonic Orchestra, János Ferencsik cond. HUNGA-ROTON SLPX-19190 \$9.98 (from Qualiton Records, Ltd., 39-28 Crescent Street, Long Island City, N.Y. 11101).

Performance: Affectionate Recording: Good

János Ferencsik is a very good conductor a very good Hungarian conductor—so it is hardly surprising that his performance with the Budapest Philharmonic of Kodály's most popular work, the Hary Janos Suite, should prove to be utterly idiomatic and utterly delightful. True, the suite has come off even more brilliantly in recordings under other conductors of Hungarian birth (Ormandy's latest version, RCA ARL1-1325, is probably the most fetching of the current listings), but a rash of deletions has eliminated several Kodály titles, among them the Concerto for Orchestra, from Schwann altogether. The new Hungaroton disc is especially welcome for making the concerto available again. Ferencsik's approach in the concerto is geared more toward breadth than brilliance, but it does not lack vitality. If this coupling is appealing, you won't be disappointed in these performances or the fine sound. R.F

RECORDING OF SPECIAL MERIT

KORNGOLD: Violanta. Walter Berry (baritone), Simone Trovai; Eva Morton (soprano), Violanta; Siegfried Jerusalem (tenor), Alfonso; Horst R. Laubenthal (tenor), Giovanni Bracca; Ruth Hesse (mezzo-soprano), Barbara; Manfred Schmidt (tenor), Matteo; others. Bavarian Radio Chorus; Munich Radio Orchestra, Marek Janowski cond. CBS M2 35909 two discs \$19.96.

Performance: Very good Recording: Artificial sounding

Even allowing for the familiar case histories of Mozart, Mendelssohn, and Schubert, the prodigious exploits of a latter-day Wunderkind named Erich Wolfgang Korngold (1897-1957) should give one pause. As a student of Alexander von Zemlinsky, Korngold at thirteen had a pantonime produced at the Vienna Hofoper; when he was nineteen, two of his one-act operas formed a double bill at the Munich State Opera, introduced under the leadership of Bruno Walter. One of the two, Violanta, has now been recorded in a first-class performance.

Considering the era (1916) and the composer's age, there is a predictable eclecticism about the score. Wagner and Richard Strauss are the main influences, but echoes of D'Albert's Tiefland (1903) are detectable, along with Puccini's thumbprints. The story is verismo, if not quite unadulterated. Violanta, married to a Venetian officer at the time of the Renaissance, is determined to avenge the seduction and suicide of her younger sister. She locates the seducer, a man of power as well as irresistible charm, and persuades her devoted husband to kill him at a given signal. But Violanta herself becomes infatuated with the man, and when her husband strikes, she interposes herself to receive the fatal blow. Aside from the Tristanesque element—the longed-for night (death) that is to release Violanta from a passionless present—the libretto (by a Viennese playwright) manages to transform the tenor's final aria into a kind of Freudian self-analysis. The opera is, however, very effective. It has atmosphere, it is skillfully paced with sagely contrasted ebb and flow, and it is lushly orchestrated and expertly written for the voice, if a bit cruelly (à la Strauss) for the lead soprano.

Siegfried Jerusalem, who seems to be wearing Nicolai Gedda's mantle more fittingly with each recorded appearance, pleads the case of the amorous Alfonso persuasively, though I am won over more by the appeal of his singing than by his argument. There are two other good tenors in smaller parts: Horst R. Laubenthal, as the

CONSUMERS CO. TAPES - DISCOUNTS - STEREO Min. Order - 10 Audio or 5 Video Tapes, or assorted

2.99 2.19 1.66 2.39 DC-45 DC-90 DC-120 DC-180 OD C-60 OD C-90 2.98 3.49 Demagtzr Head Cinr 14.50 SAX C-60 SAX C-90 VHS-VIDEO VT-120 4 hr. 14.49 VT-90 3 hr. 13.95 4.79 6.59 12.45 MAR C-90

SONY 5.95 7.49 EHF C-60 2.89 LNX C-90 LNX C-60 Metal C-60 Metal C-90 FECR C-96 FECR C-60 1.69 1.65 VIDEO BETA L-500 10.69 L-750 13.75 L-830 15.95

Scotch Metal C-60 Metal C-90 SC-90 2.59 Op. RI 207-1800' 5.69 Op. RI MSX-1800' 7.95 Rec. Care Sys. 18.95 4.69 SC-90 6.29 Op. RI 207-180 0 2.55 Op. RI MSX-18 Rec. Care Sys VIDEO 14.25 Beta L-500 17.95 Beta Cleaner Mstr II/III C-60 Mstr II/III C-90

VHS T-120 VHS Cleaner

INFLATION FIGHTERS SANYO CAR STEREO **TECHNICS** SA-222 Rcvr 215.15 RSM-250 Cass Dk 234.95 SLQ-2 Trntbl 125.95 FT-1498 FT-2400 FTC-2 FTC-4 FTC-6 FTC-8 FTC-12 FTC-16 FT-482 219.50 199.95 54.90 64.50 75.50 99.50 109.90 147.90 115.90 SHURE CARTRIDGES M 97 HE M 95 HE 53.99 34.99 EMPIRE CART'S 2000 E/III 400 TC 18.99 23.95

MAXELL UDXLIorII C-90 MEMOREX Hi-Blas, C-90, 3pk 5.99

All merchandise fresh, manufacturer guaranteed.

one Orders Call Toll Free. (800) 431-2932 (914) 664-2909

VISA

ompt delivery, send M.O., Cert. Check or use Credit Card i'l checks, 2 wk. del'y. Shpg & holig: Add 5% of total order ninimum. NYS res. add sia tx. No. C.O.D.'s. *Free Catalog*

C CONSUMERS CO. P.O. Box 550 Dept. SR 781 Mt. Vernon, N.Y. 10551

CIRCLE NO. 11 ON READER SERVICE CARD

Please let us know 8 weeks in advance so you won't miss a single issue of STEREO REVIEW.

Attach old label where indicated and print new address in space provided. Also include your mailing label whenever you write us about you subscription. It helps us serve you promptly.

Write to: P.O. Box 2771, Boulder, CO 80322, giving the following information:

Change address only

Enter new subscription Extend subscription 1 year (12 Issues) \$9.98 Bill me later

Payment enclosed (You get 1 extra BONUS issue-13 issues in all!)

NEW ADDRESS HERE

Name (please print) Address

Apt.

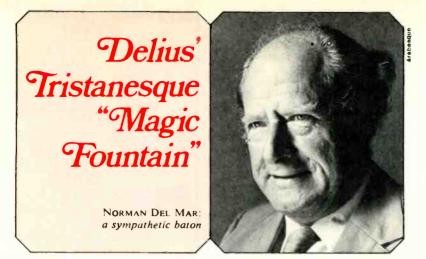
City. State Zip

Foreign postage: Add \$1 a year for Canada, \$5 a year (cash payment in U.S. currency only) for other countries outside U.S. and possessions. Please allow 30 to 60 days for delivery of first issue. 80CA AFFIX OLD LABEL 🗢

If you have no label handy, print OLD address here:

(please print) Address. Apt. Cltv.

State_____



FREDERICK DELIUS composed The Magic Fountain, his second opera, in 1893, the year after he completed Irmelin. He never heard either of those works performed (nor the fifth of his six operas, Margot-la-Rouge, composed in 1902). Irmelin was finally staged at Oxford in 1953; the première of The Magic Fountain did not take place until July 30, 1977, when the BBC, in London, produced and recorded the concert performance that has now been issued in the U.S. by Arabesque.

The libretto, by Delius himself, has rather stilted language ("Ay! 'tis even as thou sayest," etc.) but is nonetheless touching in its treatment of a tale based on American Indian legends he picked up during his productive sojourn at Solana Grove, Florida. Indeed, we are reminded of the locale in the very name of the work's hero, Solano, a Spaniard shipwrecked on the Florida coast in the sixteenth century in search of a Magic Fountain whose waters confer not only eternal youth but wisdom as well on those who are "prepared." He is rescued by Indians, and the young Seminole Princess Watawa volunteers to be his guide, but only in order to lead him to his death in yengeance for the white man's slaughter of her people. Naturally they fall in love. After being reminded by the seer Talum Hadjo that the Magic Fountain yields its blessings only to "those prepared" and is deadly to the uninitiated, Watawa drinks of its waters to forestall Solano from similar rashness, but when she dies at his feet he immediately follows her example.

This Tristanesque tale brought forth some mildly but recognizably Wagnerian touches in Delius' music (Robert Threlfall, in his annotation, reminds us that Delius visited Bayreuth and Munich while at work on this score), but the dominant, unmistakable voice is Delius' own. If the music seems to have a familiar ring, it is not simply because it conforms to his characteristically nostalgic, bittersweet style; portions of it actually come from some of his other works. Some of the music of the Indians and the Everglades was adapted from the orchestral suite Florida of 1886, and the Prelude to Act II was subsequently reused to introduce the third act of his next opera, Koanga.

In any event, The Magic Fountain, which Delius said he wanted to be "essentially Indian," is so well constructed, and flows so smoothly, that it seems shorter than the 101 minutes indicated as the timing of this performance. For this the major credit must go to Norman Del Mar's extremely sympathetic conducting. The principal singers are rather less distinguished. As Watawa, Katherine Pring (a mezzo, not a soprano as listed on the box) perhaps can't help sounding more like a matriarch than a young princess, simply because the part is written so low. As Solano, John Mitchinson, very Heldentenorish, is never less than stentorian, even in tender passages, and both he and Norman Welsby, as the noble Chief Wapanacki, tend to wobble a bit. While these faults can hardly escape notice, the work itself is such a delight and Del Mar's pacing is so apt that they are easily dismissed as minor flaws. The last of the principals, Richard Angas, is gratifyingly firm and Sarastro-like as the seer, and the welldrilled chorus is especially effective in the Act III episode involving invisible spirits and the God of Wisdom, actually a ballet that takes place while the lovers sleep prior to their discovery of the Magic Fountain.

Some tasteful sound effects have been added for the sake of atmosphere, and the sound is first-rate. I would think a staged production of *The Magic Fountain* would find an enthusiastic audience by no means limited to dyed-in-the-wool Delians; in the meantime, those same Delians, whose ranks may well be increased by this most welcome recording, can only rejoice over it—and look forward to the similar realization of *Margot-la-Rouge* that the same producers have promised for this year.

-Richard Freed

DELIUS: The Magic Fountain. Katherine Pring (mezzo-soprano), Watawa; John Mitchinson (tenor), Solano; Norman Welsby (bass), Wapanacki; Richard Angas (bass), Talum Hadjo; Francis Thomas (bass), a Spanish sailor. BBC Singers; BBC Concert Orchestra, Norman Del Mar cond. Arabesque 8121-2L two discs \$14.96, © 9121-2L \$16.96.

frivolous Bracca, and Manfred Schmidt, who does a nice bit clearly modeled on Narraboth in Salome. The role of Violanta needs a Salome voice too, and Eva Marton has the range and power for it, if not all the tonal sensuousness. Walter Berry is solid as the husband, and conductor Marek Janowski gives us all the tension and tonal richness the music demands. That very orchestral richness may, however, have caused some engineering problems—I find the recorded sound compressed, lacking in warmth, and unkind to the singers.

As is demonstrated by the better-known, later opera Die Tote Stadt, Korngold was a late Romantic who sustained the Straussian ideals at a time when his contemporaries—Berg, Weill, and Hindemith—were pursuing radically opposed operatic paths. Korngold's essentially melodic writing, spiced with mild dissonances, and his enthusiastic explorations of the crotic in music may antagonize those for whom every kind of Romanticism is a dead issue. For me, Violanta—closer in spirit and aesthetics to Montemezzi and Zandonai than to Berg and Weill—is an eminently stageworthy opera.

RECORDING OF SPECIAL MERIT

MIASKOVSKY: Piano Sonata No. 2, Op. 13; Piano Sonata No. 3, Op. 19. RACH-MANINOFF: Prelude in C-sharp Minor. SCRIABIN: Preludes, Op. 74. Idil Biret (piano). FINNADAR SR 9029 \$7.98.

Performance: The best Recording: Very good

It is a bit of a shock to put on a record conspicuously titled "Mostly Miaskovsky" and hear on the first band a magisterial performance of the Rachmaninoff Prelude in C-sharp Minor. If you look closely, the cover also says "Some Rachmaninoff and Scriabin too." So this record is really a précis of the late-Romantic side of Russian piano music before the Revolution: Rachmaninoff with his crowd-pleasing bravura, Scriabin with his elliptical, mystical modernism, Miaskovsky with his dark, powerful, personal expression.

Miaskovsky? Some older music lovers may remember rumors coming out of Russia and even occasional performances of Miaskovsky symphonies numbered in the upper twenties. Unlike Prokofiev, Stravinsky, Rachmaninoff, or Scriabin, Nikolai Miaskovsky (1881-1950) never left Russia, and his reputation didn't either. His early period, represented here by a sonata written in 1912 and another from 1920, is in the full-blown post-Romantic tradition, not very distant (as Richard Taruskin points out in his excellent notes) from the early work of Schoenberg—or, one should add, Berg.

Later in his life, Miaskovsky had cause to regret and apologize for the dark pessimism of these works; along with Shostakovich, Prokofiev, and Khachaturian, he was honored by the infamous Stalinist attacks of 1948. That alone might serve to compel our interest in these works; they are personal, inward-looking, strong, and well written. They are also smashingly played by Idil Biret. This Turkish pianist has perhaps not had the impact here that her playing deserves, but her Finnadar records have been

consistently impressive. This one—extremely well recorded at New York's Town Hall—is performed with strength and passion. I commend it to your attention. E.S.

RECORDING OF SPECIAL MERIT

MUSSORGSKY/RAVEL: Pictures at an Exhibition. MUSSORGSKY/RIMSKY-KORSAKOV: Night on Bald Mountain. Amsterdam Concergebouw Orchestra, Sir Colin Davis cond. Philips • 9500 744 \$10.98, © 7300 829 \$10.98.

Performance: Highly poetic Recording: Opulent

Sir Colin Davis eschews the merely spectacular in his traversal of the Mussorgsky/ Ravel Pictures, with the result that episodes such as "Tuileries" gain a fresh and special realism. Note Davis' subtle hesitation at phrase ends to suggest the occasionally unsteady gait of small children, for example, and the care he gives to wind-string contrast to establish an air of chatter between nurses and their young charges. The "Bydlo" ox cart has tremendous weight here and, with the extended low end of this recording, literally shakes the floor at its nearest passing. And there is a singular eloquence to the heart-wrenching outcry of the solo trumpet in "Catacombs." While the Lorin Maazel/ Cleveland Orchestra recording of Pictures for Telarc remains my top choice, this one is certainly among the best. Like Maazel, Davis includes Night on Bald Mountain as a filler, doing best in the poetic epilogue.

In the recording itself there is a certain imbalance that puts the violins a bit off stage-center, especially in *Bald Mountain*. But on the whole the Philips digital tape mastering offers sound that's extremely opulent, if not unusually brilliant on the high end.

D.H.

PAISIELLO: Il Maestro ed i Sui Due Scolari (see SÜSSMAYR)

RACHMANINOFF: Prelude in C-sharp Minor (see MIASKOVSKY)

ROSSINI: L'Italiana in Algeri (see Best of the Month, page 70)

SAINT-SAËNS: Introduction and Rondo Capriccioso, Op. 28 (see SIBELIUS)

SCHONTHAL: Totengesänge (see WEILL)

SCHUMANN: Adagio and Allegro in A-flat Major, Op. 70 (see CHOPIN)

SCRIABIN: *Preludes, Op. 74* (see MIAS-KOVSKY)

RECORDING OF SPECIAL MERIT

SIBELIUS: Violin Concerto in D Minor, Op. 47. SAINT-SAËNS: Introduction and Rondo Capriccioso, Op. 28. Dylana Jenson (violin); Philadelphia Orchestra, Eugene Ormandy cond. RCA • ATC1-3972 \$15.98, © ATK1-3972 \$15.98.

Performance: First-rate Sibelius
Recording: Rich, tending to hugeness

RCA has gone all out—Ormandy and the Philadelphia, 3M digital recording, press(Continued on page 87)



SAVE • MONEY • TIME • FREIGHT ON NAME BRANDS

AKAI CASSETTE DECKS

MODEL GXM-50 GX HEAD DECK ••••• \$257.00 MODEL GX-P80 SOLENOID CASS DECK 350.00

ADC SOUNDSHAPERS

MODEL SS-110 MARK II EQUALIZER* \$150.00 MODEL SS-2 MARK III 12 BAND EQ* 217.00 MODEL SS-3 MARK II TOP OF LINE* 329.00

B.I.C SPECIALS

MODEL B-44 LOUDS FEAKER SPECIAL* \$ 69.95 TFR-200 SPEAKER SPECIAL ***** 90.00

DUAL TURNTABLES - LOW MASS UNITS!

MODEL 506 BELT DRIVE UNIT **** \$138.00 MODEL 714Q QUARTZ DIRECT DRIVE* 288.00 WRITE OR CALL FOR ALL OTHER DUALS!!!!!!

JVC ELECTRONICS - TAPE DECKS - ETC.

MODEL KD-A8 SUFER CASSETTE DECK WRITE MODEL RS-77 NEW DIGITAL RECEIVER CALL

KENWOOD DEALS - WRITE FOR OTHER MODELS!

KR-6050 SUFER RECEIVER DEAL ••• \$269.00 KR-7050 HI-SFEED AM-FM RCVR. •• 365.00 KX-2060 TOP CASSETTE DECX DEAL• 430.00 KA-601 SUFER AMHLIFIER FRICE • 250.00 KD-5100 TURNTABLE SFECIAL •••• 255.00

MARANTZ SPECIAL!!

AM-700 GREAT AMPLIFIER & FRICE. \$266.00

PIONEEER DEALS

HM-500 LOUDS FLAKER SYSTEM ··· \$110.00 CTF-550 CASSETTE TAFE DECK ··· 130.00 MODEL RL-500 QUARTZ TURNTABLE · 190.00 MODEL RL-400 QUARTZ TURNTABLE · 120.00

SANSUI ELECTRONIX

G-5700 DIGITAL RECEIVER \$345.00 G-7700 RECEIVER SPECIAL 420.00 AUD-5B NEW SUPER AMPLIFIER 274.00

SONY SUFFER DEALS !!!

STR-V45 NEW "HOT" RECEIVER ···· \$279.00 REX-45 TURNTABLE DEAL ···· 131.00

TEAC CASSETTE DECK DEALS!!

MODEL 550RX- CASSETTE DECL ···· \$372.00 CX-400 CASSETTE DECK ···· 200.00

TECHNICS ELCETRONICS

SEE A BETTER PRICE? LET US KNOW1!!!!!!

CASSETTE TAPE

REEL TO REEL TAPE

TDK LX-35-90M NEW 71N. \$60.00/10
TDK LX-35-180M NEW 10 1/2 IN \$170.00/10
MAXELL UD-35-180 SAME ON 10 1/2" \$57.50/10
MAXELL UD-35-180 SAME ON 10 1/2" \$69.50/10
MAXELL UD-XL-35-90B BACKOATED XL \$69.50/10
MAXELL UD-XL-180B SAME ON 10 1/2 \$198.50/10
SCOTCH 207 R-180 10 1/2 IN \$170.00/10

VIDEO TAPE

 SOOTCH L-500 BETA TYFE
 \$110.00/10

 SOOTCH L-750 BETA TAFE
 130.00/10

 SOOTCH T-120 VHS TYFE
 140.00/10

 NOTE: FUJI NOW IN STOCK AT LOW FRICES !!!!!!

AUDIO TECHNICA CARTS.

MCOEL 155-LC \$105.00

MCOEL 140-LC 60.00

MCOEL 881-EEES 60.50

681-EEE 52.00

AUTOMOTIVE STEREO

HEAD PHONES

 KOSS MODEL HV-X STEREOTHONES
 \$41.50

 KOSS MODEL HV-XLC
 49.50

 KOSS FRO-4 AAA
 47.50

 SENNHEISER HD-414 HEADTHONES
 \$45.00

 NEW SONY LIGHTWEIGHTS IN STOCK !!!!



12 E. Delaware Pl., Chicago 60611

Phone Now (312) 664-0020

TOLL FREE (800) 621-8042 ---send for free catalog---

Name _____ Address _____ City

Zip

State

BOTH Angel and RCA recently released digitally mastered recordings of the late Deryck Cooke's second complete performing version of Mahler's Tenth Symphony, the former with Simon Rattle conducting the Bournemouth Symphony Orchestra, the latter with James Levine conducting the Philadelphia Orchestra. The two releases differ profoundly in interpretation and sonic approach, but both are remarkable realizations that in their different ways take pre-eminent positions among recorded versions of this music. Personally, I would not part with either.

At his death in 1911, Mahler left a full sketch of the Tenth Symphony but had finmembered from a stay in New York when from his hotel window he witnessed a funeral procession for a fireman killed in line of duty. Less obvious but perhaps even more crucial is a third event in the score, just before the end: an upward-leaping sigh (C, Aflat) in the strings leading to the exquisite final measures.

As conductor Simon Rattle observes, with the Mahler Tenth "one is presented with a unique challenge: a masterpiece of seventy years' standing for which there is no established performing tradition." Certainly this factor helps explain the enormous range of timings among the dozen or more recordings of the initial adagio, with Wyn

not command comparable pp and ppp playing from his group. The finest moments in Levine's recording are, for me, in the last pages of the finale. I scarcely dared to breathe—and thank goodness RCA's German-pressed surfaces are noiseless.

In sonics the two recordings again differ sharply in basic ways. Angel's sound is bright, assertive, recorded at peak level. The microphone pickup is fairly close, but the spacious ambiance of the hall is amply evident. RCA's recording is at a decidedly lower basic level—I would guess some 6 dB less, presumably to allow more head room for climaxes. The miking seems more distant than Angel's, but the neutrality of the



Two Tenths of Mahler

Simon Rattle

James Levine



ished scoring only the opening adagio-a unique masterpiece that is often performed and recorded on its own-and the oddly disquieting little Purgatorio third movement. I find the music as completed by Cooke completely enthralling. With Cooke's versions of the two scherzos and the magnificent finale in place alongside the two movements Mahler finished, the symphony not only makes sense as a whole but throws a revealing light on the last two years of the composer's life, racked as they were with anxiety engendered by the heart disease that finally killed him as well as by the torment of his young wife Alma's involvement with the architect Walter Gropius. In the music of the Tenth Symphony, as in the often terrifying marginal inscriptions on the manuscript score, we can trace Mahler's path toward eventual resolution and acceptance, a transcendence of self that at last left him "free within."

