

THE AUDITRONICS TRADITION C o n t i n u e s



OUR BRAND NEW 2600 SERIES

is the PERFECT UPGRADE for those thousands of stations that have had AUDITRONICS consoles over the past thirty years. Designed for the TIGHTEST of BUDGETS, it is nonetheless the highest performance console Auditronics has ever offered!

A MODULAR DESIGN, the 2600 features twelve input channels, a monitor module with control room, studio, cue,

headphone and talkback circuits, and an output module with PROGRAM, AUDITION, both pre and post fader MONO outputs, and independent meter selection. Optional line selector and tape remote modules are also offered.

This countertoo design fits efficiently in only 25 by 26 inches of space, and like all our consoles is fabricated from steel to withstand the rigors of a broadcast environment.

tel 252-638-7000/fax 252-635-4857/sales@wheatstone.com 600 Industrial Drive, New Bern, North Carolina, USA 28562

UDITRONICS

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Welcome to the seventh annual BE Radio Product Source, the issue that covers the spectrum of products you rely on to get the job done.

The Product Source has proved to be a valuable resource over the years. Our 1999 issue won a regional and a national award from the American Society of Business Publication Editors. This year's issue includes 48 pages of innovative product offerings that provide the foundation for the success of the radio industry.

The Product Source complements our pre- and post-NAB coverage. Although many of the products on these pages were unveiled at NAB, almost as many are more recent product offerings. This issue will serve as an essential reference tool as you make your productpurchasing decisions throughout the year.

We welcome your feedback on this annual issue. Send your comments to 9800 Metcalf Ave., OP KS 66212-2216 or e-mail us at beradio@primediabusiness.com.

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2600 Series

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PRODUCT SOURCE

ADVERTISEMENT





As manufacturers of fully integrated multiple control room, digital audio consoles and platform systems, KLOTZ DIGITAL is the world leader in audio media platform technology.

Developers of the DiAN fiber optic network for audio and the VADIS audio/media platform, KLOTZ DIGITAL also offers the VADIS D.C. II, Spherion and Paradigm digital audio consoles. All of these products are broadcast quality for production and on-air radio broadcasting.

Radio broadcasters realize the VADIS platform is key to the technical side of a consolidated broadcast facility. Whether it's a large, technically advanced plant or just two or three control rooms, broadcast customers know that fitting their facility with a true platform, versus stand-alone mixing consoles and routers, is a requirement for success.

The VADIS D.C. II console comes equipped with standard cue speaker and studio/control room outputs. Offering IFB capabilities to individual or collective mix-minusses, this 8 mix-minus console features 4 stereo busses in digital or analog, clock and timer units and analog or digital input combinations. The D.C. II has the most comprehensive "logic follow" of any console in the industry. Logic follows each source no matter where it appears on the console and any source can appear on any fader of the D.C. II. One button Store and Recall of the entire console setup is designed to be switched on the air. Circle (182) on Free Info Card

The SPHERION digital audio console is available in two sizes: a 12fader version with 24 input sources and a 20-fader console with 40 input sources. Sources include microphone, stereo, analog

line and various formats of digital line inputs. Expansion of sources is handled in increments of two stereo channels at a time. Sources connected to the console can appear on any fader. Machine control logic follows each source regardless of where

it appears on the console. Formats of "source to fader' can be saved with routing assianments and recalled on a console-wide basis. The

20-fader Spherion model also includes DSP production features such as EQ, limiters, gates and compressors.

Circle (183) on Free Info Card

The KLOTZ DIGITAL VADIS 880 platform provides a fully integrated, facility wide approach to audio and programassociated data routing, distribution, format conversion, sample rate conversion, DSP, digital audio sync distribution and machine control routing. Multiple control locations can share sources, area wide logic control, signal routing, talkback, intercom and more via KLOTZ's DiAN fiber optic network and Ethernet connections.





KLOTZ DIGITAL's VADIS D.C. II and SPHERION digital audio consoles are for use in professional and multimedia markets. Both consoles utilize KLOTZ's VADIS platform technology and are well suited for facilities with multiple control rooms, as well as individual stations making the transition to digital. Multiple consoles can be integrated throughout a facility to share audio sources, logic facilities, intercom and other capabilities utilizing the KLOTZ DIGITAL DIAN fiber optic network option.