But aside from such programmatic implications-which are touched on by Jack Diether in his notes for the RCA set and dealt with in lengthy and fascinating detail by Michael Steinberg for Angel-the music stands superbly on its own, with all kinds of motivic interrelationships and metamorphoses threading their way through the five movements. In terms of sonic impact, two features stand out above all others. First is the astonishing "primal scream" heard twothirds of the way through the first movement and again toward the end of the finale-a nine-note dissonant chord for full orchestra culminating with the trumpet's high A. Second is the deathly thud of the bass drum that ends the second scherzo and recurs periodically in the finale like the crack of doom-a sound that Mahler reMorris, for instance, requiring only about twenty-two minutes and Klaus Tennstedt taking nearly twenty-eight.

The differences between Rattle's and James Levine's interpretations pertain less to matters of tempo-save in the finale, where Levine is a full four minutes slowerthan to their views of the work as a whole and the effect of these contrasting views on the agogic elements in the score. As I hear it, Rattle's view of the work is intensely dramatic and extroverted, whereas Levine's is equally intensely lyrical and inner-directed. Some confirmation of this characterization is supplied by three instances in which Rattle has second-guessed Deryck Cooke: (1) restoring the cymbal crash at the end of the second movement, which was in Cooke's first performing version but omitted in the second; (2) adding additional percussion to the ferocious middle section of the finale; and (3) letting the bass-drum death knell heard at the very end of the second scherzo serve as the connecting link to the finale. (Rattle lets the finale begin with the tuba solo, whereas in Levine's recording one hears the crack of the bass drum both at the end of the fourth movement and at the beginning of the fifth.)

SOTH performances are of the highest standard, but there is no question that Levine has the finer ensemble. While Rattle carries the field in terms of dramatic impact, Levine elicits playing of unearthly finesse and beauty from the Philadelphians. Even allowing for the greater brightness and coloration of the Bournemouth recording locale as compared with the rather neutral acoustics of the Scottish Rite Cathedral in Philadelphia, it is clear that Rattle can-

hall makes it difficult to judge. In any case, the sound is certainly less spectacular than Angel's, but it may wear better over repeated listenings.

It is interesting to note that Levine's recording of the first movement derives from an analog tape of a 1978 session; it was previously released on RCA ARL2-2905 along with the Mahler Fifth Symphony. I could detect no meaningful difference in sound quality between this part of the set and those that were digitally mastered originally (the analog tape of the adagio was remastered digitally for this release). Both Angel and RCA have done first-rate jobs with these recordings in terms of their respective approaches. As usual, in my view, the digital technology makes the choice of recording ambiance and microphone setup even more critical.

In sum, for those who want a Mahler Tenth with maximum dramatic impact, there can be no choice at present other than Simon Rattle's Angel set. But for those who prefer to assimilate the spiritual essence of Mahler's final musical testament through repeated listenings over an extended period of time, I feel that James Levine on RCA is the only choice.

—David Hall

MAHLER: Symphony No. 10 (Second Performing Version by Deryck Cooke). Bournemouth Symphony Orchestra, Simon Rattle cond. ANGEL • DSB-3909 two discs \$25.98.

MAHLER: Symphony No. 10 (Second Performing Version by Deryck Cooke). Philadelphia Orchestra, James Levine cond. RCA © CTC2-3726 two discs \$27.98, © CTK2-3726 \$27.98.

ing by Teldec in Hamburg-for the recording debut of nineteen-year-old Dylana Jenson, and the special attention is by no means unwarranted. Her name is by now far from unknown: she has been performing as soloist with major American orchestras for more than a half-dozen years, has had opportunities to study with Heifetz, David Oistrakh, and Josef Gingold, and was the youngest member of Nathan Milstein's master class in Zurich-where, on his recommendation, she gave a recital in the Tonhalle at the age of fourteen. In the same year (1975) she gave a private recital for Irving Kolodin, who recalls that event in his annotation for the new RCA disc and who wrote about her in Saturday Review some sixteen months ago, by which time she had added to her credits a silver medal in the 1978 Tchaikovsky Competition in Moscow. A subsequent audition for Eugene Ormandy led to last December's concerts and this recording.

Jenson is a splendid musician. Like the still younger Anne-Sophie Mutter, she need ask no allowances on account of her youth. for she shows unquestionable maturity as well as a formidable command of her instrument. Her tone is big and warm, her technique sure, and her identification with the Sibelius concerto convincing in every bar. (Kolodin refers to a live recording of her 1978 Moscow performance of the concerto, which she played in Saint Louis as early as April 1975 and no doubt on several occasions later.) Since Ormandy and his orchestra have proprietary authority in this music, this is an altogether satisfying, highly competitive version. In the Saint-Saëns filler the playing is every bit as beautiful as in the Sibelius, but here I felt a lack of the spontaneity and dash that give life to the piece, and I was more aware, too, of the hugeness of the sonic frame RCA contrived for this presentation. Whether the same settings were used for the Sibelius and the Saint-Saëns, whether the concerto simply wears the hugeness more comfortably, or whether some other factor is operative is hard to tell, but I enjoyed the richness of the sound in the concerto and found it swollen in the Saint-Saëns. In any event, this is a most impressive debut, one that will surely inspire eagerness for a follow-up.

SÜSSMAYR: Das Namensfest. Children's Chorus and Orchestra of the Hungarian Radio/Television, Laszlo Csányi cond. PAISIELLO: Il Maestro ed i Sui Due Scolari. Jozsef Dene (baritone); Margit László (soprano); Zsuzsa Barlay (mezzo-soprano); Budapest Madrigal Choir; Hungarian State Orchestra, Ferenc Szekeres cond. SERENUS SRS 12088 \$6.98.

Performance: Good Recording: Good

These two comic cantatas, long hidden from public view, came to light after World War II when the Esterházy Archives became part of Budapest's Széchényi Library and were made accessible to scholars. The spirit of Mozart lends unity to the pairing: Giovanni Paisiello (1740-1816) was influential in Mozart's operatic development, and Franz Süssmayr (1766-1803) was Mozart's pupil.

Both works were designed for intimate presentation. Das Namensfest seems to



Only the new MMC 20CL can give your turntable the performance levels of our unique single crystal sapphire cantilever and a micropolished Contact Line diamond stylus. And our new universal connector makes proper installation an effortless task while it eliminates the weight and

mass of the common head-

shell. If you have a high quality turntable, it probably deserves the MMC 20CL. See your Bang & Olufsen dealer to make the connection.

Bang&Olufsen

Bộ

MMC

20CL

For Information Write To: Sandy Renquest

Bang & Olufsen of America, Inc., 515 Busse Road, Elk Grove Village, Illinois 60007

CIRCLE NO. 6 ON READER SERVICE CARD Just pick up the phone, dial our toll-free number, and ask for Or ask us to mail you this P.R.I.C.E. quotes. Congratulations! You've just discovered a source for stereo and month's P.R.I.C.E. list.) P.R.I.C.E. is what you want. Our prices are better than video equipment. retail - and we're much easier to Teac CX-400 3-head cassette 8003431078 \$213.50 Stanton 881S Calibration Standard \$74.50 priorio carmoge AM/FM stereo deal with. Pioneer KP-8000 AM/FM car \$147.50 Pioneer KE-5100 digital AM/FM car Crown of Japan CS-950 deluxe \$214.50 AM/FM stereo portable Jensen R-405 hi-power, auto reverse \$259.95 Pioneer RK-500 AM/EW bortable \$185.95 cassette recorder \$69.95 AM/FM car cassette Jensen R-200 AM/FM car Prices subject to change after 7/31/81 \$99.95 Pioneer TS-695 3-way, 6x9-inch \$79.95 Sony XS-63 3-way, 6x9-inch car speakers Teed Drive, SRE07 Randolph, MA 02368

CIRCLE NO. 40 ON READER SERVICE CARD

have been composed to celebrate the name day of a certain Baron Lang, with various grandchildren singing Grandpa's praises individually and in ensemble. (I recall having heard this cantata in its original release on a Qualiton import a number of years ago, and if I find it more attractive now that is probably because I too have become a grandfather in the interim.) The Paisiello work follows the popular eighteenth-century formula of a music master spoofing his own profession (Cimarosa's Il Maestro di Cappella is probably the best of the genre). It goes on a bit too long, in my opinion (so does Das Namensfest), but it is modestly entertaining.

The children's chorus is quite remarkable (testifying to the high level of Hungarian musical education based on Kodály's methods), the soloists are all competent, and both works receive polished performances. There are a couple of noisy spots on the Süssmayr side, but overall the recorded sound is clean and well balanced. G.J.

TELEMANN: Trumpet Sonata in B-flat Major; Trumpet Sonata in C Minor; Heldenmusik (excerpts). Roy Smedvig (trumpet); Sherman Walt (bassoon); Joyce Lindorff (harpsichord). DIGITECH © DIGI 106 \$14.98, © DIGI C 106 \$9.98.

Performance: Clean-cut Recording: Good

Roy Smedvig is a familiar name to Boston Symphony concertgoers and fans of the Empire Brass Quintet. With the collaboration of his BSO colleague Sherman Walt in the B-flat Major Sonata and of harpsichordist Joyce Lindorff throughout, he gives us here a most agreeable forty minutes or so of Telemann's pleasant and sometimes exhilarating music. The final movement of the B-flat Sonata is especially agreeable, in fact, with Walt's obbligato bassoon a major contributing factor. The remainder of the disc is for trumpet and harpsichord only. and I would have preferred the harpsichord to sound a bit more forward with perhaps a cello (or even Walt's bassoon) to reinforce the continuo.

Smedvig himself displays a very pure

tone, secure phrasing, agility as needed, and first-rate sostenuto. I only wish he had not been so skimpy with his ornamentation. The Risoluto movement of the Heldenmusik, which I found more interesting than the C Minor Sonata, is a good example. Listen to the same piece on Columbia MS 6354 as played by E. Power Biggs and the New England Brass Ensemble and you'll hear the kind of ornamentation that is needed. (I should mention, incidentally, that the Heldenmusik is not original trumpet music at all; Telemann composed it for flute and continuo.)

I don't feel that the digital mastering is a major contribution here, but the acoustic ambiance of the Corpus Christi Church in Housatonic, Massachusetts, does fall very nicely on the ear. The jacket notes, I must say, are grossly inadequate, and some of the label copy is downright laughable. D.H.

WEILL: Frauentanz, Op. 10. Edith Gordon Ainsberg (soprano); Bronx Arts Ensemble. ZAIMONT: Two Songs for Soprano and Harp. Berenice Bramson (soprano); Sara Cutler (harp). SCHONTHAL: Totengesänge. Berenice Bramson (soprano); Ruth Schonthal (piano). LEONARDA LPI 106 \$8.98

Performance: Good Recording: Good

Leonarda is a record company largely run by women and with a policy emphasizing contemporary music and music by women. This collection of song cycles includes the early *Women's Dance* (or *Dance of Women*) by Kurt Weill and two attractive works by important U.S. women composers.

Ruth Schonthal was actually born in Hamburg and studied in Berlin, Mexico City (with Manuel Ponce), and Yale (with Hindemith). These Songs of Death, written in 1963 on her own German texts, are very much in the Central European tradition and must have seemed awfully old-fashioned when they came out. Yet their neo-Romanticism no longer seems like anything to hold against them. Or rather, in spite of and perhaps even through their very traditionalism, they make a personal statement. The music

is skillful and inventive and has profile. Judith Lang Zaimont belongs to a younger generation, but she is also a lyric traditionalist; her settings of Adrienne Rich and Thomas Hardy are engaging.

Weill's Frauentanz, written in the early Twenties and part of the composer's modernistic period, is the driest and most cutting, dissonant music on the album. Obviously, it is the work that will carry the widest interest, but it is not necessarily the most grateful or immediately engaging. The poems are all from the Middle Ages, and the setting is very close to that dry, Hindemithian chamber style of the Twenties that one could call neo-medieval.

Both singers—Edith Gordon Ainsberg in the Weill and Berenice Bramson in the others—make a good impression, but it is Ms. Bramson and the Schonthal that make the best match. The Weill and the Zaimont are particularly well recorded.

E.S.

ZAIMONT: Two Songs for Soprano and Harp (see WEILL)

COLLECTIONS

RECORDING OF SPECIAL MERIT

BOSTON POPS: Pops on the March. J. F. Wagner: Under the Double Eagle. Elgar: Pomp and Circumstance, No. 4. Tchaikovsky: Coronation March. Walton: Orb and Sceptre. Gershwin: Strike Up the Band. Handy: St. Louis Blues March. Williams: Midway March. Wilson: 76 Trombones. Baudac/Haggart: South Rampart Street Parade. Newman: Conquest. Boston Pops Orchestra, John Williams cond. Philips © 6302 082 \$10.98, © 7144 082 \$10.98.

Performance: Very good Recording: Excellent

The Boston Pops here presents a program of marches that are by no means all military in spirit. To be sure, the proceedings open with J. F. Wagner's bristling *Under the Double Eagle*. After that, though, things take a distinctly peaceful turn, with glittering coronation music from Tchaikovsky and William Walton, a rousing arrangement of



Gershwin's Strike Up the Band, and several excursions to the South, including a St. Louis Blues wearing a martial uniform provided by arranger "Richard Hayaan" (Richard Hayman?), all 76 Trombones from Meredith Wilson's Music Man (in a Leroy Anderson arrangement), and an oversize version (by Billy May) of the South Rampart Street Parade that roars into town like a Dixieland tornado. There's also conductor John Williams' own Midway March, and Conquest from the pen of movie composer Alfred Newman brings matters to a victorious close. Mr. Williams obviously has the Pops firmly in hand and marching to a different drum: not a Sousa warhorse in the regiment.

RECORDING OF SPECIAL MERIT

CZECH PASTORAL PARTITAS, Mašek: Partita in D Major. Havel: Allegro and Pastorella in B-flat Major. Fiala: Divertimento Pastorale in B-flat Major, Anon.: Partita Pastoralis in G Major. Pichl: Concertino con Pastorella in F Major. Collegium Musicum Pragense, Supraphon 1111 2616 \$9.98 (from Qualiton Records, Ltd., 39-28 Crescent Street, Long Island City, N.Y. 11101).

Performance: Crack Recording: Excellent

I don't know if you've ever heard an alphorn on record (I don't know if you've ever wanted to), but here's your chance. The Allegro and Pastorella by the little-known Czech composer Václav Havel adds to its conventional scoring-for pairs of clarinets, horns, and bassoons—an obbligato part for alphorn in B-flat, here disguised under the name of tuba pastoralis. There is a picture of the instrument being played on the album's back cover, and it is indeed about nine feet straight out; it also seems to be growing hair, but perhaps that is merely hay from the stable in which, one presumes, it is kept when not in action. Václav Hoza, who plays the instrument in Havel's piece, does a splendid job with the unwieldy thing, managing to convey its rather exotic folk character and the difficulty of playing it



while at the same time staying on pitch.

Nothing else terribly odd occurs on the record (although the Pichl piece has a tambourine in its last movement), nor is the music of any special importance. I am struck, though, by just how well made it is and how pleasant it is to listen to simply as entertainment (which is what it was written for). The anonymous piece in particular is a

It is, however, the performance quality that is the heart of this record. The players are uniformly superb, and their efforts prove once again that lesser music-provided only that it is competently craftedcan give real pleasure if presented with the kind of spit-and-polish perfectionism often reserved for great masterpieces. Ephemeral this music may be, but it goes a long way in explaining how they got along without television in those days. Fine recording

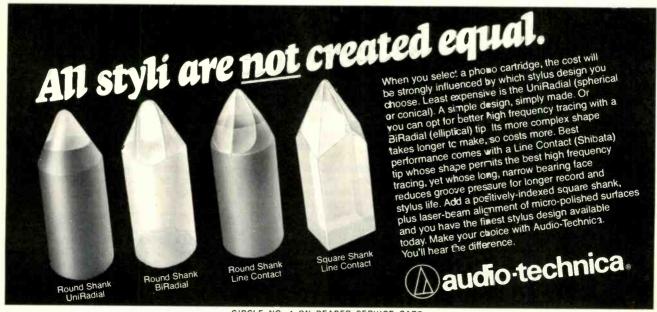
-James Goodfriend

RECORDING OF SPECIAL MERIT

ESTHER LAMANDIER: Decameron— Monodic Ballads of the Florentine Ars Nova. Masii: Non So Qual i' Mi Voglia: Sento d'Amor la Fiamma; Non Dedi Tu. Amor; Non Perch' i' Speri. Gherardellus: I' Vo' Bene; Donna, l'Altrui Mirar; Dè, Poni Amor; Per Non Far Lieto. Landini: Angelica Beltà; lo Son un Pellegrin. Anon.: Che Ti Cova; Amor Mi Fa Cantar; Lucente Stella; Per Tropo Fede. Esther Lamandier (soprano, portative organ, harp, vielle, lute). ASTRÉE AS 56 \$13.98.

Performance: Exquisite Recording: Lovely

In surveying music history, it has always been a relief to me to move from the spasmic isorhythms and jarring harmonies of the French Ars Nova to its sweet, flowing counterpart in Italy. Unfortunately, satisfy-





Conductor Nikolaus Harnoncourt

A Stylish "Idomeneo"

O^N a superb new Telefunken recording, conductor Nikolaus Harnoncourt turns his back on the Baroque era (only briefly, I suspect) in order to address the question of authentic performance practice in the case of Mozart's opera Idomeneo. The results are splendid. The hero of this performance is the orchestra, which is perhaps as it should be, since Mozart was writing for nothing less than the fabled Mannheim Orchestra. As he wrote in a letter to his father, the orchestra was "very good and large; on each side 10 to 11 violins, 4 violas. 2 oboes, 2 flutes, 2 clarinets, 2 horns, 4 violoncellos, 4 bassoons and 4 doublebasses and trumpets and timpani.... You may well imagine that I am looking forward just like a child to the splendid orchestra." His delight is obvious from the score, on which he lavished an unusual degree of detail regarding dynamics and articulation, part and parcel of the Mannheim style.

Using modern instruments, Harnoncourt has duplicated the size and composition of the Mannheim Orchestra, furnished gut strings and wooden rather than metal or plastic mutes for all the stringed instruments, and supplied wooden beaters to the timpanist. All of Mozart's dynamic markings are scrupulously observed and the articulation played with full clarity. The sonority is heavily weighted toward the winds, which only highlights Mozart's genius in writing for them, and the crescendos, diminuendos, and accents are more pronounced than they would be in a modern-style performance. The effect is stunning; one revels in the marches, accompanied recitative, and, especially, the ballet music.

Nor has Harnoncourt neglected the singers. The recitative is done melodramatically, with an emphasis on speech rhythms, almost-whispered asides, and full-bodied declamation. The recognition scene between Idomeneo and Idamante is a typical example of this high-flown dramatic style.

Of course, the very first question to be faced with Idomeneo is that of which version to use: Mozart's original score prior to the Munich première in 1781, the last Munich version, or the revision made for Vienna in 1786? Harnoncourt's decision to use the last Munich version, with cuts made by Mozart himself, is historically justifiable, but opera lovers accustomed to earlier recordings and to the various versions that hold the boards today may feel that the final scene is thereby rendered anticlimactic. Omitting the arias for Idamante, Idomeneo, and Elettra ("D'Oreste, d'Aiace") leaves nothing but a large dose of accompanied recitative until the final chorus. The absence of Elettra's aria is particularly frustrating; audiences have come to regard it as the showpiece of the entire opera and look forward to it eagerly. But Harnoncourt makes up for these cuts by including the wonderful ballet music.

In the earlier arias, laurels go to Felicity Palmer as Elettra. She makes light of Mozart's technical demands in "Tutte nel cor vi sento," where her outrage is icy and fierce, and in "Idol mio, se ritorno" her tenderness for Idamante is conveyed in singing full of warmth and grace. (All the more pity, then, to be denied her exit aria!)

As Ilia, Rachel Yakar opens on the shaky side with some sliding on her high notes, but by the time she reaches "Zeffiretti lusinghieri" she is thoroughly at home in the style and turns in an excellent account, Idamante is cleanly sung by Trudeliese Schmidt, though she unfortunately lacks the trill so necessary to the cadences of the period. But her characterization is noble, as is Werner Hollweg's of Idomeneo. The best feature of his singing is his constant projection of the character's feelings of horror and fatigue. Kurt Equiluz is forced-sounding as Arbace, and his vibrato renders his coloratura fuzzy. As the High Priest, however, Robert Tear turns in some excellent singing in the choral episode "Oh voto tremendo," and Simon Estes is appropriately sonorous as the Oracle.

N any event, the singing is not the main point of this recording. While it is basically good, the soloists do not always seem quite at ease with Harnoncourt's stylistic requirements. Nevertheless, they put on a fine show—and they'll probably never sing Mozart like Bellini again. But what really makes the album worth its weight in gold is Harnoncourt's achievement in re-creating the eighteenth-century style of orchestral playing.

—Stoddard Lincoln

MOZART: Idomeneo. Werner Hollweg (tenor), Idomeneo; Trudeliese Schmidt (alto), Idamante; Rachel Yakar (soprano), Ilia; Felicity Palmer (soprano), Elettra; Kurt Equiluz (tenor), Arbace; Robert Tear (tenor), High Priest; Simon Estes (bass), Oracle. Chorus and Mozart Orchestra of the Zürich Opera House, Nikolaus Harnon-court cond. Telefunken 6.35547 four discs \$43.92, © 4.35547 \$32.94.

ing performances of the repertoire have always been difficult to come by since the modern voice seems too heavy for the supple lines the Florentines favored. Esther Lamandier, however, commands a light, natural voice and tosses off the intricate melismas with a thrilling ease and clarity. She is also a fine performer on several instruments and is extremely imaginative in her use of them for accompaniment. This album breathes the spirit of this fragile music, and the apt title, "Decameron," reminds us that each story in that cycle ended with a song and dance. Although the plague wreaked destruction in the outside world, the walls of Boccaccio's retreat enclosed much wit and elegance. S.L.

RECORDING OF SPECIAL MERIT

RAGTIME BACK TO BACK. Joplin/Marshall: Swipesy Cake Walk; Lily Queen. Joplin/Hayden: Sunflower Slow Drag; Something Doing; Felicity Rag. William Bolcom (piano). J. P. Johnson: Mule-Walk Stomp; Eccentricity-Syncopated Waltz; (You've Got to Be) Modernistic; Snowy Morning Blues; Carolina Shout. William Albright (piano). MUSICMASTERS MM 20002 \$8.98.

Performance: Excellent Recording: Very good

Since the Scott Joplin revival started one New Year's Eve in the late Sixties with Bill Bolcom playing the piano in my living room, I think my admiration for Bolcom's playing and for his role in reviving this very American music and bringing it up to the stature of the classics is no secret. Perhaps it will not be considered a crime if I repeat it here in reference to his playing of the very beautiful and lyric collaborations that Joplin published with Arthur Marshall and Scott Hayden.

The other side of this album is hardly of less interest. William Albright, like his good friend Bolcom an excellent composer, pianist, ragtime aficionado, and American popular-music revivalist, plays the stride-piano compositions of James P. Johnson with authority and panache. Johnson, more than a quarter-century younger than Joplin (he died only in 1955), was born in New Brunswick, New Jersey, and made his reputation in New York City shortly before World War I; Carolina Shout, his most famous piece, was written at that time. Its energy, bittersweet feeling, and showy virtuosity were followed by a whole series of piecesstomps, waltzes, and blues-that have hardly been bettered as jazz solos. By the time of the stock-market crash, Johnson's reputation was fading. (You've Got to Be) Modernistic is acerbic commentary-half making fun, half showing he could do it himself-on the younger musicians and the new jazz that were fast making his style obsolete. The music is not only historically important, it is delightful.

RECORDING OF SPECIAL MERIT

KATIA RICCIARELLI AND JOSÉ CAR-RERAS: Love Duets. Puccini: Madama Butterfly: Bimba, bimba, non piangere (Act I). Verdi: I Lombardi: Dove sola m'inoltro? Per dirupi e per foreste (Act III). Donizetti: Poliuto: Ah! fuggi da morte (Act III). Roberto Devereux: Tutto è silenzio (Act I). Katia Ricciarelli (soprano); José Carreras (tenor); Ambrosian Opera Chorus; London Symphony Orchestra, Lamberto Gardelli cond. Phillips 9500 750 \$9.98, © 7300 835 \$9.98.

Performance: Very good Recording: Very good

This is an interesting collection of partly unfamiliar music in committed and authoritative performances. Katia Ricciarelli displays some particularly ravishing tones; it is gratifying to note her steady artistic development through the years. Both Ricciarelli and José Carreras are in excellent form in the Puccini duet, and their voices and temperaments are well blended, though the overall effect is somewhat handicapped by Lamberto Gardelli's uncharacteristically languid pacing. Except for the exciting Poliuto scene (which must have haunted Verdi when he wrote the Love Duet of Un Ballo in Maschera) with its exposed high tenor writing. Carreras also excels here in material congenial to his gifts. Both artists appear deeply involved, with excellent results, in the other two duets, though the I Lombardi scene is far from Verdi's best. In any case, the combination of two of the most beautiful voices before the public today is hard to resist, and why should we?

JAMES TYLER: Music of the Renaissance Virtuosi. Vallet: La Chaconna; Sarabanda; Two Bourées. Borrono: Three Pieces from the Casteliono Book. Corbetta: Preludio; Sarabanda; Chiacconi; Sinfonia. De Rore/ Terzi: Contrapunto Sopra "Non Mi Toglia Il Ben Mio." Allison: Sharp Pavin. Bernia: Toccata Chromatica. Kapsperger: Toccata. Piccinini: Toccata. Ferrabosco: Spanish Pavan. Castello: Sonata. Dowland: Fantasia. Anon.: Zouch, His March. James Tyler (lute, Baroque guitar, mandora); Nigel North (lute, theorbo, cittern); Douglas Wooton (lute, bandora); Jane Ryan (bass viol). NONESUCH H-71389 \$5.98.

Performance: Excellent Recording: Fine

Divided about equally between solo lute performances and ensemble pieces, this fascinating disc offers a rich sampling of Italian, French, German, and English music of the period (circa 1530-1650). James Tyler's playing is marked by technical excellence, a fine tone, and a pervading sense of seriousness. All I would have liked in addition is greater rhythmic flexibility so as to make the improvisatory pieces more rhapsodic.

One of the most arresting elements of the disc is the sonority produced by multiple plucked instruments accompanied by bass viol when Tyler is joined by his assisting artists. Perhaps the most ravishing sounds here are the deep tones of the theorbo and bass viol when heard together with the highly embellished lines of the Baroque guitar or mandora. The upper voice, deftly performed by Tyler, creates a tracery of figurations over the sober low-voice melodies. The combination of lute, cittern, bandora, and bass viol is striking indeed, and how close it is to the sound of "country" music today! Would there were more of it! Let us hope for yet another collection from these artists with some of Thomas Morley's consort music

At last. Clean and easy bass in a car.



Introducing the Power BassTM, a powered subwoofer for your car. Now you can have real bass—as good as—maybe better than—what you hear at home. And it's

The Power Bass can be added to *any* car stereo. Or, if you're planning a complete installation, it's the

heart of our AL1 Voice of the Highway system. Super sound for your car.

For the location of your nearest dealer call (800) 528-6050, ext. 731; in Arizona (800) 352-0458. You'll hear the greatest sound on the highway.

LANSING Voice of the Highway

©Altec Corp. 1981

easily installed.

1515 S. Manchester, Anaheim, CA 92803

CIRCLE NO. 2 ON READER SERVICE CARD

STEREO CATALOG and FM DIRECTORY

Get all the newest and latest information on the new McIntosh catalog. In addition you will receive an FM station directory that covers all of North America.











McIntosh Labora East Side Statio Binghamton, N.	atory, Inc. on P.O. Box 96 Y. 13904	SR
NAME		
1 ADDRESS		
CITY	STATEZI	P

If you are in a hurry for your catalog please send the coupon to McIntosh. For non rush service send the Reader Service Card to the magazine.

Popular Music Briefs





As insomniacs are doubtless aware, NBC's newly rerevamped *Tomorrow* show has become something of a showcase for rock-and-roll acts lately. English sensations Adam and the Ants made their network TV debut there courtesy

of noted rock fan **Tom Snyder**. Two questions immediately spring to mind: first, did the Ant on the far right once sit in front of me in Drivers Ed? And second, who looks weirder, Adam (center, in pirate drag) or Tom? Just asking.

—S.S.

WHEN Armstrong's Circle Theatre returned to TV with the recent two-hour special Live from Studio H—100 Years of America's Popular Music, the narrator was Henry Mancini. Since he was taking time off from a busy schedule of conducting concerts and composing for films to talk about music, we asked him to talk to STEREO REVIEW about anything that was on his mind as long as it was music.

"Whether popular music has gotten better lately, as is claimed, is not the point," Mancini said. "It's gotten different. It's more homogenized, for one thing. Jazz has become less pure, and country has become less pure as well—which is not to say they are any less good. But you can find whatever you are looking for in popular music today, and there's still some un-

homogenized cream around."

Mancini sees the nostalgia for the Fifties in general (and the early days of rock in particular) as a fad that will run its course like the fad for Indian music started by the Beatles. He is not much involved in such trends as New Wave and punk. "That kind of thing is always out there, but I take offense at spitting contests between the stage and the audience."

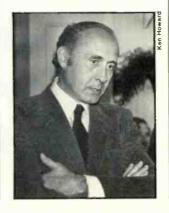
What interests him more is the shift toward classical music. "People are finally putting their money where they think their mouths ought to be. The reasons for the growing interest in classical music include the rise in the general educational level in this country since World War II and the rise in per capita income, which means that more people can afford to spend money on 'extras'—though I

hate to speak of classical music as something extra.

"There are still people who are too snobbish to be caught at a John Cage or Stockhausen concert, but they will get a record of it and listen at home." He thinks it's good that this closet classical audience helps ballance symphony-orchestra budgets through buying records if not concert tickets.

New Mancini compositions include the twenty-five-minute *Piece for Jazz Bassoon and Orchestra*, written for **Ray Pizzi**, bassoonist with the New American Orchestra, which has premiered the work and will record it in the fall. "The orchestra is unique," Mancini says. "It has more than eighty players—they all do studio work—and they play this piece better than most major symphony orchestras could. Pizzi himself is outrageously virtuosic."

For a number of years Mancini has endowed a scholarship in film music at U.C.L.A. and one in composition at the Juilliard School in New York. He mentioned with pride the good reviews for Edward Barnes' opera Feathertop written while



he was on a Mancini fellowship at Juilliard. "It's especially rewarding to know that you've helped a young composer during a key year in his development. I'm glad to be able to reinvest something in music. I've gotten a lot out of it."—W.L.

Dip you know that there's a bootleg album (on Melvin Records, no less) called "The International Battle of the Century—the Beatles vs. Don Ho"? Did you know that it's "electronically reprocessed to simulate mono"? Do you care? Well, if you do, you'll just have to have You Can't Do That!, a 440-page hardcover tome just published by the Pierian Press.

The work of one Charles Reinhardt, the book is the most detailed guide yet assembled to the countless **Beatles** bootlegs, counterfeits, and novelty records currently being offered to a Beatles-besotted public. It contains a 1,394-entry discography, it is extensively cross-indexed (recording dates, personnel, etc.), and it is illustrated. At \$14.95, just the thing for the Beatlemaniac or trivia freak on your Christmas list.

More to my taste is Phillip Norman's Shout! The Beatles in Their Generation (Fireside/Simon and Schuster, \$9.95), probably the definitive biography of the Fab Four. Norman seems to have interviewed virtually everybody who knew the lads since the time of their births. The result is a most readable account of their history (complete with some truly scandalous dirt) that somehow manages to skewer the Beatles myth while being at the same time oddly moving.

HE Broadway singing/dancing star Gregory Hines is making his film debut in not one, but two movies scheduled for early summer release: Mel Brooks' History of the World, Part I and Wolfen with Albert Finney, "It was like working at the opposite pole of what I knew from the stage." he says. "but I liked it. For one thing, you get six weeks to develop a character. I got a lot of help from the more experienced people I worked with—like Mel Brooks and Madeleine Kahn and particularly Dom de Luise. When a live performance is over, it's finished, gone forever. What I found very attractive about making movies is that when your work is done, something remains that will last '

Hines is currently starring on Broadway in Duke Ellington's Sophisticated Ladies, and his performance has been preserved in lasting form by RCA in the original-cast album of the show (RCA CDL2-4053-see Chris Albertson's review in this issue). Since Hines made his Broadway debut in Eubie! (about Eubie Blake), then worked in Salute to Black Broadway, and is now in an Ellington revue, we asked him to name a composer he'd like to see honored in a similar show in which he might have a part. "America has produced too many great songwriters for me to pick one," he said. "Be-



sides, we too often don't know who wrote the songs we love. I didn't fully appreciate the scope and talent of Blake and Ellington until I worked in these shows. If I should get a part in a salute to, say, Jerome Kern, I'm sure I'd be surprised to find out just how many of my favorite songs he wrote."

—W.L.

GRACENOTES: A&M recording Styx, who are threatening to become at least as ubiquitous as death and taxes, showed up recently at a game between their home-town hockey team, the Chicago Blackhawks, and the New York Islanders. In the photo, the band's James Young and John Panozzo cross sticks (no pun intended) with right-winger Grant Mulvey. ... Ex-Monkee Mike Nesmith just received an

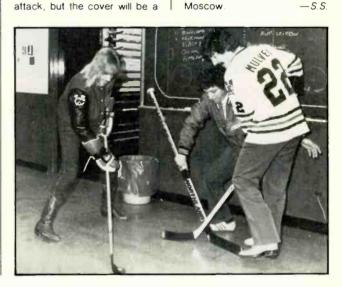
award for his video work from the Bay Area Music Archives. Nesmith, described by BAM as the one "who started it all" (a reference to a groundbreaking video promo of his hit Rio in 1977), is currently wrapping up his new, full-length video recording, "Michael Nesmith in Elephant Parts." a musical comedy for tape scheduled for summer release on Pacific Arts Viden Records The new Ramones album, tentatively titled "Assault and Battery," is being produced by Graham Gouldman, English hitmaker from the pop group 10cc; no clue as to whether this signals a softening of the Ramones' blitzkrieg punk attack, but the cover will be a

from Hitchcock's Psycho. Paging the House Committee on Un-American Activities: Pink Floyd has just gotten rave reviews-in Pravda! In a recent issue, a Russian critic cited the multi-platinum art-rockers as "four honest artists" despite the fact that pop music is "an ugly child of an unequal marriage between art and business." Pravda went on to characterize the group's blockbuster album "The Wall" as an attempt to "break through the divisions between the Western elite and the popular masses."

Black-market Floyd albums sell

for \$120 each in non-capitalist

parody of the shower scene



Discand Tape Reviews

By CHRIS ALBERTSON • IRV COHN • NOEL COPPAGE • PHYL GARLAND PAUL KRESH • PETER REILLY • STEVE SIMELS • JOEL VANCE

© = stereo cassette

• digital-master recording

= quadraphonic disc

® = eight-track stereo cartridge

① = direct-to-disc

■ monophonic recording

The first listing is the one reviewed; other formats, if available, follow

MICHAEL BLOOMFIELD: Cruisin' for a Bruisin'. Michael Bloomfield (vocals, guitar, piano, organ); instrumental accompaniment. It'll Be Me; Junker's Blues; Mathilda; Linda Lu; Papa-Mama-Rompah-Stompah; and five others. TAKOMA TAK 7091 \$7.98

Performance: Lost Recording: Good

Michael Bloomfield died last February at the age of thirty-eight, two months after this album was recorded. Unless there are some tapes still in the vaults, this will have to stand as his last statement. I wish I could say that it is a worthy valedictory to his distinguished career; unfortunately, it's not.

Like Presley's last session, this one has

good ideas and smooth execution, but no punch. To compensate for their fatigue, both men indulged in stylistic bravado: Presley sang at songs with his dignified baritone; Bloomfield could still play guitar and keyboards, but his vocal solos were boilerplate. The vocals here, imitating black Delta blues singers Bloomfield admired, are so thickly smeared with an assumed Southern accent that many of the lyrics are unintelligible. Only on Mathilda does he enunciate carefully. It'll Be Me (the flip side of Jerry Lee Lewis' first hit, Whole Lotta Shakin' Goin' On) slips in and out of coherence: I know the lyrics and still had trouble recognizing them. The most successful cut is the instrumental Papa-Mama-Rompah-Stompah, on which Bloomfield sounds assured

and excited. The rest, as Hamlet said, is silence, or should have been. J.V.

PEABO BRYSON: Turn the Hands of Time. Peabo Bryson (vocals); instrumental accompaniment. I've Been Down; My Life; Piece of My Heart; Dwellers of the City; Friction; and five others. CAPITOL ST-12138 \$7.98, © 4XT-12138 \$7.98, ® 8XT-12138 \$7.98.

Performance: Nice Recording: Good

Peabo Bryson wrote all but one of the ten songs he sings on this album of previously unissued recordings made "several years ago" but recently remixed and "sweet-(Continued on page 95)



Ellington: "Sophisticated Ladies"

HEN Duke Ellington died in 1974, he left behind a legacy of hundreds of recordings and compositions, the latter including both standards known throughout the world and tunes that linger in obscurity but stubbornly refuse to vanish entirely. Nearly three dozen Ellington compositions have been woven together for Sophisticated Ladies, a dazzling revue now on Broadway that will undoubtedly stimulate new interest in the work of this prolific music maker. The show's success is the fulfillment of a dream for Ellington's son Mercer, who is its music director, and RCA's new two-disc original-cast recording allows an even wider audience to share it.

If Sophisticated Ladies fails fully to capture the shades and strokes that gave Duke Ellington's music such a distinctive character, that is nobody's fault. Ellington used his orchestra both as a source of inspiration and as the brush to paint his extraordinary sound canvases; each musician in the band provided a unique shade to his palette. Everyone who has tried to reproduce the Ellington sound has failed, as no one knows better than Mercer Ellington. On discs, without the glitter of the stage production, Sophisticated Ladies seems to invite comparison with Ellington's own recordings. But while the show, having shed an apparently disastrous story line and script, owes its survival largely to the power of Ellington's music, it deserves to be judged on its own merits-as a tribute, not a mirror. Nonetheless, the occasional attempts to recreate the sound of a vintage number such as Jubilee Stomp or The Mooche come ad-

Sophisticated Ladies stars dancer/singer Gregory Hines, who tapped his way into the limelight in Eubie, a Broadway production based on the music of Eubie Blake, and Judith Jamison, the statuesque star of the Al-

vin Ailey Dance Company, for whom this show is a decided departure. Hines is a remarkable tap dancer (you can get an idea of his ability in that field from Kinda Dukish), but the album does greater justice to his vocal talent, which is considerable; an allsinging Gregory Hines album is undoubtedly somewhere in the works. Unfortunately, the album is not as good a showcase for Miss Jamison. Her dancing is strictly of the visual variety, and her singing is a painful experience. Listen to both stars on I'm Beginning to See the Light and you will know the pleasure and the pain of which I speak. Clearly aware of Jamison's limitations, the show's producers wisely gave her vocal cords a lot of rest, but if there is ever a videodisc release of this production she will undoubtedly shine.

wo ladies who do shine in the vocal department are Priscilla Baskerville, whose Solitude evokes memories of Kay Davis, and Phyllis Hyman, who shines on her own Arista recordings and here is heard to good advantage throughout. I was especially impressed by Miss Hyman on such slow numbers as I've Got It Bad and That Ain't Good and In a Sentimental Mood. The former is part of an effective medley that begins with Hyman's spirited rendition of I'm Checking Out, Goombye and includes Mood Indigo, which is sung with considerable silkiness by Terri Klausner. The vocal arrangements by Lloyd Mayers and Malcolm Dodds are complemented by Al Cohn's generally sensitive and tasteful orchestrations. The band includes some Ellington alumni and adopts that tired Broadway pit sound only with blessed infrequency; the score preserves just enough of the flavor of the periods when Ellington's creativity flourished and adds just the right amount of au courant sounds to give the production a wide appeal.

I am puzzled by the inclusion of Fat and Forty (You're My Meat), an awkward novelty number (by Skeets Tolbert) through which P. J. Benjamin (understandably) stumbles, since it is the only tune in the show neither written nor co-written by Duke Ellington. Dozens of shows could be put together from Ellington material without running the well dry, so why go elsewhere? Aside from Miss Jamison's singing, Fat and Forty is one of two sore thumbs that stick out here. The other is Imagine My Frustration, for which Ellington does share responsibility (with Billy Strayhorn and Gerald Wilson) but which gets an oddly dated rock-and-roll treatment that serves neither Ellington nor vocalist Terri Klausner well in 1981

Such errors in judgment are swiftly forgotten, however, for even without the graceful movements, palm skirts, two-tone shoes, checkered suit, and neon lights of the stage production, the disc version of Sophisticated Ladies is a fine tribute to a man whose music (and sartorial elegance) remains forever imprinted on the minds of all who had the good fortune to hear him play it in person. The irony is that Duke Ellington himself several times turned his music into stage shows; but where circumstances denied such productions as My People, Jump for Joy, and Beggar's Holiday a proper hearing, Sophisticated Ladies thrives. Somewhere he must be nodding, "I told you so." -Chris Albertson

SOPHISTICATED LADIES (Duke Ellington). Original-cast recording. Gregory Hines, Judith Jamison, Phyllis Hyman, P. J. Benjamin, Hinton Battle, Gregg Burge, Mercedes Ellington, Priscilla Baskerville, Terri Klausner (vocals); orchestra, Mercer Ellington cond. RCA CBL2-4053 two discs \$15.98.

ened." There's nothing very unusual about Bryson's voice or about his writing, but even if the scenery is familiar, you may enjoy this trip. The arrangements use simple rhythm patterns with an occasional horn accent, and I will be very surprised if any of these tracks makes it as a single. Bryson has done better work since he wrote them, and while I don't think this release will have an adverse effect on his career. I doubt it will boost it either. C.A.

CHANGE: Miracles. Change (vocals and instrumentals). Paradise; Your Move; Stop for Love; On Top; and three others. RFC, ATLANTIC SD 19301 \$7.98, @ CS 19301 \$7.98, @ TP 19301 \$7.98.

Performance: Disappointing Recording: Superb

There are no miracles in this collection of contemporary ballads and dance-tempo material. Ray F. Caviano, whose RFC label sporadically released a number of fine albums during the short-lived disco era, has apparently neither rethought his way to a post-disco sound nor inventively used disco conventions to create something fresh. The result in this case is uninspired. The beat is definitely there, especially on side two, but there is little else. The songs are melodically and lyrically weak, and the arrangements are so spare that the breaks sound as though a few tracks got left out of the final mixes. Lead vocalist Diva Gray almost makes the ballad Hold Tight work, but the bland orchestration, featuring some senseless noodling on guitar, gives her no help. The dance cuts are the high points. Heaven of My Life, which has the album's best melody, and Miracles are both good examples of today's laid-back dance music, but there's nothing really distinctive even about them. Everything here sounds very polished and is superbly engineered, but I expect a lot more imagination and excitement from an RFC release.

ERIC CLAPTON: Another Ticket. Eric Clapton (vocals, guitar); Albert Lee (guitar); Gary Brooker (keyboards); Chris Stainton (keyboards); Henry Spinetti (drums); Dave Markee (bass). Something Special; Black Rose; Blow Wind Blow; Another Ticket; I Can't Stand It; and four others. RSO RX-1-3095 \$7.98, @ CT-1-3095 \$7.98, @ 8T-1-3095 \$7.98.