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Our Secret is Behind the Scenes!



KLOTZ DIGITAL's unique VADIS Platform provides the perfect solution for facilities searching for the ultimate in digital audio integration. From single studio buildouts to new mega-facility operations, KLOTZ DIG-TAL provides a cost effective and time saving option to traditional analog and digital facility installations. Our secret is behind the scenes. Fiber optic based, the VADIS Platform integrates all audio functions. combining operator tasks, reducing the need for

traditional wiring, and paving the way for effortless future expansion. And, the elimination of a central router means distribution of "any audio source anywhere at any time!

Compare the costs for yourself. When it comes to savings, quality and performance...ncbody even comes close. That's why the most sophisticated and technologically advanced facilities throughout the world chocse KLOTZ DIGITAL

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Compact power amps **QSC** Audio

RMX series: This series of amplifiers provides clean, dynamic power in a cost-effective package. An efficient and robust power supply provides ample power for high level transients. Ultra-low distortion (.05% THD) and a



frequency response are key performance features. Surface-mount technology triples the small-signal component density to provide up to 2400 watts in 2RU. Independent defeatable clip limiters, selectable lowfrequency filters, barrier strip, XLR and 1/4" balanced inputs, and Speakon and binding post outputs round out the feature list.

714-957-7100; fax 714-754-6174 www.qscaudio.com; info@qscaudio.com Circle (274) on Free Info Card or go to www.beradlo.com

Digital audio network router Wheatstone

Bridge 2001: Features bi-directional fiber optic or CAT-5 interlocation connectivity, all digital domain AES switching, analog or digital inputs and analog and dig-

ital outputs, all in a seven inch rackmount digital routing cage. Each cage is capable of handling 512 simultaneous audio channels on its backplane. The 2001 handles smaller applications, yet offers growth potential via stackable units to upgrade to larger system configurations. Cages can be separated by great distances with many studios connected to a central rack room, providing shared resources yet permitting independently functioning satellite studios. Mixed signal switching is accomplished with a choice of AES digital or analog 24-bit A/D input cards, or 24-bit D/A analog output cards, all of which can be serviced from the front of the cage.

252-638-7000; fax 252-637-1285 www.wheatstone.com; sales@wheatstone.com Circle (302) on Free Info Card or go to www.beradio.com

RODUCTSOU Digital phosphor oscilloscopes Tektronix Inc

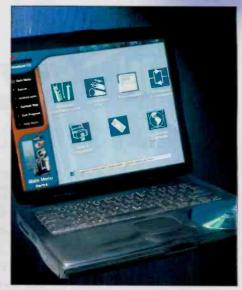
TDS3000B series: Based on the design of the TDS3000, the six new models in the TDS3000B series provide more power and portability for testing dynamic, complex signals in various environments. The TDS3000B series offers a host of new features designed for electronic design, production and maintenance, including the WaveAlert Waveform Anomaly Detection, which automatically detects anomalous waveforms. As a standard feature on every model in the TDS3000B series, Wave-Alert makes it easy to detect and take action against



events that fall outside the normal repetitive patterns of waveform activity. The unit can be set to respond to anomalies in a variety of ways. Also added is the e*Scope web-based remote control capability, which enables remote instrument control via an Internet browser.

800-835-9433; fax 503-222-1542 www.tektronix.com Eric.Hodges@Tektronix.com Circle (293) on Free Info Card or go to www.beradlo.com

CD-ROM Andrew



Broadcast CD-ROM: Containing complete product information on the company's broadcast product range, the CD-ROM is an instant source of reference for broadcasters, broadcast engineers and consultants. The Broadcast CD-ROM features broadcast antennas. transmission lines, pressurization products, RF systems and components, plus broadcast system planning tools and calculators. Each product area includes a document center; a full sales contact list; a reference data section; the Andrew update service; and video clips giving a brief introduction and overview to the specific product area.