Performance: Very good Recording: Good

This doesn't contain as much fancy guitar playing as some old-line Eric Clapton fans will want, but it finds Clapton following up his fine live-from-Japan album by staying more or less away from the RSO cute-hit formula. That is, most of the cuts are not attempts at finding another Lay Down Sally. A couple—Something Special especially-are trite, but there's also some hardnosed blues by Muddy Waters and Sleepy John Estes (the latter's song was apparently written about the time-Ry Cooder used to tell this story-Sleepy John drove off a bridge and almost drowned). And there are some interesting songs between those two extremes, although nothing really zings. The instrumentals seem committed to teamwork, which makes them cohesive but a little less daring than you might want, given some of the reputations involved. There are a couple of nice guitar breaks, though, and here and there a bit of silky slide work. Clapton's voice is featured, and he has developed into one of the prime stylists of bluesy rock, but, again, the songs are too small to let it do anything really exciting. Still, the album is all so nicely integrated and balanced that it might be just the thing for, say, late at night when the rest of the N.C. house is asleep.

STANLEY CLARKE AND GEORGE DUKE: The Clarke/Duke Project (see Best of the Month, page 74)

RECORDING OF SPECIAL MERIT

PHIL COLLINS: Face Value. Phil Collins (vocals, drums, piano); vocal and instrumental accompaniment. In the Air Tonight; The Roof Is Leaking; Behind the Lines; Tomorrow Never Knows; I Missed Again; and seven others. ATLANTIC SD 16029 \$7.98, @ CS 16029 \$7.98, ® TP 16029 \$7.98.

Performance: Good Recording: Good

Phil Collins is the drummer for Genesis, a pompous group I can do without, but on his own he is more than palatable. As a singer he tends toward a kind of jazz-balladeer style. His material, almost exclusively concerned with losing a loved one, has that quirky kind of British rationality that makes sadness seem so much more . . . reasonable. In the Air Tonight was the British single release; the one being plugged in this country is I Missed Again, with the horn section from Earth, Wind, and Fire punching out the riffs. Collins' solo version of Behind the Lines, which Genesis did on their "Duke" album, is more interesting than the group's effort, and his inclusion of Tomorrow Never Knows is the best memorial tribute to John Lennon that I've heard so far. As a friend of mine pointed out: "It's not only faithful to the Beatles and to John, but also to Ringo." I agree; Ringo deserves more credit as a drummer than he's ever been given. Nicely done, Mr. Collins. J.V.

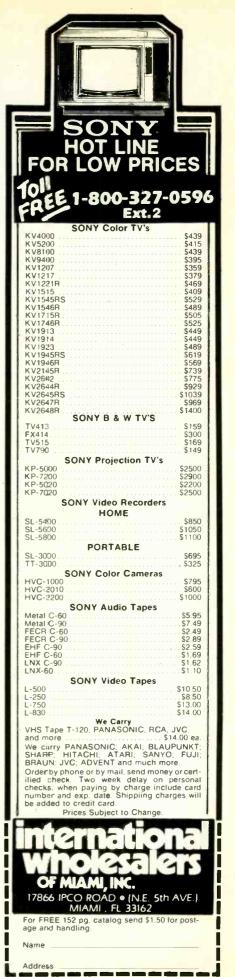
RECORDING OF SPECIAL MERIT

CRAZY JOE AND THE VARIABLE SPEED BAND: Eugene. Joe Renda (vocals, keyboards); the Variable Speed Band (vocals and instrumentals). Eugene; Buzz Me; A Gay Ranchero; Little Puffies; Ice Cream; and five others. CASABLANCA NBLP 7254 \$7.98, © NBL5 7254 \$7.98.

Performance: Funny Recording: Very good

Joe Renda isn't so much crazy as foxy. Using provincial humor-he's from White Plains, New York-he's created this character named Eugene who is slightly above contempt but certainly beneath dignity. The title tune here portrays Eugene's efforts to pick up girls, at which he is hopelessly—even irritatingly—inept. ("What'd you say your name was again?" "Uh-uhuh . . . Yoo-jeen.") The song was co-written and co-produced by Ace Frehley of Kiss, who surprised me by this demonstration of a sense of humor

Renda is in charge of the rest of the album, a satiric potpourri of disco, rock nos-





How Bout Champaign?

THOUGH some would have us believe that the world of American popular music consists of an oasis in Los Angeles and another in New York with a vast wasteland in between, it just isn't so. Fresh evidence recently arrived in the form of a splendid album by a new group that takes its name from—of all places—Champaign, Illinois, which is where most of its members met. The town has previously been known only as the main seat of the University of Illinois,

but from now on it should be known as the home of the most exciting new progressive-soul band to emerge since Earth, Wind & Fire threw off inherited formulas and began doing its own highly individual thing. "How Bout Us" is simply the best debut album I've heard in more years than I care to count, and Champaign even stacks up pretty well compared with those venerable soul ensembles that measure their success in gold and platinum.

It is hard, however, to pinpoint what exactly makes Champaign's music sound so invigorating. The vocals and instrumentals are firmly rooted in traditional r-&-b, but with fine touches of invention. The songs are instantly appealing yet more complex melodically than most of what catches on today. The melodies are springboards for intricate vocal performances marked by the clever inflections of lead singers Paulie Carman and Rena Jones. The ensemble textures demand response from the listener, as is especially apparent on the title track, a sweet but rocking ballad. I defy anyone to hear it twice without trying to sing along.

Champaign's leader is guitarist/key-boardist/songwriter Michael Day. Howard Reeder (guitar), Dana Walden (key-boards), and Michael Reed (bass) were Day's partners in a recording studio in Champaign, and their experience in the business shows. Yet their album has the freshness of a first time out, when a group is able to do just what it wants without worrying about duplicating the success of a previous effort. Champaign has taken familiar formats and stretched them just enough to let some air in. "How 'Bout Us' is a very bracing breeze from the heartland.

-Phyl Garland

CHAMPAIGN: How 'Bout Us. Champaign (vocals and instrumentals). Can You Find the Time?; Party People; Whiplash; I'm on Fire; How 'Bout Us, Spinnin'; Dancin' Together Again; Lighten Up; If One More Morning. COLUMBIA JC 37008 \$8.98, © JCT 37008 \$8.98.

talgia, and portraits of the lesser and more ludicrous citizens of White Plains. Buzz Me uses The Flight of the Bumble Bee in a parody of a disco string arrangement while Renda intones "sexy" code-word nonsense. A Gay Ranchero is from 1936; you can imagine what Renda does to update it. Little Puffies, with an outer-space character in a sped-up voice à la the Chipmunks, concerns nymphets in their fashion jeans. Stranded in the Jungle, a 1953 hit by the Cadets, is done in a straightforward manner, but that's all it needs to be hilarious, since it is such pure nonsense. Renda himself does most of the vocals-or, rather, the loony narration—but singer Kat McCord, who not only has a fine voice and excellent phrasing but knows how to sing satire, deserves special mention.

RECORDING OF SPECIAL MERIT

THE CRETONES: Snap! Snap! The Cretones (vocals and instrumentals). Love Is Turning; One Kiss; Swinging Divorcee; Lonely Street; Hanging On to No One; and five others. PLANET P-15 \$7.98, © PC-15 \$7.98, ® PT-15 \$7.98.

Performance: Very good Recording: Very good

Once in a while the accepted rule of sequencing an album, which dictates that all the hot material be on the first side, is

flouted and the really good stuff is put on the second. Such is the case with "Snap! Snap!" The Cretones' first album was bathed in reflected glory when La Ronstadt took three songs from it for her "Mad Love" album. If she doesn't grab Love Is Turning from this one, their second LP, then she's missing a sure bet.

The title track here is an impish instrumental. The other goodies on side two include Girls! Girls! Girls!, about the last man on earth watching a movie; Swinging Divorcee, a funny, nasty description of romance in Tinsel Town; and the ballad Lonely Street, which has a fetching chord structure. Mark Goldenberg, a Chicagoan turned Angelino, wrote the songs, sings, and plays guitar and synthesizer. He's a talent to watch and a pleasure to hear.

J.V.

DELEGATION: Delegation II. Delegation (vocals and instrumentals); instrumental accompaniment. Feels So Good; Dance, Prance, Boogie; Turn On to City Life; I Wantcha Back; Gonna Keep My Eyes on You; and five others. MERCURY SRM-1-3821 \$7.98, © MCR4-1-3821 \$7.98, ® MC8-1-3821 \$7.98.

Performance: Fitfully interesting Recording: Tubby

The instrumental emphasis on this second American release by Delegation, a trio of Jamaican men who live and record in Britain, is on midtempo rhythm-and-blues with a contemporary beat. The voices, however, suggest another style entirely; the group does best with slower material in which their honest, basically pop vocal harmonies have a chance to be heard. The ballad In Love's Time, for example, is a rhythmic gem set in an austere arrangement. Free to Be Me is even better; its simple production is the most clearly focused in the album, and it is very well sung by Ricky Bailey.

But those are the exceptions. For the most part, Delegation's warm, intimate singing is muddied by would-be-funky instrumentals or sacrificed entirely for the sake of a more "commercial" but much less distinctive sound. The punched-out bass ruins the potentially best song, Gonna Keep My Eyes on You, and consistently undercuts Bailey's fine vocals. And matters are certainly not improved by the strangely tub-by recording.

TOM DICKIE AND THE DESIRES: Competition. Tom Dickie and the Desires (vocals and instrumentals). Downtown Talk; Competition; House of Mirrors; You've Lost; and six others. MERCURY SRM-1-4018 \$8.98, © MCR4-1-4018 \$8.98.

Performance: Anxious Recording: Good

There's quite a lot of jangle and thud from this band, but what else would you expect

from a new group on their first album, especially a Boston group that moved to New York to gain (now, don't snicker) "life experience"? The subjects are also what you'd expect—identity crises, drugs, a hostile world, blah blah. The band has been quoted as saying that they haven't experienced any of these things but have observed them. Perhaps as time goes by they'll learn a few things firsthand, such as that they needn't try quite so hard.

J.V.

SHEENA EASTON. Sheena Easton (vocals); vocal and instrumental accompaniment. Morning Train; Don't Send Flowers; One Man Woman; Calm Before the Storm; and six others. EMI/AMERICA ST-17049 \$7.98. © 4ST-17049 \$7.98.

Performance: Jumbled Recording: Good

Sheena Easton is a young British singer with the same kind of drop-dead beauty as Jackie Bisset or Vivien Leigh. But that's it, folks! In this album she comes across as a performer in search of a style, and her voice is strictly wallflower. It was someone's nottoo-clever idea (possibly producer Christopher Neil's) to mix ballad, disco, and New Wave all in one unlovely haggis. The result is a godawful jumble with Ms. Easton never quite on firm ground anywhere. Recording, to put it mildly, does not seem to be her natural milieu.

P.R.

NELSON EDDY AND JEANETTE MAC-DONALD: On the Air. Nelson Eddy and Jeanette MacDonald (vocals); orchestra. Indian Love Call; When Day Is Done; Where or When; Lover; Romance; Shortnin' Bread; The Blind Ploughman; and seven others. TOTEM 1035 \$7.98.

Performance: Imperishable Recording: Crackly

The first side of this record, a transcription of an old Kraft Music Hall radio show from September of 1948 that finds Nelson Eddy and Jeanette MacDonald singing at, around, and occasionally to each other, is the gem here. The other side is a random pick-up of Eddy's other radio appearances.

By 1948 the team, idolized by some and dubbed "the Singing Capon and the Iron Butterfly" by others, had their last screen appearance several years behind them. MacDonald still maintained her haughtily whimsical attitude toward Eddy, who-her voice implied each time she spoke at himhad forgotten to wipe the mud from his shoes. After a few moments of badinage at Eddy's expense, MacDonald launches into an ear-shattering rendition of Romance. Later she performs Lover, the song she introduced, in the bravura style that used to give L. B. Mayer goose bumps and music critics headaches during her reign as the prima donna assoluta of Hollywood. Heard today she sounds like every other smalltown voice teacher with operatic aspirations that you've ever known. Next Nelson sings When Day Is Done "just for Jeanette." By the time they perform the duet most closely associated with them, Indian Love Call,

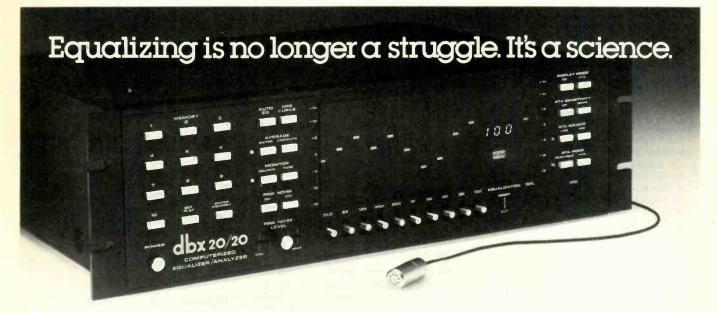
MacDonald's voice is showing noticeable signs of cadenza fatigue and Eddy takes that opportunity to bellow over her in the last half. Nelson's finish is a solo performance of *The Blind Ploughboy*. MacDonald spends a couple of minutes bowing off and another *Kraft Music Hall* has gone down in radio history. A wonderful example of old Hollywood being "gracious." *P.R.*

JOE ELY: Musta Notta Gotta Lotta. Joe Ely (vocals, guitar); instrumental accompaniment. Dallas; Wishin' for You; Hold On; Rock Me My Baby; Good Rockin' Tonight; Hard Livin'; and five others. SOUTH-COAST MCA-5183 \$8.98, © MCAC-5183 \$8.98, ® MCAT-5183 \$8.98.

Performance: Monochromatic Recording: Good

"Could I have a little more echo in my voice?" went a parody of Elvis a number of years ago, and I kept expecting to hear that very interjection throughout this album. Joe Ely comes on as a rockabilly stuck in a Jerry Lee Lewis tempo as well as in an echo chamber. It's all about as monotonous as listening to someone drive a ten-penny nail, only louder. Some rock critics-who may or may not know beans about country musichave touted Ely as some sort of emerging country-music avant-garde figure. So far, I can't see it. His vocals are not very distinguished or even very interesting, and in this release there's not a dram of imagination in either the songwriting or the instrumentals.

(Continued overleaf)



Forget all the problems of trying to equalize by ear. Because now there's the dbx 20/20. The world's first computerized equalizer/analyzer.

Now you can equalize any location in your room. Automatically. In 15 seconds. You can store up to ten equalization curves in the 20/20's memory. You can even analyze your music, your system, and your room acoustics with the 20/20's sophisticated measuring capabilities.

Hear the dbx 20/20 at your authorized dbx retailer, or send the coupon for a free brochure.

Equalizing has finally become a science. dbx, Inc., 71 Chapel St., Newton, Mass. 02195 U.S.A. Tel. (617) 964-3210, Telex 92-2522. Distributed throughout Canada by BSR (Canada) Ltd., Rexdale, Ontario. I'd like to know more about the dbx 20/20 and how it makes equalizing a science.

Name
Address
City State Zip
Phone
My current components are:

dbx, Incorporated, Dept. ES, 71 Chapel St. Newton, Mass. 02195 U.S.A.





Lisa Gilkyson

LISA GILKYSON, whose father Terry wrote All Day, All Night, Mary Ann, Greenfields, and the score for Walt Disney's Jungle Book, lives in New Mexico and is apparently a statewide favorite, but the major record labels have so far ignored her. They

should give a listen. She has enough of a voice to play in the big leagues now, and her songwriting occasionally flashes a sign of something special. Her new Helios album, "Love from the Heart," is uneven, mostly because her songwriting also seems amateurish at times-particularly in Delia, which is told from the point of view of the child of a single parent (Lisa is a single parent), and Tennessee Road (For Elvis), which seems to have the opposite problem, too much distance, too much secondhand information. But the best ones-Where Did I Go Wrong, Don't Go to Strangers, Song of the Sea-have lovely, almost haunting melodies and come close to meeting her apparently high standards for lyrics as well. Song of the Sea was written for the documentary film Ghosts of Cape Horn (title song by Gordon Lightfoot, narration by Jason Robards), and it is far and away the best thing here, truly a beautiful song. It seems obvious that Lisa Gilkyson is still learning her craft, but she has a tougher definition of craftsmanship than do some of the Big Stars who come my way.

-Noel Coppage

LISA GILKYSON: Love from the Heart. Lisa Gilkyson (vocals, piano); instrumental accompaniment. Scorpio Rising: Delia; Where Did I Go Wrong: Tennessee Road (For Elvis); Song of the Sea; Love from the Heart; Woman in Love; Having a Good Time; Don't Go to Strangers; Esta Salida del Sol. HELIOS HR-440-4 \$7.98, © CHR-440-4 \$7.98.

Matter of fact, this is one of the lousier records I've heard lately.

N.C.

RECORDING OF SPECIAL MERIT

FABULOUS THUNDERBIRDS: Butt Rockin'. Fabulous Thunderbirds (vocals and instrumentals). I Believe I'm in Love; Tip On In; Cherry Pink and Apple Blossom White; Mathilda; One's Too Many; In Orbit; and five others. CHRYSALIS CHR 1319 \$8.98, © CCH 1319 \$8.98, ® 8CH 1319 \$8.98.

Performance: Excellent Recording: Very good

Well, all right! The new album by this delightfully rowdy Texas band is a wowser. I Believe I'm in Love, written by the band's vocalist and harmonica player Kim Wilson, is a glorious throwback to the short, sock-'em juke-box single of old, and it's danceable in the extreme. One's Too Many, another Wilson song, is very close to the style of black urban singers of the Fifties and Sixties. Wilson is one of the few white musicians I've heard who can write such material from the inside out-he knows the content as well as the form. Tip On In, dedicated to the memory of the great and underrated Slim Harpo, is faithful to the original but breathes on its own. In Orbit is a raunchy, spirited instrumental, and the band's essay of Cherry Pink and Apple Blossom White is deliberate and charming folderol. If you missed the first two Fab 'Birds albums, by all means don't let this one get by you. J.V.

ELLEN FOLEY: Spirit of St. Louis (see Best of the Month, page 73)

IAN GOMM: What a Blow. Ian Gomm (vocals, guitar); instrumental accompaniment. Man on a Mountain; It Don't Help; Slow Dancin'; Jealousy; What a Blow; and seven others. STIFF/EPIC JE 36433 \$7.98, © JET 36433 \$7.98, ® JEA 36433 \$7.98.

Performance: Flat Recording: Good

Even though there's a lot of satisfying, real rock-'n'-roll guitar playing here by lan Gomm and his colleague Taff Williams, and even though the vocals and arrangements are highly professional, I don't find Gomm's second solo outing as interesting as his first. True, the album moves-so few rock albums have any real thrust to them these days-but the songs are on a journeyman level. They are meant to service the instrumental backing instead of the other way around. The title tune and It Don't Help are about the rigors of a musical career, and it's a sure sign that inspiration is on a low flame when rock musicians write songs about their profession. The function of any musician is to make people dream, not to submit emotional tax deductions. Show-biz is J.Vthe medium, not the message.

RECORDING OF SPECIAL MERIT

WAYLON JENNINGS AND JESSI COLTER: Leather and Lace. Waylon Jennings (vocals, guitar); Jessi Colter (vocals, piano); instrumental accompaniment. You Never Can Tell (C'Est la Vie); Rainy Seasons; I'll Be Alright; Wild Side of Life; Pastels and Harmony; I Believe You Can; and four others. RCA AAL1-3931 \$8.98,

AAK1-3931 \$8.98,
AAS1-3931 \$8.98,

Performance: Good but puzzling Recording: Very good

On the surface, this album might seem less than it ought to be, seeing as how Waylon Jennings is one of the great singers of our time and Jessi Colter, at the very least, writes neat melodies. But once you get into it, the striking thing is how much better it is than it ought to be, seeing as how Jennings and Colter have totally different styles and approaches with almost no shared ground on which to merge. (I should tell you that I happen to know, through fluke circumstances, that they've been talking about doing this album—and giving it this very title—for at least five years, giving my expectations time to build up.)

It isn't until I Ain't the One, quite straight-ahead for a Colter-written song, that they do anything special with two-part harmonies. Otherwise, it's mostly a now-Waylon, now-Jessi outing, with about four good but overworked songs giving it the feel of a sampler. Their attempt to twist one of those, having Waylon instead of Jessi do her What's Happened to Blue Eyes, just shows how different their styles are; I love Waylon's spacy, stuttering, open-string guitar style, but it doesn't go with this kind of song. Yet Jessi, in one of her turns, showcases an absolutely beautiful song called Rainy Seasons-nary a Waylonism in it anywhere—and he, in one of his turns, does his best Waylon-the-soft-voiced-balladeer thing with Mickey Newbury's You're Not My Same Sweet Baby. And things like that keep mounting up, and on balance it turns out to be a pretty danged good album.

N.C.

JORMA KAUKONEN AND VITAL PARTS: Barbecue King. Jorma Kaukonen (vocals, guitar); Vital Parts (instrumentals); other musicians. Runnin' with the Fast Crowd; Milkow Blues Boogie; To Hate Is to Stay Young; Rockabilly Shuffle; Snout Psalm; Love Is Strange; and four others. RCA AFLI-3725 \$8.98, © AFKI-3725 \$8.98, ® AFSI-3725 \$8.98.

Performance: Good playing Recording: Good

No doubt Jorma Kaukonen's a good guitarist, and it's not his fault that he can't sing since he wasn't blessed with much of a voice, but there's a prankster air about this album that keeps me from either taking it seriously or enjoying it as much as I might. As I listened, I couldn't help but recall the R. Crumb cartoons of the late Sixties, and I think that that is the emotional period in which Kaukonen is stuck. Perhaps it's his residence in San Francisco that makes him sound like a comfortable—even entrenched—iconoclast. San Francisco, like Chicago for Twenties jazz or Fifties blues, has a his-

tory but not, it would seem, a future. It's easy to revel in former glory even if the leaves are long off the vine. Kaukonen's versions of certified oldies such as Love Is Strange and Milkcow Blues Boogie are diminished by his don't-give-a-damn vocals (hell, I know he can't sing, but I wish he'd try!), and his own material is post-fad cynicism. It hardly seems to fill any real need.

B. B. KING: There Must Be a Better World Somewhere. B. B. King (vocals, guitar); Hank Crawford, David "Fathead" Newman (saxophone); Dr. John (keyboards); other musicians. You're Going with Me; The Victim; More, More, More, and three others. MCA MCA-5162 \$8.98, © MCAC-5162 \$8.98, ® MCAT-5162 \$8.98.

Performance: Above the material Recording: Good

If you like your blues slicked up and calculated, you are bound to go for "There Must Be a Better World Somewhere." But there are better B. B. King albums somewhere, probably on your own record shelves. Not that this one is a bad album, but King deserves better material than the stuff he rises above here; most of it is basic blues laced with lyrics it would be generous to dismiss as trite. Aided by saxophone soloists Hank Crawford and David "Fathead" Newman, King jumps the hurdles well, stumbling over the lyrics only on The Victim. He is a victim—of unimaginative production and writing.

C.A.

WILLIE NELSON: Somewhere over the Rainbow. Willie Nelson (vocals, guitar); vocal and instrumental accompaniment. Mona Lisa; Exactly Like You; Who's Sorry Now; I'm Confessin'; Won't You Ride in My Little Red Wagon; Over the Rainbow; and four others. COLUMBIA FC 36883 \$8.98, © FCT 36883 \$8.98, ® FCA 36883 \$8.98.

Performance: Good, actually Recording: Squeaky clean

Every time I play this, I start out with the spell broken. Mona Lisa is the first cut, and it calls to mind Homer and Jethro's Mona Lisa No. 2, many years ago, which ended, "Are you blue number two Mona Lisa/Or just a dadburned picture hangin' there on the wall?" You might think of this album as "Stardust No. 2," but Willie Nelson is really aiming for something slightly different. In "Stardust," ancient pop standards were rendered by his road band playing more or less the way it plays on country-rock stuff. For this one he has assembled a five-piece country-swing ensemble, featuring Johnny Gimble on fiddle, and the trick was to play another batch of ancient standards without multitudes of strings and horns and the other garbage the record-biz moguls hung on them before. And it's fairly successful.

As on "Stardust," Willie does the little vocal things that shock one into actually listening to stuff one normally takes for granted. Actually, he's getting back to part of his roots here; the country-swing bands in the Southwest during his youth played many of these same pieces. The picking is quite agile and fetching too, in that ultracool way of country swing. But this particu-

WHY PAY MORE!

Clarion

AM/FM with

⁵69



PE-554A

Pioneer \$84 pr. Bridgeless Speakers

TS-695

Jensen

Auto Reverse





R406

Sansui Amp Linear A & \$299

AU-D7

Sony's Best Seller

Call for the price



C-K71

Pioneer's Newest

⁵|44

HPM-700



Weekdays 9-9

Saturdays 9-5

TOLL FREE 800-356-9514

Cerwin

Over 100 Brands like:

Technics Pioneer Marantz Kenwood Sansui

lensen

Maxell Sony Empire Teac Altec Akai Sharp Dual Phillips Koss

Shure

Teac Vega Akai JBL Dual Audio Koss Technica TDK Clarion

Acutex Craig Scotch B.I.C. Stanton Pickering MDS

WISCONSIN DISCOUNT STEREO

2417 w. badger rd. madison, wi 53713

CIRCLE NO. 45 ON READER SERVICE CARD

e free call to Discount Sound can get: u the best price on thousands of items

800-638-6666

000-030-000

() PIONEER



SX-3700 AM/FM Receiver— 45 watts per channel, Digital-quartz tuner CALL HPM-700 4-way Speakers— 10-inch woofer ...\$148 ea PL-400 Turntable—

Quartz Direct Drive, fully auto.....CALL

CALL FOR PRICES ON ALL PIONEER MODELS

Technics



45 Watts per channel,
Digltal quartz tuner, 14
station presets CALL
SL-D1 Turntable—

Direct Drive, pitch control, strobe \$81

CALL FOR PRICES ON ALL TECHNICS MODELS

CAR STEREO

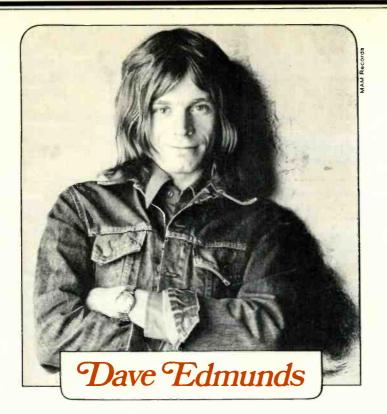
PIONEER KP-1500 PIONEER KP-5500 \$125 PIONEER KP-6500 \$156 PIONEER KP-7500 \$179 PIONEER KE-2100 \$171 PIONEER KPX-9000 \$152 PIONEER KPX-9500 \$169 PIONEER TS-694 \$ 48 PIONEER TS-695 \$ 82 CRAIG T-640 \$126 CRAIG T-687 \$385 BLAUPUNKT CR-4000 \$240 \$328 BLAUPUNKT CR-5001 SANYO CAR STEREO . CALL JENSEN CAR STEREO CALL

MANY OTHER CAR STEREO MODELS IN STOCK— PLEASE CALL FOR PRICES



12200 Parklawn Dr., Rockville, MD 20852 All orders shipped immediately • Phone orders accepted • Use your VISA or Master Charge • Call or write for price quotes on all the top audio brands • Write for free catalog • All merchandise in factory sealed cartons with full manufacturer's warranty.

301-881-8890



s the current trend toward revivals of ear-lier pop forms—ska, rockabilly, the blues, power pop, whatever-a holding action? A brand of nostalgia? A search for roots in a confused time? The last desperate gasp of an exhausted genre-rock-androll-doomed to extinction in the near future? All of these? None of these? Who cares? Here's Dave Edmunds' wonderful new album "Twangin ...," and, while there's not a note on it that could be remotely described as ground-breaking, overall it's so invigorating, so intelligent, and (paradoxically) so fresh-sounding that I find it hard to believe that there breathes anyone with soul so dead that he couldn't get off on at least parts of it.

Edmunds has worn a lot of hats over the course of his career: cult figure, guitar hero, producer (Phil Spector called him the best in the world). But recently he's emerged as a sort of Keeper of the Rock-and-Roll Flame, both on his own and as a member of the late, lamented Rockpile with Nick Lowe. He's become, in fact, a sort of oneman repository of all that's good in rooted American music of the last three decades, but because his pop instincts are so strong he's never come off solely as an academic, as some stuffy historian browsing through the archives in search of a doctorate. He understands that the basis for all good rock, country, and r-&-b is (believe it or not) swing; that some schlock can be quite sublime; that juke-box and radio fare need not be an insult to your intelligence or sensibilities. It's a truly egalitarian vision, though I doubt he's even conscious of the political underpinnings of what he does; in any event, that in itself may be a strength. Add to it a second-to-none facility at vocal and instrumental mimicry, and you have a pretty formidable artist. If he were a songwriter he'd be one of the immortals.

"Twangin" follows the format of Edmunds' earlier solo albums-a little rock, a little hard-core country, a little blues-but it's probably the most consistently excellent album he's ever come up with. The high points are a remarkable version of John Fogerty's evocative Almost Saturday Night, which manages to be simultaneously tougher and more winsome than the original; an authentic account of the classic George Jones hit The Race Is On; and an eerily accurate rendition of the early Elvis' Baby Let's Play House, which Edmunds has had lying in the can since 1968 (God only knows what the drug-addled progressive-rock fans of that day would have thought of it). But everything else is spunky, melodically memorable, and, on the most basic of levels. good fun . . . like the records we Sixties kids enjoyed back when Top-40 success was not necessarily a sign of artistic compromise.

At a time when much successful pop music is the most reactionary drivel since the days of *Doggie in the Window*, an album like "Twangin..." is one of the healthiest correctives I can think of. To quote an Edmunds album, "Get It!"—Steve Simels

DAVE EDMUNDS: Twangin... Dave Edmunds (vocals, guitar); instrumental accompaniment. Something Happens; It's Been So Long; Singin' the Blues; (I'm Gonna Start) Living Again if It Kills Me; Almost Saturday Night; Cheap Talk, Patter and Jive; Three Time Loser; You'll Never Get Me Up (In One of Those); I'm Only Human; The Race Is On; Baby Let's Play House. SWAN SONG SS 16034 \$8.98, © CS 16034 \$8.98, ® TP 16034 \$8.98.

lar assortment of ancient standards has a few too many chestnuts for my taste; we've never been able to get away from these songs, so how can we welcome them back? At least the Twinkle Twinkle Little Star at the end is not the time-waster you'd expect; it's an instrumental, either a Little Star I never heard of or mislabeled. Still, there's no denying that Ol' Willie makes you pay attention.

GILBERT O'SULLIVAN: Off Centre. Gilbert O'Sullivan (vocals, piano); instrumental accompaniment. I Love It But; What's in a Kiss; Help Is on the Way; Why Pretend; The Niceness of It All; Hello. It's Goodbye; and six others. EPIC JE 37013 \$7.98. © JET 37013 \$7.98.

Performance: **Sprightly** Recording: **Good**

After a three-year forced hiatus (he's had legal problems), Gilbert O'Sullivan is back with a collection of new songs. The album is sprightly and engaging enough, although I don't hear another Alone Again (Naturally) or Claire anywhere. But, then again, those hits were more than a decade ago; if they came along today they would cause hardly a ripple. O'Sullivan tries hard to be introspective in I'm Not Getting Any Younger and The Niceness of It All, but they both seem more like adolescent pulse-takings than mature self-appraisals. His main talent remains his ability to write and perform catchy little trifles, such as Things That Go Bump in the Night and Help Is on the Way, for his own and his listeners' amusement. Well, there's a place for that too.

RAY PRICE: A Tribute to Willie & Kris. Ray Price (vocals); instrumental accompaniment. Night Life; The Healing Hands of Time; Crazy; For the Good Times; and five others. COLUMBIA JC 37061 \$7.98, © JCT 37061 \$7.98, ® JCA 37061 \$7.98.

Performance: Good
Recording: Pretty good

Let's see now . . . Willie Nelson did an album of Kris Kristofferson songs, Willie and Ray Price did an album together, and Ray's done an album of Nelson and Kristofferson songs. Maybe Ray & Willie & Kris should form a trio and get it out of their systems. Actually, this album is a reissue of singles and previous album cuts (Ray's been looking to Willie and Kris for songs for years). They're all good, of course, and the first one, Willie's Night Life, gives you Price hitting high notes he doesn't often try for any more. He does-and did, when these cuts were recorded—have one of the larger voices, and if you don't have a Ray Price collection and want a sampler with no weak songs in it, this is it.

RAINBOW: Difficult to Cure. Rainbow (vocals and instrumentals). F Surrender; Spotlight Kid; No Release; Magic; Can't Happen Here; Freedom Fighter; and three others. POLYDOR PD-1-6316 \$8.98, © CT-1-6316 \$8.98.

Performance: Much metal, some mettle

Recording: Good

Guitarist Ritchie Blackmore is, you might say, the Vanilla Fudge factor in this group, and the album sounds definitely influenced by that era. The instrumentals are somewhere between Led Zeppelin and Bad Company, which doesn't exactly date them, with all this revivalist heavy-metal thundering about. And, indeed, a couple of the songs, Magic especially, seem mainly designed to get on the radio and stay there until they've thoroughly annoyed everyone and made a lot of money in the best Eighties tradition. But there's a Sixties approach to subject matter-many of the songs hold loosely to the suggested theme that it's our society that's difficult to cure—and there's an oldfashioned tension, in rock terms, running through it. Of course, the ending, Difficult to Cure, blending the best-known theme from Beethoven's Ninth Symphony into an otherwise tuneless hard-rock mishmash, is as cheap as Emerson, Lake, and Palmer with a good head of steam up, and I frankly don't think even the album's most straightforward "protest song," Can't Happen Here, gets to the heart of anything. But at least it is free of "mah baby" songs. N.C.

PHOEBE SNOW: Rock Away (see Best of the Month, page 72)

RECORDING OF SPECIAL MERIT

T-CONNECTION: Everything Is Cool. T-Connection (vocals and instrumentals); vocal and instrumental accompaniment. Groove City; Spinnin'; Paradise; Everything Is Cool; and four others. CAPITOL ST-12128 \$7.98. © 4XT-12128 \$7.98.

Performance: Good stuff Recording: Fine

Percolating percussive rhythms dominate these tracks and are, in fact, the point of many of them. What raises T-Connection above the ordinary is the fine musicianship in the busy, funky arrangements. The-ophilus Coakley (the "T" of the group) both writes and sings in a pop idiom; his attractive melodies contrast with the funkiness and create a distinctive combination. Spend the Night with Me, for instance, has a vocal arrangement that moves smoothly into and out of a pleasant and (for once) perfectly natural-sounding falsetto. The percussion really takes off in the direction of reggae in another good Coakley song, Give Me Your Love, which is rhythmically complex, melodic, and danceable all at the same time. Nor is Coakley afraid of sentiment. Heaven in Your Eves is an old-fashioned love song complete with violins and a crooned vocal.

The five men of T-Connection are really good, and their new album proves it's possible for a contemporary group to work within a commercial mode and still make distinctive music.

1.C.

CONWAY TWITTY AND LORETTA LYNN: Two's a Party. Conway Twitty, Loretta Lynn (vocals); instrumental accompaniment. Two's a Party; The State of Our Union; Lovin' What Your Lovin' Does to Me; I'd Rather Have What We Had; and six others. MCA MCA-5178 \$8.98, © MCAC-5178 \$8.98, ® MCAC-5178 \$8.98.

Performance: Southern-fried fun Recording: Excellent

Those superstars of country music, Conway Twitty and Loretta Lynn, are so downhome and open, so unabashedly Nashville, and so well matched that they are hard to resist as they team up here for a program of ballads totally drenched in corn oil. "I still believe in love songs/And the good in the good old days" they assure each other in one waltzy item, while in another they proclaim "the state of our union" to be in healthy shape. Health—a robust joy in living—is what this music is about. Their singing goes down easy, sure, but they know exactly what they're doing, and they do it admirably well. A wholesome disc. P.K.

COLLECTIONS

CONCERTS FOR THE PEOPLE OF KAMPUCHEA. The Who: Baba O'Riley; Sister Disco; Behind Blue Eyes; See Me, Feel Me. The Pretenders: The Wait; Precious; Tattooed Love Boys. Elvis Costello and the Attractions: The Imposter. Rockpile: Crawling from the Wreckage. Queen: Now I'm Here. Paul McCartney and Wings: Every Night. Rockestra: Let It Be. And eight others. ATLANTIC SD 2-7005 two discs \$13.98, © CS 2-7005 \$13.98, ® TP 2-7005 \$13.98.

Performance: Well-intentioned Recording: Average

A lot of talented people turned out in late 1980 for a series of Music for UNICEF charity concerts for the beleaguered people of Kampuchea (Cambodia). Most of the performers made it to this album, and what we get is a nicely balanced cross section of the current Big Names of English rock as opposed to, say, the retro-L.A. bias of the American "No Nukes" album. Again, of course, much is promised and little delivered, but you should probably buy this set anyway just so you can feel like a better human being. The proceeds of the album go to UNICEF, and this is the kind of good cause that mostly transcends political affiliations.

The music, unfortunately, is generally ho-hum. The Who's side duplicates live things they've already committed to vinyl in more spirited versions; it's of interest only to Who freaks who want to hear how new member Kenny Jones approaches the Basic Repertoire. Elvis Costello clocks in at a breathless 2:10 and is gone before you notice him, the Pretenders sound somewhat perfunctory, Queen is typically bombastic, the Clash is typically sloppy, lan Dury and the Specials are mildly amusing, and the Paul McCartney side, complete with the monster all-star Rockestra, is a sprawling mess. The only standout stuff, for me anyway, is provided by Nick Lowe and Dave Edmunds' now sadly defunct Rockpile. The boys do a sizzling version of Graham Parker's Crawling from the Wreckage and then are joined by Robert Plant (of all people!) for a Presley tune; it's a revelatory performance. Freed of Led Zeppelin's heavy-metal sludge, Plant turns out to be a thoroughly idiomatic rock singer, and the band backs him to the hilt, even if they can't end together. While there's nothing offensive here (except maybe the Queen bit, which does go on), there's not much to get excited about either; my guess is you really had to be there. But if you want to buy off your social conscience, you could do a lot worse. S.S.

(Continued overleaf)



CASSETTE BECKS

BLANK CASSETTE TAPE

TDK SA-C50 box of 10 .\$24 TDK SA-C90 box of 10 .\$29 MAXELL UD-XL2-C90 box of 12 ...\$41

VIDEO

J.V.C HR-6700\$825 PANA. PV-3200\$999 RCA VET-450\$849

CARTRIDGES

SHURE V15-4 .					.\$96
SHURE M95HE		,	,		.\$32
SHURE M97HE					.\$48
STANTON 881S				ı	.579

AIWA MICRO SYSTEM

SA-A22 AMP SD-L22 CASSETTE ST-R22 TUNER

COMPLETE SYSTEM ONLY! \$399

ACCESSORIES

TECHNICS SH-F101 ..\$ 59 AOC SOUNDSHAPER 2MK3\$199

Call Toll-Free! 800-221-0974

(except N.Y., Alaska, Hawaii) Mon.-Fri. 9Am - 5:30Pm Thurs. til 9Pm = Sat. 9Am - 5Pm E.S.T. or call (212) 253-8888

Write or call for FREE catalog!

STEREO CORPORATION
OF AMERICA

Dept. 107
1629 Flatbush Avenue
Brooklyn, New York 11210
MASTERCHARGE & VISA ACCEPTED

CIRCLE NO. 38 ON READER SERVICE CARD



THEATER · FILMS

CALIFORNIA SUITE (Claude Bolling). Original-soundtrack recording. Hubert Laws (flute); Claude Bolling, Ralph Grierson (piano); Chuck Damonico (bass); Shelly Manne (drums); Bud Shank (flute, soprano saxophone); Tommy Tedesco (guitar). CBS FM 36691 \$9.98, © FMT 36691 \$9.98.

Performance: Very good Recording: Very good

As blithe and mindless as the Neil Simon movie it was written for, Claude Bolling's California Suite is the latest effusion from the French-born composer whose Suite for Flute and Jazz Piano was on Billboard's best-seller charts for four years. The several parts of this "suite" are pretty interchangeable, and the patented high-toned, syncopated Bolling sound rolls out like yards and

yards of prettily figured fabric. It's a strange thing about Bolling's music—if you listen closely there isn't much to hear, but if you just let it wash over you, the experience is not at all unpleasant. Throughout, Hubert Laws' expert handling of the flamboyant flute passages, Chuck Damonico's crisp, clear bass, Shelly Manne's drums, and Bolling's own glittering pianism put an impressively high sheen on the material.

P.K.

DANCE CRAZE. Original-soundtrack recording. The Specials: Concrete Jungle. The English Beat: Mirror in the Bathroom. Bad Manners: Lip Up Fatty. Madness: Razor Blade Alley. The Selecter: Three Minute Hero. The Bodysnatchers: Easy Life. And nine others. Chrysalis CHR 1299 \$7.98, © CCH 1299 \$7.98, ® 8CH 1299 \$7.98.

Performance: Variable Recording: Good

This collection of live tracks by some of the stars of the British ska movement is, unsurprisingly, a pretty mixed bag. It serves reasonably well as an introduction to the style if you supplement it with Island's two collections of vintage tracks by the artists who originally invented the stuff (circa 1961), but there's no escaping the fact that ska is a rather limited form—far more so than reggae, which developed out of it. I can under-

stand the live appeal of the groups here: they're highly visual (Madness is funny in a Spike Jonesish way, and the Selecter's Pauline Black is a real charmer on stage). and it's good to see integrated bands playing non-disco black dance music. But neither of those qualities comes across on vinyl, and, in any case, for a ska band to work in 1981 it has to be long on personality. Here, only the English Beat qualifies. Their druggy paranoia and Fifties jazz overtones are appealing and unique; once you hear this band, you can't mistake them for anybody else. The rest of the groups in Dance Craze have their moments, particularly the Specials, but compared with the English Beat they all sound pedestrian.

THE NEW MOON (Sigmund Romberg-Oscar Hammerstein II-Herbert Stothart). Excerpts from the original-soundtrack recording. Lawrence Tibbett (baritone); Grace Moore (soprano); others; orchestra. PELICAN & LP 2020 \$7.98.

Performance: Wonderful kitsch Recording: Decrepit

The New Moon, the 1928 Sigmund Romberg operetta about a French revolutionist who eludes his royalist enemies and finds happiness on a tropical isle with his beloved Marianne, is rife with tunes my mother used to hum at her housework. It seems to me that while I was growing up it was always being revived somewhere, or they were making still another movie of it when they weren't offering a medley of its melodies as part of the spectacular stage show at Radio City Music Hall. Actually there were two movies, one with Lawrence Tibbett and Grace Moore in 1930 and another ten years later with Jeanette MacDonald but without Nelson Eddy.

The decision by Pelican Records to release excerpts from the original 1930 MGM soundtrack was nothing less than inspired, however, and the record has to be heard to be believed. Not to take anything away from Mr. Tibbett or Miss Moore, who could sing rings around the Jeanette MacDonalds and Nelson Eddys of this world with stoppers in their mouths, but there has never been anything more wonderfully silly than that movie of New Moon. The scene was shifted from a New Orleans plantation and a ship on the Caribbean to the Caspian Sea, where Mr. Tibbett, in the role of Lt. Michael Petroff, pants after Miss Moore as the pouting Princess Tanya. Most of the story line hinges on whether the princess will forgive the lieutenant for singing a "vulgar song" about a farmer's daughter, which had to be written into the score by Hollywood composer Herbert Stothart. In the end, after putting down a mutiny, the lieutenant finally wins the princess. The dialogue left on the record is treasurable, and we get to hear two of the best warblers who ever took leave of the opera stage for the soundstage making the most of Lover Come Back to Me, One Kiss, Stouthearted Men, Wanting You, and all those other songs my mother loved (along with the rest of her generation) when movies like New Moon offered escape from the grey winds of the Depression blowing outside the local Loew's. Little has been done to improve the sound of the 1930 recording, which is rather noisy at first but PK quiets down as it goes along.