800-DIAL-4-RF; fax 708-349-5444 www.andrew.com rose.wolski@andrew.com Circle (203) on Free Info Card or go to www.beradio.com

Digital on-air console Arrakis

Colorado Digital Revolution series digital consoles: Rackmounted, digital broadcast console with digital and analog inputs. Occupies 3RU and is controlled by an external PC



running the Cool-Mix software or from a slide-fader control surface. Available with 12 or 18 channels with two inputs per channel, three PGM buses, two mix-minus buses, stereo monitor, headphone output and cue bus output. Includes machine control logic, remote channel on/off and five onboard mic pre-amps. The 12-channel version can be upgraded to the 18-channel version.

970-224-2248 fax 970-493-1076 www.arrakis-systems.com sales@arrakis-systems.com Circle (208) on

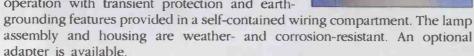
> Free Info Card or go to www.beradio.com



Red steady-state light Dialight

860 Series LED Obstruction Light: At 12.5 watts, the red steady-state light

uses nearly 90 percent less energy than a standard 116-watt incandescent bulb. The light also resists aircraft-induced vibration. Using Dialight's high-flux LED technology, the 860 Series exceeds the FAA's intensity specification for an L-810 light and can meet its -55°C temperature requirement. An optically designed glass lens enhances LED operation and provides 360° visibility at 70cd. The light is designed for 120-vac operation with transient protection and earth-



732-919-3119; fax 732-751-5778; www.dialight.com; info@dialight.com Circle (229) on Free Info Card or go to www.beradio.com



Professional audio facilities Creative Studio Solutions

System integration: Creative Studio Solutions (CSS) designs and installs professional audio facilities. The CSS facility houses a full turnkey operation from design to completion. Focusing on traditional and Internet broadcast, production and recording studios, CSS also creates custom audio racks, re-

mote broadcast and recording packages that are tested, then shipped to the clients' facility for installation. CSS concentrates on quality custom solutions to meet or exceed clients' needs. Being certified installers of major consoles and audio manufacturers as well as dealers for professional audio equipment, CSS is able to offer a one-stop-shop for those seeking high quality studio options. 303-425-5004; fax 303-425-5005

www.creativestudiosolutions.com; info@creativestudiosolutions.com Circle (225) on Free Info Card or go to www.beradio.com

Production package Digigram

PCXpocket 440 and Xtrack 4.1: A portable and powerful digital audio workstation is created when the PCXpocket 440 is coupled with the latest version of Xtrack that has been upgraded to allow users to import, export and edit MP3 files, export AIFF and WMF, as well as add support for audio CD track grabbing. Xtrack 4.1

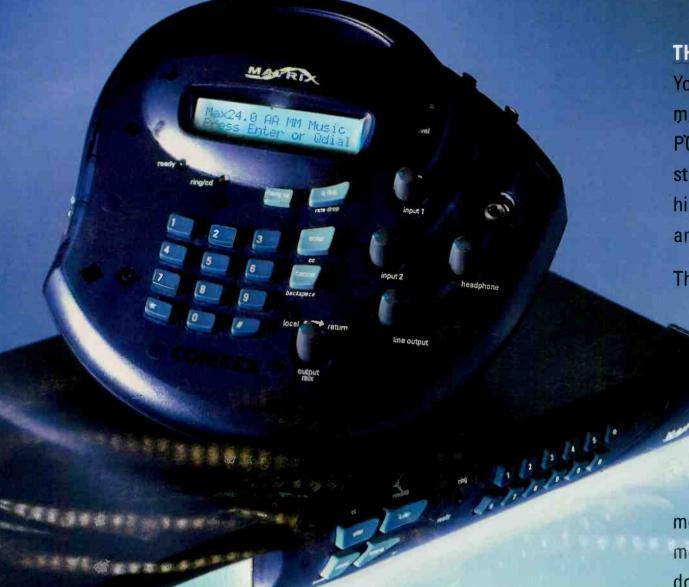


is able to merge a set of tracks, consisting of any combination of PCM, Layer I, and Layer II, to generate a single MP3 file. Format, sampling frequency and bit rate conversions are done by the export process. The software also allows users to convert their MP3 files into a single PCM, MPEG Layer I or MPEG Layer II file. A wide range of compression is offered, from 8kb/s at 22.05kHz to 320kb/s at 48kHz.