Rex Harrison, Teacher of Singing

F there isn't a statue of Rex Harrison erected somewhere by the ASG (Aging Star Guild), then there ought to be. If it

hadn't been for his breakthrough work all those years ago in My Fair Lady, in which he was the first star to "talk" his musical numbers, where would the scores of overthe-hill, tone-deaf film stars who seem to have appeared in every second Broadway show since be today? No, the blame and/or credit must rest on the exquisitely tailored shoulders of Mr. Harrison. Of course, what none of the others have going for them is the Harrison charm, the superb Harrison diction and timing, the Harrison acting ability, or the Harrison wit-but they keep on trying anyway. Harrison doesn't have to try at all, as his new DRG album, "Accustomed to Her Face," demonstrates. He is a lithe and elegant vocal wonder, deftly creating roles for himself in each song. His technique and self-assurance are so overpowering that by the time he finished that old music-hall relic One of Those Songs, at the end of side one, without actually singing a note of it, I began to wonder what a Harrison version of Boris Godunov or Siegfried might be like. Smashing, probably. Peter Reilly

REX HARRISON: Accustomed to Her Face. Rex Harrison (vocals); orchestra. As Time Goes By; These Foolish Things; One of Those Songs; Gigi; The Second Time Around; I've Grown Accustomed to Her Face; A House Is Not a Home; Try a Little Tenderness/How to Handle a Woman; Everybody's Out of Town; Have You Met Miss Jones?/Wait Till You See Her; The Best Thing for You/Change Partners; I Thought I Had Time. DRG SL 5193 \$7.98, © SLC 5193 \$7.98.



BOB BROOKMEYER: And Friends. Bob Brookmeyer (trombone); Stan Getz (tenor saxophone); Gary Burton (vibraphone); Herbie Hancock (piano); Ron Carter (bass); Elvin Jones (drums). Jive Hoot; Skylark; Wrinkle Time; Who Cares; and four others. COLUMBIA PC 36804 \$5.98.

Performance: Excellent Recording: Very good

This album first appeared in 1965, and Bob Brookmeyer and his "friends" were considered an all-star group even then, but Ron Carter, Herbie Hancock, and Gary Burton were relative newcomers. As members of the Miles Davis Quintet, Carter and Hancock were not exactly unknown, and Burton's visibility was also increasing as a Stan Getz sideman. Brookmeyer had himself been a Getz sideman in 1953, and at the time of this recording drummer Elvin Jones was propelling John Coltrane's group. Even with so many luminaries in one group things could have gone wrong, but all went well and the music does not sound the least bit dated to my 1981 ears.

I only wish Columbia had reissued the whole package intact. Bob Cato's cover art for the original release showed more imagination and originality than Ken Robbin's grainy photo of people on a beach, and Dan Morgenstern's original liner notes were more informative and pertinent than Mort Goode's updated replacement. Well, at least the fine music hasn't been tampered with.

RECORDING OF SPECIAL MERIT

DON BYAS: Master Balladeer. Don Byas (tenor saxophone); Mary Lou Williams, Beryl Booker (piano); other musicians. Lullaby of the Leaves; O.W.; Lover Come Back to Me; Why; Moon Glow; I Should Care; and six others. INNER CITY © IC 7018 \$7.98, © TIC 7018 \$8.98.

Performance: Vintage Recording: Good mono

Tenor saxophonist Don Byas came from Oklahoma, spent the early part of his career in a swing environment on the West Coast, then moved east, graced New York's 52nd Street, fed the early flames of bop, and finally, touring Europe with the Don Redman band in 1946, simply got off the circuit and settled down in Holland. This album from the French Vogue label's Jazz Legacy series contains twelve performances Byas recorded with three different groups between 1953 and 1955. Half of them (all of side one) are with a trio led by Mary Lou Williams. Rich in texture, these performances seem to reflect an old friendship warmed (Continued on page 105)

CALL TOLL FRE (800) 223-2706		makic the month	register (Aurya
(000) 220 2700		Maria	
PIONEER Car Stared	MARY STEEL		BLANK TAPE
INDASH CASSETTE UNITS		THE PARTY OF THE P	*TOK
KEX 20 219.99	JENSEN T415	In-Dash Stereo Cass.	SA C-90 (Cr) 2.99
KPX 9500 181.99 KPX 9000 159.99	PLUS FOA.3000 FO	1 & Amp 20099	SA C-60 (Cr) 2.18
KE 5100 219.99	#250 00	2 9 WILL A A WILL A A WI	AD C-90
KE 2100 182.99	reg. \$350.00 NO	OW ONLY ZJJ	0 C-90
KP 8500 145.99	BLAUPUNKT		0 C 60 1.19
KP 7500 182.99	CR3001 Indesh Cassette 469.99	JENSEN JERSEN our sterrors	REEL-TO-REEL
KP 6500 162.99	CR 5001 Indash Cassette 349.99	call teday for our low prices	LB 3600
KP 5500 132.99 KE 2002 Foreign 217.99	CR 4000 Indash Cassette 269.99	JENSEN SPEAKERS	L-3600 10" 14.89
EP 8000 Foreign 147.79	CR 2001 Indash Cassette 259.99	Triex II J1933 (6x9") . 84.99/pr Coex II J1937 (6x9") . 64.99/pr	L-1800 7" 5.29
UNDERDASH CASSETTES	CR 2000 Indesh Cassette 205.99 BEA 200 Equalizer 169.99	Coex (f J1941 (5%") . 54.99/pr	maxell
KPX 600 119.99	HOME ENTERAINMENT	Triax J1001 94.99/pr	C-90 UDXL-II (Cr) 3.39
KP 77 G 102.99	Tesc A668 199_99	Triex J1065 (6x9") 62.99/pr Triex J1101 (4x10") 62.99/pr	C-60 UDXL-II (Cr) 2.49 C-90 UDXL-I 3.39
KP 66 G 82.99	Teac A550Rx Cassette . 399,99	Triax J1174 (5%") 62.99/pr	C-60 UDXL-1 2.49
KP 506 136.99 POWER AMPLIFIERS	Sansui 59002 Receiver 405.99	Coax J1069 (6x9") 40.99/pr	C-90 UD 2.79
GM-4 51.99	Sansui 39002 Receiver 278.99 Sansui 0350 Cassette 286.99	Coax J1105 (4x10") 40.99/pr	C-60 UD 1.89 REEL-TO-REEL
GM-120 109.99	Koss CM-1010 Sokrs . 354.99/or	VIDEO	UD-35-908 7" 6.79
AD-30 95.99	Koss M80 Mini-Spkrs 199.99/pr	RCA VET 650 (VHS) 1099.00 RCA VET 250 (VHS) 789.00	UD-35-908 7" 6.79 UD-35-90 7" 5.49
AD-50 144.99	Koss K4OS Delay 349.99/pr	Panasonic I'V1750 (VHS) 1099.00	UD-35-180 10" 15.29
CD-5 Comp 95.99	Pioneer CTF950 Cass 399.99	SONY SL-600 (Beta) . 945.00	SONY FeCr C-90 2.79
SPEAKERS TS-695	Paineer SX 3700 268.99	SONY SL-5800 (Beta) 1099.00 BLANK VIDEO CASSETTES	RECOROS
TS-698 99.99/pr	Pioneer PL 400 149.99	Sony L-75il (Beta) Special, 14.49	ROCK JAZZ CLASSICAL
TS-X6	JVC KDA-7 349.99 Atari CX 2600 Game 149.99	Sony L-50H (Beta) 12,99	Minimum Order 4 Records
TS-X9	Mattel Intellivison 249.99	TOK T-128 (VHS) 15.49	ALL 7.98 List Daily 4.85
TS-167 45.99/pr	PHONO CARTRIDGES	HEADPHONES	ALL 8.90 List Only 5.35
TS-168 73.99/pr	Shure V15 Type IV 105.99	Koss Pro 4AAA Special . 49.99	ALL 9.98 List Daily 5.85
TS-M2 33.99/pr	Shure V15 Type III HE 86.99	Koss HVXI.C 48.99	Tapes, Camettes, or 8Tracks
- SANYO CAR -	Shure M97HE 56.99 Shure M95 HE 36.99	Koss KSP Rew	,30 addf,
FT 1498 229.99	Audio Technica 155LC. 109.99	Sennheiser HD430 75.99	No Telephone Orders Accepted
FTC 26 105.99	Audio-Technica 140LC 64.99	Sennheiser HD222 73.99	ORDERING INSTRUCTIONS All merchandise is Factory Fresh
FTC-16	Audio-Technica 125LC 39.99	Sennheiser H D420 52,99	with menufacturer's warrenty,
FTC-6	Stanton 881\$ 82.99	Sennheiser HD414 47.99	Send Money Order or Cashler's Check for shipment within 24 hrs.
CLARION	Stanton 681EEES 62,99 Stanton 681EEE 56,99	Sennheiser H D400 27.99 Audio Technica ATH-7 99.99	Add shipping charge \$4.25, P.R., & Canada add 10% of order.
PE-751C Indash Cassette, 243.99	Empire 400TC 22.99	Audio-Technica ATH-7 . 55.99	Personal Checks held for 3 weeks.
PE-554 Indash Cassette, . 89.99	Empire 20002 54,99	Audio-Technica ATH-3 . 41.99	Customer Service Hot-Line, call (212) 683-9088.
300-EQB Equalizer 141.99	Pickering XSV4000 68.99	Sony MDR-7 59.99	We carry full lines of Sherwood.
150-EQB Equalizer 111.99	Pickering XSV3000 49.99	Sony MDR 5A 49.99	Harmon-Kardon, Nikko, Sonus, as well as Sony, Mitsubishi, Craig,
100-EQB Equalizer 79.99	Pickering X V15-750E 33.99	Sony MDR 3 34.99	and Concord Car Stereos
	WRITE FOR FE	REE CATALOG	THE RESERVE OF THE RE
			CALL TOLL FREE
	III tiic Electron	- (00	
	File Cleater		0)223-270 6
			THE RESIDENCE OF THE PARTY OF T
1263 Broadway New	York , N.Y. 10001 Call (2	212) 484.5500	
NO.	Can (2		. v. nawaii, Alaska, Lanada

CIRCLE NO. 3 ON READER SERVICE CARD

CALL US!

Stereo Discounters new Fall '81 Hi-Fi and Home Entertainment Buying Guide will be available soon. It's even bigger and better than ever, with page after page of the latest, the best, and the most



Call TOLL FREE

for our price quotes or our catalog of the latest in audio & video equipment!

1-800-638-3920





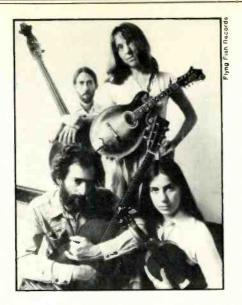
innovative consumer electronics products. We've got the newest equipment from over 100 of the world's leading manufacturers of hi-fi, video, car stereo and personal computers. Stereo Discounters new Buying Guide is full of manufacturers specifications & illustrations of the latest in sight and sound, home information and entertainment, for your home and car. Call one of our audio/video consultants today TOLL FREE to reserve yours. And be sure to ask about our many unadvertised specials. Stereo Discounters—we're not just stereo anymore!

STEREO DISCOUNTERS

6730 Santa Barbara Ct. Baltimore, MD. 21227

Making Real Music: Trapezoid and Figgy Duff

Trapezoid, right: Ralph Gordon and Lorraine Duisit, top; Paul Reisler and Freyda Epstein, bottom. Figgy Duff, below: Geoff Butler, Pamela Morgan, Noel Dinn, and Dave Panting.



TRAPEZOID is what happens when four musical dropouts from different parts of the country meet in West Virginia. I wouldn't want you to get the wrong feeling about that word "dropout." These are obviously productive people and, for all I know, they may espouse the same values as the average middle-American nuclear family (though I doubt it). But West Virginia is not a place you go to to join the great American business-of-music machine; it's a place you go to to get said machine off your back and do something different, a place you drop out 10.

On their new Flying Fish album, "Now & Then," Trapezoid (which was put together about five years ago by four other people) is doing something different, something interesting, and, to my mind, something marvelous. Their sound includes, at various times, voices, violin and viola, mandolin and mandola, guitar, cello and bass, bowed psaltery, and hammered dulcimer. The "country" basis of this is obvious, but the four members of Trapezoid also share a classical training, a taste and a feel for older jazz, and, as Michael Kline (who wrote the notes) puts it, "a passion for Irish music" (one might say Scottish and English as well). What they also share is intense musicality and imagination; there are so many different and interesting (and beautiful and peculiar and funny) things on this record that you just want to go down to West Virginia and hug the four of them.

It takes a certain turn of mind to write and perform a piece called Silverplume Waltz that is a waltz only in its bridge section and otherwise meanders right back into 4/4. It takes a certain rhythmical force of character to put an asymmetrical rhythm onto a traditional tune (Do You Love an Apple) and make it over wholly while seeming perfectly natural. It takes both guts and a sense of humor to echo the Boswell Sisters on Down Home Rag and do it well enough to be taken seriously. I don't know what it takes to come up with The Lakes of Pontchartrain, but it is just beautiful.

What you really have to respond to is the

sound of this group: the plinking and plunking, buzzing, sweeping, ringing, droning, and wailing acoustic construction that changes from song to song to give you every facet of the geometry involved here. There's very little of this sort of thing generally heard today. God bless those dropouts.

IGGY DUFF is three males and a female native to Newfoundland, which, if you didn't know, has an ethnic basis of English and Irish with "a sprinkling of Scottish, Welsh, French, and Basque" (!). Figgy Duff, which has an aural basis of female vocals, accordion, guitar, bass, and drums, with a sprinkling of tin whistle, piano, mandolin, and vocal harmony, sings and plays songs, jigs, and reels they learned from some of the older inhabitants of Newfoundland. They're bloody good.

That accordion takes you back right away to the "country" music of the British Isles and Ireland, but the drums would never have been present but for rock-and-roll. The combination is devastating, and the lyrics, dealing with love in some of its coarser, earthier manifestations, keep the music ringing true. Again, it is the overall sound—the predominantly minor keys and modes, the accordion, the drums, the almost seventeenth-century vocal technique of Pamela

Morgan—that makes the record. Morgan, by the way, is also a virtuoso of the tin whistle, and her solo on *The Fisher Who Died in His Bed* shows the incredible communicative power of that venerable folk instrument.

If Figgy Duff has a weakness (given self-imposed repertoire and style limitations), it is one of too much reliance on Morgan's voice; too often she sings the verses and the choruses, and the ears cry for the timbre of a couple of male voices to alternate with hers. But she does sing well. The recording was mastered at half speed, is a self-declared "audiophile recording," and is really quite a knockout.

Both these groups, from different directions, adjoin and impinge upon territory currently held by Steeleye Span. In spite of this, their distance from the Top-40 commercial gristmill is at least as great as the distance from West Virginia and Newfoundland to New York and Los Angeles. Both groups are a reassurance that if we can just get beyond the self-serving palaver that characterizes the communications industry and the music business today, there is still real music on this continent.

—James Goodfriend

TRAPEZOID: Now & Then. Lorraine Duisit, Freyda Epstein, Paul Reisler, Ralph Gordon (vocals and instrumentals). Devrah's Delight; Do You Love an Apple; Medley—Now & Then/Round the Horn/Tucker's Barn; The Blacksmith; Write Me a Letter; Down Home Rag; The Old Road to Maryland; There Ain't Nobody Here but Us Chickens; The Lakes of Pontchartrain; The Silverplume Waltz; God Bless That Moonshiner. FLYING FISH FF 239 \$7.98.

FIGGY DUFF. Noel Dinn, Pamela Morgan, Dave Panting, Geoff Butler (vocals and instrumentals). Medley—Half Door/Larry's Lancer/Mother on the Doorstep; Rabbits in a Basket; Now I'm 64; The Greenland Disaster; Tinker Behind the Door; Fisher Who Died in His Bed; Four-Stop Jigs; Quand J'Étais Fille à l'Âge Quinze Ans; Kissing Dance Medley; Rosy Banks of Green; Geese in the Bog; Matt Eiley; Emile's Reels. POSTERITY PTR 13014 \$8.98 (plus \$1.02 postage and handling from Phonodisc Ltd., 30 Malley Road. Scarborough, Ontario, Canada).



anew. As annotator Herb Wong points out, Williams' ballad Why is exceptionally beautiful and ought to find its way into more repertoires.

There are also three cuts Byas did with an all-woman trio led by the late Beryl Booker on a 1954 European tour. One of these, I Should Care, has the pianist—who accompanied both Dinah Washington and Billie Holiday—singing in a pleasantly intimate style. And there are three selections with a European quartet that includes Belgian vibist Fats Sadi. Byas sails through it all, again and again reminding us of what a great loss his migration from the American scene was. There is no plethora of Don Byas albums, so I strongly advise you to get this one while you can.

RICHIE COLE: Side by Side. Richie Cole, Phil Woods (alto saxophones); Eddie "Lockjaw" Davis (tenor saxophone); John Hicks (piano); Walter Booker (bass); Jimmy Cobb (drums). Donna Lee; Scrapple from the Apple; Naugahyde Reality; and three others. MUSE MR 5237 \$7.98.

Performance: Spirited Recording: Fair remote

This album was recorded at a concert in Denver, Colorado, last summer, and while it does not show Richie Cole's alto playing to as great advantage as did some of his previous studio releases, it does find him in more interesting company than usual. Most interesting is the presence and participation of fellow saxophonists Eddie "Lockjaw" Davis and Phil Woods; the former is heard only on the opening number, Save Your Love for Me, but he more than makes his mark with that one statement. Nevertheless, it is one of the weaker tracks overall, for the combination of Cole and Woods is what really makes this release shine, from their breakneck improvisations on the bebop standards Scrapple from the Apple and Donna Lee to a laid-back blues, Eddie's Mood, dedicated to the late Eddie Jefferson (with whom Cole was closely associated).

I would be unforgivably remiss if I did not mention the rhythm section that cooks throughout this set, with a special note for pianist John Hicks' burning solo on *Donna* Lee. Try this album; you'll love it if bop or just plain good jazz is your thing. C.A.

RECORDING OF SPECIAL MERIT

ROY ELDRIDGE: I Remember Harlem. Roy Eldridge (trumpet, piano, vocals); Don Byas (tenor saxophone); Claude Bolling (piano); other musicians. Baby, Don't Do Me Like That; I Remember Harlem; Black and Blue; Just Fooling; I'd Love Him So; L'Isle Adam; Fireworks: Hollywood Passtime; and eight others. INNER CITY © IC 7012 \$7.98.

Performance: Excellent Recording: Good mono

If you can recall a Roy Eldridge performance that was ever less than interesting, I'd be very much surprised. Even when Eldridge sings in fractured French, there's so much musicality in his delivery that it is almost impossible not to become absorbed. And he virtually explodes on the playing end of a trumpet, a position he holds through most of this Inner City set.

"I Remember Harlem" is another release in the French Vogue label's Jazz Legacy series, the second to be devoted to Eldridge. Recorded in 1950 and 1951, the album presents various sides of Eldridge: as vocalist and soloist extraordinaire with two different groups, in a couple of duets with the then twenty-year-old pianist Claude Bolling, and as piano soloist. Eldridge is, of course, a strong individualist, but the influence of the grand master, Louis Armstrong, is unmistakable. The two duets here. Wild Man Blues (wrongly credited to Lil Armstrong) and Fireworks, are virtual mirrors of the early Armstrong performances with the Hot Seven and Hot Five, and Bolling's work on the latter cut clearly emulates the original Earl Hines interpretation. A far more original approach to the instrument is found in Eldridge's three piano solos, although they appear to be what is commonly referred to as "throwaway" tracks and may in fact never have been intended for release. Three of the sixteen tracks in this album have, in fact, never before been issued, including two wonderful quintet selections featuring tenor saxophonist Don Byas that are alone worth the price of admission.

CA

RECORDING OF SPECIAL MERIT

JAN GARBAREK: Folk Songs. Jan Garbarek (soprano and tenor saxophones); Egberto Gismonti (guitars, piano); Charlie Haden (bass). Veien; For Turiya; Cego Aderaldo; and three others. ECM ECM-1-1170 \$8.98, © M5E-1170 \$8.98.

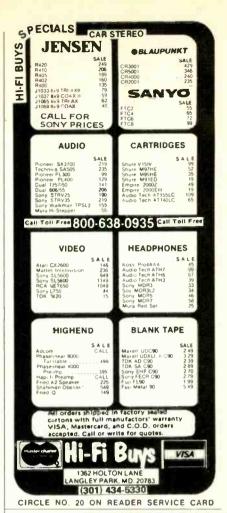
Performance: Haunting
Recording: Extraordinary

If you have ever heard Norwegian tenor saxophonist Jan Garbarek cast his sounds across a studio, you probably imagined a Viking's mournful horn dancing across the quiet waters of a misty fjord. If you have ever heard Egberto Gismonti's expressive guitar and piano amplify his Brazilian soul, you probably formed some equally romantic mental picture. Now imagine the two, not only combined, but cemented together by the masterful and sensitive bass playing of Charlie Haden—sheer delight, right? Right. Now stop this time-wasting imagining and do whatever you have to to get hold of "Folk Songs."

HARRY JAMES AND DICK HAYMES: James and Haymes. Harry James (trumpet); Dick Haymes (vocals); Harry James Orchestra. Flying Home; All or Nothing at All; Sonata Moderne; Carnival of Venice; Cherry; Music Makers; The Things I Love; Here Comes the Night; and eight others. CIRCLE @ CLP-5 \$6.98.

Performance: Interesting Recording: Good

These tracks were recorded in 1941 when Harry James and his orchestra were approaching the peak of their popularity. James' trumpet work was often exciting, but unfortunately it was just as often bombastic and gimmicky, as in such chestnuts as Flight of the Bumble Bee and Carnival of Venice. The less said about his own composition, Sonata Moderne, the better. He and his orchestra provide a fine setting, however, for the young (and now late) Dick









Your National Headquarters for Name Brand Electronics by Mail

* Full Manufacturer Guarantee Applies to All Sales!!

- * Orders Shipped in Factory-Sealed Cartons— **Most Within 24 Hours**
- ★ Multi-Million \$\$\$ Inventory

TOP DISCOUNT AUDIO

1150 N. Powis Rd., West Chicago, IL 60185

Call or Write t	or the LOWEST P	RICES Arous
IR IS.		
(First)	(Initial)	(Last)
	(Number and Street)	
(Crty)	(State)	(Zip Code)

In Illinois, Alaska & Hawaii call (312) 293-1825 CIRCLE NO. 42 ON READER SERVICE CARD

Haymes, who sounds just fine in such standards as All or Nothing at All and Braggin'. Still, the album will be of interest mainly to serious collectors of big-band recordings.

JAMES P. JOHNSON: Stride Pieces (see "Ragtime Back to Back," Classical Reviews, page 90)

SCOTT JOPLIN: Collaborative Rugs (see "Ragtime Back to Back," Classical Reviews, page 90)

SUSANNAH McCORKLE: The Songs of Johnny Mercer, Susannah McCorkle (vocals); Keith Ingham Trio (instrumentals); other musicians. Harlem Butterfly; Talk to Me Baby; Fools Rush In; My New Celebrity Is You: How Little We Know: and nine others. INNER CITY IC 1101 \$7.98.

Performance: Jazznik's delight Recording: Good

Susannah McCorkle, an American singer who made it big in Britain, is partially back on her home turf with this recording; the songs are by the very American Johnny Mercer, but the album was recorded in London with English musicians. McCorkle's singing and her accompanists' playing are all very elegant, and technically the album is a jazznik's delight. But there is a decidedly retro feel to it; every line, every phrase, every intonation has a weighty and studied sound. This is not to say that it isn't often very satisfying when McCorkle and Co. are examining such lovely songs as How Little We Know or Fools Rush In, because it is. But it is the kind of satisfaction I get from watching Masterpiece Theatre. I know that every bit of period decor is correct and that the costumes are right and that there will be no jarring anachronisms in the dialogue or accents. I like and admire this sort of thing, but somehow it doesn't seem quite real. Surely classic jazz doesn't have to be museum jazz. Is it possible that the locale is at fault? Jazz rarely sounds completely idiomatic off the American turf.

ANITA O'DAY: In Berlin. Anita O'Day (vocals); George Arvenitas (piano); Jacky Samson (bass); Charles Saudrais (drums). Your Wings; Honeysuckle Rose; I Can't Get Started; On a Clear Day; Sunny; and four others. PAUSA 7092 \$7.98.

Performance: Involved Recording: Good

This isn't one of my favorite Anita O'Day albums. Recorded at the Berlin Jazz Festival in 1970, it sounds too academic, too much the "pure" jazz artist singing to "echt" jazzophiles and casual listeners be damned. Lyric sense and logic take an awful beating here as O'Day "instrumentalizes" every last comma or semicolon, serenely above such pedestrian obligations as telling a story. I don't particularly mind when it's something like her own Your Wings, but it's annoying when she clouds up a song as straightforward as On a Clear Day.

DARYLE RICE: I Walk with Music. Daryle Rice (vocals); Loonis McGlohon Quartet. My Shining Hour; Once I Loved;

The Rainbow Connection; Blackberry Winter; Stormy Weather; It Never Entered My Mind; Summertime; and seven others. AUDIOPHILE AP-141 \$7.98.

Performance: Promising Recording: Good

Daryle Rice has a big, warm, powerful voice, and she's not at all shy about getting down with it emotionally. The problem is that her lyric technique is still rather ragged and she sometimes allows the feeling she expresses to obscure the sense. This is fine in such things as The Rainbow Connection and Once I Loved, but not so fine in more cerebral songs such as It Never Entered My Mind and Alec Wilder's Blackberry Winter. Still, Rice shows a lot of promise, and we'll probably be hearing from her in the future. PR

RECORDING OF SPECIAL MERIT

DAVE SCHNITTER: Glowing. Dave Schnitter (tenor saxophone, vocal); Claudio Roditi (trumpet); Albert Dailey (piano); Mark Helias (bass); other musicians. Where or When, I'll Remember April; If I Loved You; and three others. MUSE MR 5222 \$7.98.

Performance: Glowing Indeed Recording: Very good

Dave Schnitter's latest Muse album, "Glowing," is his finest; the thirty-twoyear-old tenor saxophonist here surpasses even the brilliant performances on his three previous releases on the label. Of course, credit for the album's success is not due to Schnitter alone, for he has excellent collaborators in trumpeter Claudio Roditi, pianist Albert Dailey, and bassist Mark Helias, among others. Roditi's name is new to me, but his expert bop playing should soon make it familiar; his performance here on I'll Remember April is as impressive as anything I've heard lately in this genre.

One track here, If I Loved You, has different personnel and probably stems from the session that produced Schnitter's earlier album "Thundering." Billy Hart, Ted Dunbar, Kenny Barron, Cecil McBee, et al. take a back seat on it, however, for its two and a half minutes are devoted mostly to the album's only Schnitter vocal. It provides a touch of soul, but Schnitter sings too cautiously, clearly testing the water before plunging in. If he decides that singing is not his bag, he will have all the more time to play where he is obviously comfortable. If this is not a man at ease with a tenor saxophone, Art Tatum had pianophobia. C.A.

RECORDING OF SPECIAL MERIT

GEORGE SHEARING: Getting in the Swing of Things. George Shearing (piano); Lewis Stewart (guitar); Niels Henning Ørsted-Pedersen (bass). Don't Get Around Much Anymore: Consternation: Poinciana: Sweet and Lovely; My Little Anna; and four others. PAUSA 7088 \$7.98.

Performance: Mellow Recording: Somewhat muddy

You may never find a more satisfying George Shearing album than "Getting in the Swing of Things," which title aptly de-(Continued on page 109)

STEREO REVIEW CLASSIFIED

CLASSIFIED RATES: Per Word, 15 Word Minimum. COMMERCIAL: \$3.20. EXPAND-AD": \$4.80. PERSONAL RATE: \$1.80. DISPLAY: 1" x 21/4", \$390.00. 2" x 21/4", \$780.00. 3" x 21/4", \$1,170.00. GENERAL INFORMATION: Frequency rates and prepayment discounts available. Payment must accompany order except credit card — Am. Ex., Diners, MC, VISA (include exp. date) — or accredited ad agency insertions. Copy subject to publisher's approval; must be typewritten or printed. First word set in caps. Advertisers using P.O. Boxes MUST supply permanent address and telephone number. Orders not acknowledged. They will appear in next available issue after receipt. Closing date: 5th of the 2nd month preceding cover date (e.g., Mar. issue closes Jan. 5th). Send order & remittance to: Classified Advertising, STEREO REVIEW Magazine, 1 Park Avenue, New York. NY 10016. Direct inquiries to Rose Lynch, (212) 725-7686.

EQUIPMENT

DIAMOND NEEDLES and STEREO CARTRIDGES at DIS-COUNT PRICES for SHURE, PICKERING, STANTON, EM-PIRE, GRADO, AUDIO TECHNICA, ORTOFON and ADC Send for free catalog. LYLE CARTRIDGES, Dept. S., Box 69, Brooklyn, NY 11218, For fast service Toll Free 800-221-0906, 9AM - 8PM except Sunday.

WHOLESALE PRICES on stereo/esoteric components, cartridges, tonearms, tapes. Free Catalog. Audio Unlimited, 1798 Technology Drive, San Jose, CA 95110. (408) 279-0122 1-6 M-Th.



ATTENTION SOUTHERN AUDIOPHILES: Yamaha, Nakamlchi, Carver, Dahlquist, Polk Audio, Bang & Olufsen, Advent, Ortofon & Technics home audio, Alpine, Jensen & Visonik car stereo. Kloss & Sanyo video. Mail order inquiries welcome. Free shipping in U.S. Available at Sound Advice, Village Plaza, Ruston, LA 71270. (318) 255-8000.

WISCONSIN HAS: Nakamichi, Acoustat, Carver, Audionics, NAD, Polk, Boston, 3D, B&W, Amber, Micro-Seiki, Dahlqulst, Denon, Hafler, Stax, Grado, Vandersteen, DCM, Tandberg, Adcom and more. We invite specific inquiries. The Sound Seller, 1706 Maln Street, Mannette, WI 54143, (715) 735-9002

SPEAKERS SAVE 50%. Build your own speaker system. Write: McGee Radio Electronics, 1901 McGee Street, Kansas City, Missouri 64108.



HORNS-WOOFERS-MIDS-TWEETERS at tremendous OEM savings. Altec, Electro-Voice, Philips, Peerless, Polydax and many others. Dozens of hard to find items used in major manufacturers most expensive systems. Huge selection of crossover network components, automobile systems, and musical instrument loudspeakers. Send \$2.00 for catalog refundable with purchase. SRC Audio. Dept. SR1, 3238 Towerwood Dr., Dallas, TX 75234.

TOP QUALITY SPEAKERS AND KITS. Send \$2.00. Speaker Warehouse, 801 North Route 441, Hollywood, FL 33021.

LOWEST PRICES. BOSE, SAE, HAFLER, and MORE, Dynamic Sound, Box 168(A), Starkville, MS 39759, (601) 323-0750, 1 P.M. - 9 P.M.

USED HI FI. Buy, Sell, Trade: Broker. Bob Heenan, Box 782, Brookline Village. MA 02147. (617) 969-2727. Wanted McIntosh, Marantz: Western Electric Tube Equipment.



CABLE TV DESCRAMBLERS AND CONVERTERS. Microwave antennas and downconverters. Plans and parts. Build or buy. For information send \$2.00. C&D Company, P.O. Box 21, Jenisen, MI 49428.



LOWEST PRICES on AR, ADVENT, ALLISON, Bose, ESS, Fried, Harmon/Kardon, Infinity, JBL, Onkyo, SAE, Tandberg, and Thorens. For quotes, Mon.-Sat.: Audio Discounts, 1026 McCeney Ave., Silver Spring, MD 20901. (301) 593-8244.

BEST IN THE WEST! Haffler, Nakamichi, Dahlquist, DCM, Magneplanar, Beverldge, APT, Threshold, Polk, Oracle, Harmon Kardon, B&W, Adcom. Rocky Mountain HI-FI, 812 Central, Great Falls, MT 59401, (406) 761-8683.



QUALITY AUDIO COMPONENTS, MULTI-TRACK EQUIPMENT. PROGRAMMABLE CALCULATORS. ACCESSORIES, Competitive Pricing! Prompt Delivery! Knowledgeable Staff! Service Facility! Credit Cards Accepted. FREE Catalog. SOUND IDEAS, Dept. SR. P.O. Box 340, Cary. NC 27511. 1-800-334-2483. (NC-919-467-8462).

DISTRIBUTER PRICING! Tascam, Hafter, E.V., Ampex, JBL, Technics, Onkyo, Nikko, Infinity, Lux...P.K, AUDIO, 4773 Convention Street, Baton Rouge, LA 70806.



HIGH MAIL ORDER PRICES? NOT AT STEREO VILLAGE! ADC. Advent, Akai. AR. Audiovox. Audio Technica. Cerwin Vega. Clubman. Craig, DBX, Dahlquist, Dual. EPI. ESS, Fisher. Grade. Hitachi. Infinity, Jensen. HVC, Kenwood. Koss. Klipsch. Maxell. Micro Acoustics. Mitsubishi. Nakamichi, Onkyo, Panasonic, Pioneer. Polk Audio. Sansui, Sanyo. Sony. Sharp. Shure. Sonus. Stanton. Teac. Technics, TDK. Visonik. Yamaha and more!

HIGH MAIL ORDER PRICES? Not at Stereo Village! 404-233-5346, 3021 Peachtree Rd., NE/Atlanta, GA 30305.

HIGH MAIL ORDER PRICES? Not at Stereo Village! 404-953-103G, 2411 South Cobb Parkway/Smyrna, GA 30080.

HIGH MAIL ORDER PRICES? Not at Stereo Village! 404-968-0281, 1067 Morrow Industrial Blvd./Morrow, GA 30260.

HIGH MAIL ORDER PRICES? Not at Sterec Village! 504-455-1461, 5029 Veterans Memorial Blvd./Metairie, LA 70002.

HIGH MAIL ORDER PRICES? Not at Stereo Village! 504-366-3238, 516 West Bank Expwy Grethna, LA 70053.

CARVER, HAFLER, KLIPSCH, FRIED kits, more. In stock. Immediate, FREE shipping! READ BROTHERS STEREO, 593-B King Street, Charleston, South Carolina 29403, (803) 723-7276

HARMON/KARDON HIGH TECHNOLOGY SEPARATES, Receivers, Cassette decks, Immediate shipment — Best Prices, West (213) 243-1168, East (305) 462-1976.

PHILIPS AND AUDAX LOUDSPEAKERS in stock at good prices with component service. Crossover components also. Madisound Speaker Components, 431 West Gorham, Box 4283. Madison. Wisconsin 53711. (608) 256-7337.

ACCURATE. QUALITY AUDIO: Reasonable Prices. Car/ Home. Denco, P.O. Box 6104-R, El Monte, CA 91734. (213) 961-6158 Evenings. Weekends. Monthly Specials. ANNIS Han-D-Mag IS THE BEST Demagnetizer for magnetic tape equipment. Price is \$29.70. "Demagnetizing Notes" and literature on request. Annisco. 1101 N. Delaware. Indianapolis, Indiana 46202.

SPEAKER STANDS. The Original GoldStands Improve any speaker, custom models, so good they're Imitated but never duplicated. Send for catalog. Dealers welcome. GoldStands, 229 Nassau Rd., Huntington, NY 11743. (516) 427-4813.

LAST CHANCE FOR KOSS QUADS. Attention Quad System owners. Here's your chance to buy Koss Quadraphones at factory direct prices. Koss K.6.LCQ normally \$59.95. now only \$32.79. Koss KO.747Q normally \$65.00. now only \$39.00. Phase 2 + 2 usually \$155.00. now only \$59.00. Original K.2 + 2A normally \$90.00, now only \$41.72 and the PRO/4Q normally \$75.00 for only \$41.15. Remember these quad phones work in stereo too! Just flip the switch and double the bass radiating surface. Send your check to Koss Corporation & Virginia Lamm. 4129 N. Port Washington Avenue. Milwaukee.

TO RECEIVE FREE uninterrupted movies, sports, shows, send \$199.95 for complete ready to install AMATEUR MICROWAVE SUBSCRIPTION T.V. ANTENNA, or \$9.95 for complete plans, fully guaranteed and refundable against purchase of antenna. PHILLIP-TECH ELECTRONICS, Dept Sp-12, 5025 North 68th Street, Scottsdale, Arizona 85253.

BUILD YOUR OWN SPEAKERS. Save 50%. Designs inloude miniatures, subwoofers, satellites, multi-amp and state of the art ultra speakers. Plans, parts, crossovers and kits available. No compromlses - These are well engineered designs. High quality drivers and components. Write for free catalog, YE OLDE SOUNDE BOX, Box 75. Webster City, IA 50595.

HANDCRAFTED AUDIO CABINETS, you design. Free information: Custom Electronics Display Cabinetry. 1547 Birchwood, Saint Germaln, WI 54558.

HIGH END AUDIO IN NORTHERN NEW JERSEY. Representing: Audio Pro. Magnepan. Adcom, Dahlquist. Carver, SAE. Promethean. Spendor. D.B. Systems, Grace. I.M.F., Mitsubishi, Obelisk. Linn Sondek. Marcof. Avid. Grado. Tandberg. LS 3:5A. Fulton. B&W and others. We ship anywhere in the U.S. THE SOUNDING BOARD. INC.. 20 minutes from G.W. Bridge. Ridgewood. NJ (201) 445-5006.

OMNISONIC IMAGER provides full dimensional sound from your present system. Call or write for lowest price. AudioWorld. Box 6202SR, G.R., MI 49506, (616) 451-3868.



MAIL ORDER high-end audio available, Hafler, B&W. P.S., Denon, Audio Salon, 1612 Elizabeth Ave., Charlotte, NC 28204, (704) 333-3306.



NEW TECHNOLOGY RAW SPEAKERS.

Leaf tweeters, the Wave Aperture system, the Nestorovic woofer system, polypropylene drivers, and more from

Speakerlab, the highly acclaimed speaker design/manufacturing company. Send today for your free catalog of speaker systems, raw speakers and design guidelines.



Wallingford Station-Seattle, WA 98103

STEREO IMAGE ENHANCER - Creates a larger, more spacious stereo image and adds a sense of front to back dimension and ambience to ordinary stereo recordings with only two speakers. \$50. Satisfaction guaranteed. Write: Exodus. 51 Plymouth Road. Malden. MA 02148.

VIDEO CATALOG — complete selection, recorders, cameras, accessories, electronic items, cabinets. Send \$2.00 refundable first order to: VIDEO MERCHANT, P.O. Box 5381, 2725 Abington Rd., Dept. 104, Akron, Ohio 44313.



TAPES & RECORDERS

SCOTCH RECORDING TAPE, exclusively, all new, lowest prices, TAPE CENTER, Box 4305, Washington, D.C. 20012.

1930-1962 RADIO PROGRAMS. Beats Television!! Tapes. \$1.00 Hour! Established esteemed dealer. Informative 250 page catalog. \$1.25. AM Treasures. Box 192SR. Babylon. N.Y. 11702.

LIVE OPERA TAPES (REELS) — CASSETTES. Unbelievable treasure since 1926. Over 4,000 selections. Free DELUXE Catalog: Mr. Tape. Box 138. Murray Hill Station, N.Y. 10016.

YESTERDAY'S RADIO ON TAPE. Reels-Cassettes. Quality Sound. Reliable Service. Catalog \$2.00. ADVENTURES. Box 4822-S. Inglewood. CA 90302.

VIENNESE LIGHT MUSIC SOCIETY — Strauss. Lanner. Etc. on Dolby Cassettes. KC Company. Box 793. Augusta. Maine 04330.

EXCITING OLD RADIO TAPES. Large selection available. Free catalog. Radio Memories. Box 56-R. California. MD 20619.

OLD RADIO PROGRAMS. \$1.99 hour cassettes- open-reels. Big catalog \$1.50 relundable with order. Nostalgia. Box 254. Simi VIv. CA 93065.

GOLDEN AGE RADIO—Your best source for radio lapes. Free catalog. Box 25215-T, Portland. Oregon 97225.

QUALITY TAPES AT	WHOLESALE PRICES
MAXELL UDXL 1 or 2 C-90	9 PANASONIC T-120 (Video)
MAXELL UDXL 1 or 2 'S' C-90	9 SONY L-750 (Video)
MAXELL MX C-90 6.8	9 SONY L-500 (Video) 0.49
MAXELL UD C-90 2.4	3 MAXELL UD 35-90 1800' 5.19
TDK SA C-90. 2.8	3 MAXELL UDXL 35-90B 1800*
TDK SA C-60 2.1	3 TDK LX 35-90 1800' 5.39
TDK SAX C-90 4.5	9 TDK 1X 35-908 1800' 5.89
TDK AD C-90. 2.3	2 TDK CASS, HEAD DEMAG, HD-01 4.89
TDK D C-90	2 DISCWASHER COMPLETE SYSTEM 10.50
TDK MA C-90 6.3	5 DISCWASHER D-4 16 oz. REFILL 10.50
ADD SHIPPING, U.S., \$3.50 or 5% whichever whichever is more. Send check, MO, Visa or N	is more, Foreign \$7.50 or \$3.00 per 10 cassettes NC. Cards add 2% handling, Call 212-339-9085. St., Dept. MS, Brooklyn, NY 11223

RARE OPERA. Symphonic music on open reel tapes. World wide broadcasts. Free catalogue. Underhill. Bellport. NY 11713.

OLD TIME RADIO — original broadcasts on quality tapes. Free catalog. Carl R. Froelich. Route One. New Freedom. Pennsylvania 17349.

		00 T-Shirt
TDK: SA-C90	\$2.89	Ampex: Grandmaster I or IIC90
TDK: AD-C90	2.39	TDK: MAR-C90
TDK: SAX-C90	4.79	Scotch: 212-7R-1800
TDK: 0D-C90	3.49	TDK: VHS: VAT-120 14.49
TDK: SA-C60	2.25	TDK LX35-90 (18001)
TDK: MA-C90	7.89	TDK- LX3590B
TDK: D-C90	1.69	Ampex Grandmaster 1800 ft Reel 5.99
BASF: PRO II or III-C90	2.89	Scotch: 207-7R-1800
		TDK: GX35-90B
Free T-Shirt with even	order over 40.00	State size. All tapes can be assorted.
Add 3.50 shipping: We w	ill Honor any price	ce in this book on complete line of Maxell.
Free catalog 100%	quaranteed 417.	283-8621, M-Th 8-3:30, VISA and MIC

40,000 OLD RADIO SHOWS on Tape. Jazz Big Band remotes. Country Western. discographies, anthologies, κhτοnologies. Send \$2 for huge catalog (refundable). McCoy's Recording, Box 10695. Richland. Washington 99352.

OLD TIME RADIO at new special low price. Catalog: \$2.00. BRC OTC Distributors, 2013 South Huron Parkway #1, Ann Arbor, Michigan 48104.

"FASCINATING!" OLDTIME RADIO TAPES. "Outstanding Selections Value!" "Superspeed Service!" FREE Catalog: Heritage-SFJ, 412 Redbud. Oxford. MS 38655.

FREE PROMOTIONAL ALBUMS, concert tickets, stereos, etc., Information: J. Saez Promotions, Suite S-151, 323 S. Franklin Bldg., Chicago, ILL, 60606.

OPEN REEL TAPES from studio masters. Philips. Argo. Telefunken, Vanguard, Unicorn. Catalogue \$1.00. Barclay-Crocker. Room 1470-S. 11 Broadway. NYC 10004. OPEN REEL TAPE — Used once (Unboxed) 7" 1800" or 2400" Price: 50 reels \$45.00—100 reels \$80.00. 3600" 10-½" reels \$1.75 each. Sample reel \$1.00. AUDIO TAPES INC.. Box 9584-K, Alexandria, VA 22304.

RECORDS

SHOW ALBUMS. Rare, Out-of-Print LP's. 64 pg. list. \$1.00. King of Hearts— original cast LP \$9.95. Broadway/Hollywood Recordings. Georgetown, Conn. 06829.

PROTECT your LP's —Poly sleeves for jackets 12 cents: Round Bottom Inner Sleeves 10 cents: Square Bottom 6 cents: Poly lined paper 15 cents; white jackets 35 cents. Postage \$2.00. Record House, Hillburn, N.Y. 10931.

COLLECTORS' Soundtracks. Mint. 75 cents (refundable) Jemm's, P.O. Box 157, Glenview. III. 60025.