703-875-9100; fax 703-875-9161 www.digigram.com input@digigram.com Circle (230) on Free Info Card or go to www.beradio.com

Matrix-

QUITE POSSIBLY THE LAST CODEC YOU'LL EVER BUY.



THE CODEC FOR THE FUTURE

Your remote equipment toolbox may already include ISDN and POTS codecs plus a slew of other stuff. Now they are talking about high speed GSM digital wireless—and coming soon...3G.

The Matrix's modular approach is designed with this future

in mind. The core of the Matrix's flexibility revolves around full access to its powerful coding engine through easily inserted

modules and upgradeable flash memory. Whatever may be coming down the communications pipeline, the Matrix is ready.

WIRELESS

- 5 kHz real-time, full duplex audio on GSM wireless phones
- Up to 10 kHz real-time, full duplex audio on HSCSD GSM
- 15 kHz real-time, full duplex audio on portable Inmarsat terminals (with optional ISDN module)
- 15 kHz nonreal-time, "Store and-Forward" feature may be used on many mobile circuits
- Optional battery kit delivers power for up to 7 hours

ISDN*

- Layer III for 15 kHz at 64 kb/s
- G.722 for wide compatibility with other codecs

THE CODEC FOR TODAY

- Turbo-G.722 for 15 kHz with only 6 mS of delay
- Layer III transmit with G.722 return to reduce delay
 - 1200 baud ancillary data available
 - Fully international terminal adapter works worldwide
 - * ISDN module required

POTS

- 15 kHz full-duplex audio on a standard telephone line
 - Available in portable or rackmount versions
 - Modular design enables use on future circuits
 - Will work at data rates as low as 9600 baud
 - "Store and Forward" allows
 15 kHz, nonreal-time audio
 transmission at any data rate

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Andrew

MACXLine: Two new versions, 4 1/16-inch and 6 1/8-inch, 50 ohm, have been added to the MACXLine family of rigid coaxial transmission lines. MACXLine coaxial transmission lines are thermally compensated for dependable op-



eration and feature patented technology that can more than double the life of a transmission line system. All MACXLine rigid transmission lines are made from high conductivity copper tubing to ensure low attenuation. A bellows section is incorporated in the inner conductors. The bellows compensate for differential expansion between the inner and outer conductors, eliminating mechanical wear on sliding contacts. Inner connectors are captivated and use tensioned springfingers for maximum contact force, minimizing contact resistance and preventing line overheating

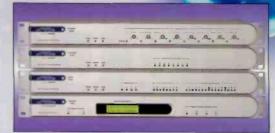
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DRODUCT SOUR

Audio routing system Symetrix

Air Tools Audio Routing System: The various components in the

AirTools Audio Routing System (ARS) can be combined to create a 64×64 router or smaller variations. Designed for flexibility and



versatility in both analog and digital broadcasting applications, the Audio Routing System has the capability of linking multiple studios using standard CAT5 cable while retaining 108dB dynamic range and low distortion. A unique feature of the ARS is on-board DSP for dynamics processing (AGC, EQ and Compression), gain and routing functions. All of these functions are configurable by a Windows-based PC running AirTools ARS Designer Software via an RS-232 port that is standard on each ARS component. The system is comprised of the Homer 2×4 Studio Break Out (7000), the Iliad 8×16 HomerLink Router (7100), the Odyssey 16×32 HomerLink Router (7200), the Icarus 8× Analog Router (8000), the Ulysses 8× Analog Output Router (8100), the Narcissus 8× Digital Input Router (8200), and the Oedipus 8× Digital Output Router (8300). 425-787-3222; fax 425-787-3211

www.symetrixaudio.com; symetrix@symetrixaudio.com Circle (291) on Free Info Card or go to www.beradio.com



ECISY to OWN, CRL's Amigo Series Audio Processors give you high-quality audio at very affordable prices. Easy to use, "set and forget" Amigo processors give your listeners the loud, clear, consistent sound that will keep them tuned to your audio.