OLDIES oldies, 45rpm. Also current hits. Free Catalog. Corny's Record Shop, Box 166L, Mason, Ohio 45040.

PROTECT YOUR ALBUMS. White cardboard replacement jackets 35 cents. Plastic lined sleeves 15 cents. Postage \$1.25. Opera Boxes, 78 Sleeves. Free Catalog. CABCO 400-1. Box 8212, Columbus, Ohio 43201.

THOUSANDS of like new LPs and prerecorded tapes catalogue \$2.50. Records, Hillburn, New York 10931.

RARE ORIGINAL RECORDS, all kinds, mostly mint, 5000 list \$2,00, refundable, Carl, Box 828, Princeton, NC 27569.

RECORD HOUND. Box 88. Eagleville, PA 19408, Fills "wantlists"? DOGGONE RIGHT!! 33-1 3 Specialist. Fast. Friendly Service.

CUTOUT OVERSTOCK RECORDS —UNBELIEVABLE SE-LECTION. \$2.99 Super Specials. \$1.00 for catalog (refundable). Cutouts, 742 Route 18, East Brunswick, NJ 08816.

FREE RECORD CATALOG. New releases at discount prices and huge selection of classical, soundtrack, popular and jazz special values. Rose Records, Dept. R, 214 S, Wabash, Chicago, IL 60604.

DIRECT — DISC. DIGITAL. half-speed masters, and DBX encoded discs. Free catalog. DISConnection, P.O. Box 10705, Tampa, FL 33679

OLDIES SHOP AT HOME! Anka, Beatles, Crystals, Glen Miller, Queen, Thousands of 45's listed in our giant 46 page catalog. We carry albums, current 45's, and collectors items. Send 51 for oldie catalog to: AARDVARK MUSIC-S, Box 69441. Los Angeles, CA 90069.

RECOMMENDED POP ROCK ALBUMS! Overlooked gems! Send \$5 for list, sample "recommended" LP, plus \$1 credit! Money back guarantee! Lollipop Records, Box 499-SR, Fresh Meadows, NY 11365.

FACTORY-SEALED. NEW & imported classical records, 50c above wholesale! Catalog \$1.00. M.I.T.M., Box #1. Brightwaters, NY 11718.

BRAVO BEETHOVEN. Sampler LP \$2.98. cassette \$3.49. Free catalog: Musical Concepts. Box 53SR7. Cedarhurst, NY 11516.

AUDIOPHILE and Japanese discs. Super Sound Record Service. P.O. Box 411237, Chicago, ILL 60641, (312) 486-6667.

WHILE YOU WERE LOOKING FOR "Out-of-Print" Records you should've been looking for us! DISContinued (213) 846-9192.

QUADRAPHILES! Your number one source for four-channel recordings and news is the MCS Review. Annual subscription. \$4.00 in U.S., Canada, Mexico: \$7.00 elsewhere. Published by QUAD Incorporated. Box 19-S. Capron, VA 23829.

ORION'S AVAILABLE by mail! \$7/record includes postage \$13.2, \$18/3 or more. Box 4087. Malibu, CA 90265.

CLASSICAL IMPORTS: Records & Cassettes not listed in Schwann, available direct from importer. Free catalogues, Qualiton Imports Ltd., 39-28 Crescent Street, Long Island City, NY 11101.

UNIQUE, new record filing systsm, \$8.95 + \$1.25 P&H. Free Info, write now! R.J. Communications, Suite 707, 674 Amsterdam Ave., New York, NY 10025.

TUBES

TV and Radio Tubes 49 cents. Free 48 page color catalog. Cornell. 4215-H University, San Diego, California 92105.

WANTED

GOLD. silver. platinum, mercury, tantalum wanted. Highest prices paid by refinery. Ores assayed. Free circular. Mercury Terminal. Norwood. MA 02062.

CASH FOR YOUR Unwanted LP's and Prerecorded Reel to Reel Tapes. Reder. Box 323S, Hillburn, NY 10931.

MCINTOSH & MARANTZ tube tape equipment wanted. (213) 576:2642 or 576:9103. David Yo. P.O. Box 832. M.P., CA 91754.

TOP DOLLAR PAID for good condition LP's. All types, quantities. FESTOON'S, 15 Whitney, New Haven, CT 06510. (203)

TOP PRICES paid for WESTERN ELECTRIC drivers, horns. etc. Toyohashi, Box 18009, Seattle, WA 98118, (206) 323-

HYPNOTISM

FREE Hypnotism, Self-Hypnosis, Sleep Learning Catalog! Drawer H400, Ruidoso, New Mexico 88345.

RUBBER STAMPS

RUBBER ADDRESS STAMPS, BUSINESS CARDS. Free Catalog - Fast Service, Jackson's, Brownsville Road-E-101. Mt. Vernon, fll. 62864.

BUSINESS OPPORTUNITIES

STEREO REPRESENTATIVES NEEDED!!! Lowest Possible Prices!! Over 100 Brands!!! Krasco-Rep SR, 998 Orange Ave., West Haven, Conn. 06516.

ERASE DEBTS with fittle-known faw - CREATE wealth! Details FREE - Blueprints, No. DD7, La Grangeville, NY 12540.

BORROW \$25,000 "OVERNIGHT". Any purpose. Keep indefinitely! Free report! Success Research. Box 29070-RG, Indianapolis, IN 46229.

COLLEGE DEALERS - WRITE for details on College Programs. Fast shipments, low prices, specify college. Sound Reproduction, 7 Industrial Rd., Fairfield, NJ 07006.

FREE BOOK "2042 Unique, Proven Enterprises." Fabulous 'unknowns," second Inflation income. Haylings-M. Carlsbad.

MAKE MONEY IN COLLEGE. Sell brand name audio components. No investment. Unbelievable prices. Call Mr. Kay TOLL FREE at 800-241-6270.

WANT YOUR OWN RADIO STATION? Investment/experience unnecessary. Free information. "Broadcasting, Box 130-R7, Paradise, CA 95969.

FREE BOOK describing many loans available to deserving individuals refused elsewhere. Associates, Box 98(K6), Brooklyn, NY 11235.

INSTRUCTIONS

LEARN MUSIC THEORY AT HOME with a correspondence course. Send for free information. TECLOR MUSIC SCHOOL, Dept. 131S, 323 Franklin #804, Chicago, IllInois 60606

REPAIR any 8 track cassette tape



8 TRACK

JUST PENNIES EACH.

Never throw away your broken tapes again! Complete kit Includes: simple, detailed, illustrated instructions, tools and material to completely repair hundreds of 8 track or cassette tapes. Cost? Only \$5 including postage. Send cash, check or money order to:

P.O. Box 279, Greenvale, L.I., N.Y. 11548

BOOKS & MAGAZINES

PUBLISHERS' OVERSTOCK. BARGAIN BOOKS 2,000 titles, all subjects! Free catalog: Hamilton, 98-86 Clapboard. Danbury, CT 06810.

EVOLUTION - The Sound Magazine. Quad and audiophile software plus hardware. For Information: Evolution, 23757 Canzonet, Woodland Hills, CA 91367.

CONFESSIONS OF A STEREO SALESMAN", written by a former salesman shows how to get the BEST EQUIPMENT AT THE BEST PRICE every time! \$3.75 & \$0.75 p&h. Satisfaction guaranteed. P.O. Box 8511SR. Albany, NY 12208.

GOVERNMENT SURPLUS

JEEPS \$19.301 CARS \$13.501 650.000 ITEMS GOVERNMENT SURPLUS MOST COMPREHEN-SIVE DIRECTORY AVAILABLE Tells how, where to buy your area \$2 MONEYBACK GUARANTEE GOVERNMENT (FORTER MEDICAL PROPERTY (FO . 650,000 ITEMS ernment Information Services". Department EC-27. Box 99249, San Francisco, California 94109.

ELECTRONICS

ELECTRONICS BARGAINS, Closeouts. Surplus! Parts, stereo, industrial, educational. Amazing values! Fascinating items unavailable in stores or catalogs anywhere. Unusual FREE catalog. ETCO-014. Box 762. Plattsburgh. NY 12901.

PRINTED CIRCUIT boards with running water! Technological breakthrough. Precise reproduction. Ideal for beginners. Free info. COVAL, Dept. SR7, 2706 Kirby, Champaign, IL 61820.

FOR SALE

COMPUTERISTS AND COMPUTER CLUBS! Why pay full price for software? We have it all for most any system and WILL NOT BE UNDERSOLD! Guaranteed! Write for free listings. Pacific Discount Software, 3205 Production Circle. Oceanside, CA 92054, 714-439-6201

FORMULA 4 MK III \$99.. MC-3L \$89 Tax/Duty Free. Information \$1. bifl. Visa Mastercharge. Mayware, P.O. Box 58. Edgware, Middlesex, England,

MOVIE FILMS/VIDEO TAPES

16mm SOUND Features. Shorts, New, Used for Sale. Free Catalog. National Cinema, P.O. Box 43. Ho-Ho-Kus. NJ 07423.

OPERA VIDEO — Magnificent performances from Europe on BETA, VHS Videocassettes. Free listings. H.R.E.. Box 12, Kew Gardens, NY 11415.

MUSICAL INSTRUMENTS

MUSICAL INSTRUMENTS HOT LINE! Incredible prices: Amps. PA gear. All instruments. Huge selection. Sam Ash. established 1924. 800-645-3518. NYS: (212) 347-7757.

EDUCATIONAL OPPORTUNITIES

LEARN WHILE ASLEEP. Hypnotize! Astonishing details strange catalog free! Autosuggestion. Box 24-ZD. Olympla. Washington, 98507

FOR INVENTORS

FREE CONSULTATION NO IDEA TOO NO IOEA TOO SMALL

Disclosure registration. Potential cash or royallies from manufacturers seeking new ideas. For free information on how to register your ideas, call or write.

AMERICAN INVENTORS CORP.

59 Interstate Dr. Dept SR West Springfield, MA 01089 (413) 737-5376 A Fee Based Marketing Company

PERSONALS

MAKE FRIENDS WORLDWIDE through international correspondence. Illustrated brochure free. Hermes-Verlag. Box 10660/Z, D-1000 Berlin 11, W. Germany.

PENFRIENDS - ENGLAND - USA, Through correspondence, Send age, Interests. Free reply, Harmony, Box 89SR. Brooklyn, New York 11235.

CORRESPONDENCE FOR FRIENDSHIP IN PHILIPPINES. MALAYSIA. Free information. AACC-(SR). Box 1542. Canoga Park. CA 91304.



Residents of CA, CO, DC, FL, IL, MA, MI, MO NY State, UT and VT add applicable sales tax.

scribes the music. With superb collaboration by guitarist Louis Stewart and bassist Niels Henning Ørsted-Pedersen, the evermodern Mr. Shearing eases our ears through a program of mostly well-known material, enhanced by touches of humor and a steady stream of taste and imagination. I wish this had been a crisper recording, but I have yet to hear a clean sound from the MPS studio in Villingen, Germany, where these sessions took place in late

BOBBY SHEW: Class Reunion. Bobby Shew (trumpet, flugelhorn); other musicians. Navarro Flats; Kachina; A Child Is Born; and three others. SUTRA SUS 1002

Performance: Plenty of horn Recording: Good

The big-band experience enjoyed by most outstanding jazz soloists in the past is rare among today's emerging stars. "Bands taught you how to play with discipline and precision, and when you work as a wheel in a rather large machine, you are forced to work harder on the technical aspects of playing," trumpeter Rex Stewart once told me. "I think the death of the big bands has to profoundly affect the future of jazz, because there is no better school."

Stewart's point is hard to argue with; jazz has indeed spawned fewer outstanding individuals in recent years, and while there are certainly other factors as well, the exceptional soloists of recent vintage have more often than not had some big-band background. Trumpeter Bobby Shew has yet to demonstrate the kind of individuality that assured Rex Stewart and such estimable colleagues as Cootie Williams and Roy Eldridge a chapter in the book of great trumpets, but his playing does have many qualities to make one sit up and take notice. Not so coincidentally, perhaps, Shew also has behind him stints with the big bands of Woody Herman, Buddy Rich, Louie Bellson, and Akiyoshi/Tabackin, among others. "Class Reunion" features the same group heard on Shew's "Outstanding in His Field" (Inner City IC 1077), a quintet of considerable merit that gets much of its spirit from tenor saxophonist Gordon Brisker. It is a sometimes romping, sometimes gently gliding, all boppishly delightful trek through a program of Shew and Brisker originals, with Thad Jones' A Child Is Born thrown in for good measure. Recommended listening.

RECORDING OF SPECIAL MERIT

ZOOT SIMS: The Swinger. Zoot Sims (tenor saxophone); Ray Sims (vocals, trombone); Jimmy Rowles (piano); Michael Moore, John Heard (bass); Shelly Manne, John Clay (drums). The Moon Is Low; Jeep Is Jumping; Mr. J. R. Blues; On the Alamo; and four others. PABLO 2310 861 \$8.98, © K10-861 \$8.98.

Performance: Superb Recording: Very good

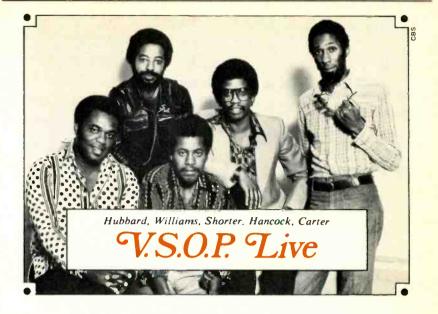
No one who has kept an ear on jazz for the last three decades (or, for that matter, the last three months) will be surprised to hear that Zoot Sims' "The Swinger" lives up to its title. Even without the participation of

ADVERTISERS' INDEX

READER		PAGE
SERVICE NO	AOVERTISER	NUMBER

_	
	ADS35
1	Aiwa
2	Altec Corp./Sound Products Division
3	Audiomatic Electronics 103
4 5	Audio-Technica U.S., Inc. 89 Audio-Technica U.S., Inc. 88
3	
6	Bang & Olufsen .87 BASF .7
48	Blue Angel, Inc. 23
9	Bose Corporation
10	Carver Corporation
11	Consumers Company83
13	dbx, Inc
14	dbx, Inc
15	Discount Sound
16	Discwasher
17	Electro-Voice
"	Empire Scientific Stop
18	47th St. Photo
19	Ford Motor Co69
20	Hi-Fi Buys 105
21	Illinois Audio85
22	International Hi-FI Dist. 105 International Record & Tape Club 80
24	International Wholesalers
26	J & R Music World
47	Jensen/Automotive Div
25	Kodak .49 Koss Corporation
25	Koss Corporation
	Mariboro47
27	Maxell Corp. of America21
28	McIntosh Laboratory, Inc. 91 Memorex Corp. 33
29	Micro-Acoustics Corp79
32	Polk Audio
40	P.R.I.C.E87
30	RealTime Records 56,57 R.J. Reynolds / Camel 39
33	R.J. Reynolds / Vantage 54,55 RKO Tape 10
33	
34 35	Sansui Electronics Corp. 9 Shure Brothers 19
36	Sony Corp
37	Sound Reproduction, Inc
38	Stereo Corp. of America 101 Stereo Discounters 103
39	TDK Electronics
39	Teacher's Scotch53
41	Technics by Panasonic
44	U.S. JVC Corp
45	Wisconsin Discount Stereo
46	Yamaha International Corp





SOME of the best music produced in recent years by jazz and fusion stars Wayne Shorter, Herbie Hancock, Ron Carter, Freddie Hubbard, and Tony Williams has been not with the groups they respectively lead but as equal parts of the quintet V.S.O.P. This group of five men with their acoustic instruments recaptures the grace of pre-fusion jazz, music whose solid structure underpins a bold and freewheeling musical conversation. All but Hubbard are graduates of the University of Miles Davis: indeed, they formed four-fifths of the quintet he led in the late Sixties when he was on the brink of creating fusion. Davis has been silent of late, but these disciples-particularly Shorter, Hancock, and Williamshave carried the electronic gospel to fame and prosperity, which makes their occasional returns to their roots in V.S.O.P. concerts seem like reunions for the varsity.

The latest V.S.O.P. album, "Live Under the Sky," is a two-disc set recorded live in summer 1979 at the Denen Coliseum in Tokyo. The spontaneity of live performance is enhanced by the response of an exceptionally appreciative audience. If any of the five instrumentalists shows to particular advantage here, it is Tony Williams, whose ability to coax a wide range of aural textures from a set of drums is most impressive. His impetus stimulates Herbie Hancock to display his own remarkable fluidity as a pianist, while Ron Carter is both subtle and powerful on bass. As always in V.S.O.P. sets, Wayne Shorter's solos are exquisite, and Freddie Hubbard's contributions exhibit a taste and restraint that are not apparent in some of his other work.

The recording is a marvel in itself, the digital process providing a startlingly true-to-life sound quality. The pattering of rain accompanies parts of the concert, making it seem even more real, and the instruments seem to have a more than usually keen edge to their sound. But it's the wonderful music that makes all the expensive technology worthwhile.

—Phyl Garland

V.S.O.P.: Live Under the Sky. Herbie Hancock (piano); Wayne Shorter (soprano and tenor saxophones); Freddie Hubbard (trumpet, flugelhorn); Ron Carter (bass); Tony Williams (drums). One of Another Kind; Teardrop; Pee Wee; Para Oriente; Fragile; Domo; Stella by Starlight/On Green Dolphin Street. CBS MASTERSOUND 12C 36770 two discs \$29.96.

such keepers of the beat as John Heard, Jimmy Rowles, and Shelly Manne, all of whom appear on all but one track, Sims would surely have swung. But this set does have a mellow, pleasant surprise—the performances of trombonist Ray Sims, the leader's brother. I don't know where he has kept himself all these years, but I suspect we will be hearing his Bill Harris-inspired horn on many albums to come. Ray Sims also sings on one track, Dream of You, in a voice reminiscent of the late Jack Teagarden. He should stick to the trombone, and his brother should continue to record marvelous albums like this. C.A.

MIKE WOFFORD QUARTET: Plays Jerome Kern, Vol. 2. Mike Wofford (piano);

Anthony Ortega (alto and tenor saxophones, flute, clarinet); Tom Azarello (bass); Jim Plank (drums, percussion, vibes). Dearly Beloved; You Are Love; Sure Thing; Smoke Gets in Your Eyes; and three others. DISCOVERY DS-816 \$8.98.

Performance: Good Recording: Good

To me, transposing Jerome Kern's songs into the jazz idiom is like trying to "swing" Johann Strauss. Why? Who needs anything but the gorgeous, Viennese-inflected melodies with soaring lyric lines that Kern wrote? No slight intended to Mike Wofford and his colleagues, all of whom are excellent musicians, but they've picked the wrong composer this time.

P.R.

"For the first time, critics all over the world are unanimous in their verdict on a loudspeaker."

Oberösterreichische Austria, 1968

The Bose 901 Direct/Reflecting Loudspeaker System.

Since its introduction in 1968 the Bose 901 loudspeaker has accumulated a record of international acclaim that is without precedent in the industry. Each stage of its technological evolution (including three model changes and more than 300 design improvements) has been favorably acknowledged by major audio publications worldwide.

The '60's.

Belgium. "It is no longer recorded music....
The orchestra is there in front, with the ambience of the concert hall all around!"— La Revue des Disques

de la Haute-Fidelité

Denmark. "The 901 can produce deeper bass than any other speaker I have ever listened to ..."— Hobby Bladet + Lyd & Tone

United States. "There is no doubt that the much abused and overworked term 'breakthrough' applies to the Bose 901..."— *Audi*o

The '70's.

Holland. "The Bose 901 will make your amplifier sound 2,000 guilders more expensive...The most natural-sounding system on the market."

—Toon En Beeld

Italy. "The high efficiency and dynamic range of the Bose 901 will impress even the most skeptical listener."

—Audiovisione

France. "The Bose 901 may well be the finest speaker in its class."—*Hifi Stereo*

The '80's.



Japan. "This Bose loudspeaker displayed the best performance, not only in the purity of its sound and realistic presence,

but also in its powerful reproduction of high volume sources."—Swing

Germany. "In comparison with the 901, a conventional loud-

speaker of the same size sounds thin and insubstantial."—Stereo Play

United States. "In terms of sheer musicality, this speaker ranks with the finest, and in spaciousness of sound it is unsurpassed..."—*Hi-Fi Stereo Buyer's Guide*

Ask your authorized Bose dealer for a side-by-side comparison of the Bose 901 loudspeaker with any other speaker, regardless of size or price.

For more information, write Bose Corporation, Department SR, The Mountain, Framingham, Massachusetts 01701.

Covered by patent rights issued and/or pending. © Copyright 1981 Bose Corporation.



055 FIRE

Finally, there's a speaker that lives up to its promise. The Kossfire dual tweeter loudspeaker system.

It's about time a speaker at a reasonable price lived up to its promise. Not just in the bass and midrange. But in the all-important treble range where power handling really counts. That's why we've designed the Kossfire/210

loudspeaker with not only a 12-inch woofer and a 5-inch midrange, but also with unique dual Kossfire tweeters that double the power handling capability over the high frequency range while virtually eliminating distortion. By placing the Kossfire dual tweeters in the optimum geometric alignment, we've created an ideal horizontal listening plane that's remarkable in its wide and uniform dispersion characteristics. The result is an exciting 4-driver speaker system that won't make you choose between the high road and the low road. And that's a promise!

But then, the Kossfire/210 loudspeaker

has a lot of very promising things going for it. There's a linear phase constant voltage crossover network for seamless transition between drivers. There's a built-in circuit breaker that automatically resets so no fuses are

necessary. There's a vertical alignment of woofer, midrange and tweeter array for perfect stereo imaging. And there are separate continuous level controls for midrange and trable response ranges. Not to mention, the Kossfire's beautiful pecan-veneer cabinet.

All in all, these 4-driver Kossfire speakers were created to fill the void between loudspeakers that cost too much and those that promise too much and deliver too little. The superb performance of Kossfire speakers will amaze you. But then, so will their price. And that's a promise!



TIMES Stereophones /Loudspeakers/Digital Delay Systems

hearing is believing

INTERNATIONAL HEADQUARTERS 4129 N. Port Washington Avenue Milwoukee, Wisconsin 53212 Facilities Canada France Germany, ireio

CIRCLE NO. 25 ON READER SERVICE CARD