OUTPUT



DISE REDUCTION

For all the technical specs and details, check out our website at

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AGC & Limiter

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Outdoor signs Antenna ID Products

Tower sight compliance signs: When intended for outdoor use, all signs are made of heavy-duty aluminum. Designed for displaying tower registration numbers, emergency and site access information, safety guidelines and equipment identification. Several standard designs are available, as are completely customized designs to fit specific needs.

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POTS/ISDN/PCS Codec Comrex

Matrix: As a plain telephone codec, the Matrix delivers 15kHz full duplex audio on one standard telephone line. An optional slide-in module allows the Matrix to operate on ISDN using Layer III or G.722. The Matrix is also capable of improving the quality of GSM wireless phone feeds. The data port on the Matrix enables direct connection of a



is switchable to line level), one headphone output and one line level output for connection to microphones and headphones or a mixer. An additional -10 dBu input is available for a minidisc or DAT player.

800-237-1776; fax 978-635-0401 www.comrex.com; info@comrex.com Circle (223) on Free Info Card or go to www.beradio.com

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PRODUCT SOURCE



ADVERTISEMENT

APT Unveils the Worldnet Rio an Audio Codec for the 21st Century

APT used the NAB platform to launch the WorldNet Rio, a full duplex multi-channel, multi-algorithm audio codec designed to meet the requirement for a universal codec with the capacity to interface with all previous APT products.

Aimed primarily at the broadcast and post production markets, this 1U box is not only smaller than existing products but also offers enhanced audio quality, reduced delay, and full backward compatibility with the NXL 384A, the NXL 384D and the DSM 100 X21, which it is designed to replace. The unit features one primary data port and a secondary data port (X.21/V.35) ensuring that in the event of main line failing it will automatically switch to back up.

The WorldNet Rio- is the first commercial product to incorporate APT's enhanced version of apt-X™, offering 20 and 24-bit operation as an extension to

Audio Processing Technology Launches WorldNet Milano

Belfast-based Audio Processing Technology (APT) has launched a brand new digital audio codec, the WorldNet Milano, which is intended to replace the hugely popular DSM 100 Pro Link and the BCF 256 and 384.



This new product is the latest addition to APT's WorldNet series—a range of digital audio codecs that includes the WorldNet Rio, on show for the first time in the U.S. at NAB.

The Milano features standard and enhanced apt-X™, the company's recently upgraded data compression algorithm, which provides enhanced audio quality and reduced delay time. APT is aiming the Milano at both the broadcast and post-production markets as it can be supplied with or without SMPTE timecode. It also features four ISDN interfaces—S or U—making it suitable for both US standards and other standards used around the world.

APT's managing director Noel McKenna says: "The Milano is not only an improvement on our previous products but it is also highly competitive in terms of price. This will enable us to open up our target market to encompass those customers who have always wanted APT quality but were previously deterred by the cost."

The Milano will begin shipping in the summer and is expected to consolidate APT's position in both domestic and export markets.

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the performance of the company's original 16-bit algorithm. This improved algorithm is the result of intensive in-house research and development that has incorporated the latest advances in DSP technology. A single Motorola

DSP563xx device provides increased stereo and mono audio channel capability and simultaneous full duplex

operation, guaranteeing that the algorithm will meet the demands of current and future PCM standards. Companies involved in audio track mastering applications will particularly welcome these improvements thanks to a reduction in coding delay and increased dynamic range.

With the ability to deliver high quality

audio found in inter studio networking, remote/outside broadcasts and STL/TSL applications, the WorldNet Rio is suitable for use in AM, FM, DAB and other broadcast environments. The available

audio bandwidths,

while dependent on the network bit rate and the resolution of the desired audio, will range from 3.5kHz mono through to 22.5kHz stereo . When the unit is interfaced with an X21 formatted digital telecom network the input/output data rates range from 64kbit/s through to 576kbit/s.

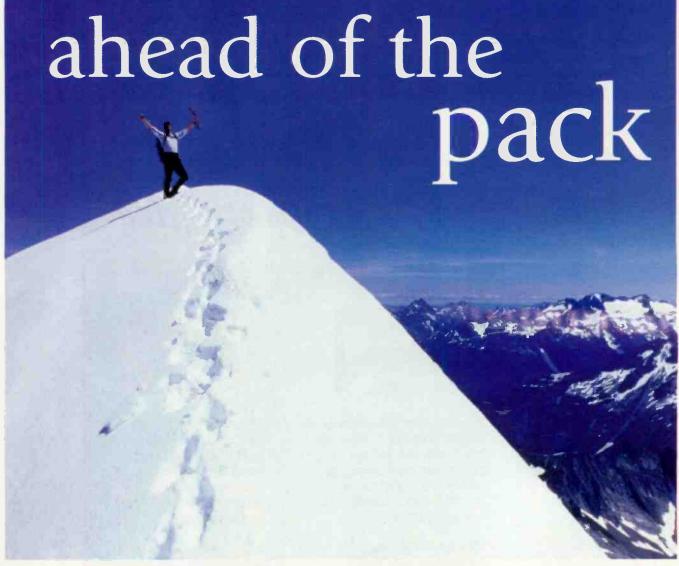
14 1 11

The WorldNet Rio is fully software driven, controlled and monitored through the front panel keyboard and LCD display. A headphone socket mounted on the front panel provides for additional monitoring of the audio input and

output. The rear panel I/Os can be switched to accept either analogue or digital signals and, if required, the digital output can be synchronised/locked to an external digital reference signal. Additional inter-

faces allow for the connection of Auxiliary and Timecode data plus Alarms and Opto-coupled control.

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apt-X™ is now available to license.

The apt-X™ algorithm is the first choice for many of the world's leading professional audio manufacturers. Its world-beating performance allows compression of a factor of 4:1 with no audible degradation, a coding delay of fewer than 4 milliseconds and a high resilience to multiple coding.

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Find out why apt-X™ is the leaders' choice; contact



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BEZALLO

Mic interface for computer audio

Sound Devices

USBPre 1.5: A complete, portable audio interface for hard disk recording. Designed for USB-equipped Windows and Mac OS computers, USBPre 1.5 adds S/PDIF input and output to Sound Devices' USBPre Digital Audio Interface. USBPre 1.5 includes all



audio acquisition with notebook or desktop computers. Features include: two active-balanced microphone preamplifiers with 48V phantom power, 24-bit A/D converters, instrument DI, line-level inputs, front panel level metering, with headphone monitoring of both analog source and computer audio. USBPre is completely bus powered, eliminating batteries or external power supplies.

608-524-0625; fax 608-524-0655 www.sounddevices.com; info@sounddevices.com Circle (284) on Free Info Card or go to www.beradio.com

PRODUCTSOURCE

Console Wheatstone

A-2000: This console is ideal for multi-studio buildouts and compact enough to fit almost any studio countertop. The modular A-2000 incorporates many features, including two stereo program buses and two



mono buses (one pre- and one post-fader) for backfeeds or on-the-fly mix-minus, and dual phone caller support using Wheatstone's Bus-Minus circuitry, which generates mix-minus caller feeds with the push of the module's bus assignment switch. The A-2000's mainframe can accommodate up to 23 input or accessory modules in any combination. Both control room and studio monitoring with talkback are provided, including pre- and post-studio and headphone level control monitor feeds. A second monitor module is available for studio two/headphone two output feeds. Connections are made via standard insulation displacement mating connectors and tooling. In addition, the A-2000 features a hinged meterbridge that conceals I/O connectors and gives direct access to logic programming dipswitches and calibration trims.

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Current Standard



The illustrious legacy of Crown Broadcast is beginning a new chapter. To meet the needs of broadcasters worldwide, Crown Broadcast is aggressively researching and developing new technology.

The transition to technically innovative new designs will fit the changing dynamics of world broadcasting while keeping the rugged reliability that defines Crown.

Crown FM Series transmitters daily extend the standard for reliable excellence in broadcasting. Around the world Crown remains the choice for trouble-free service in demanding circumstances and difficult environments. From FM 30 to FM 2000, each Crown model comes with a rich tradition of long-term value. The newest



Crown designs, scheduled for release in the fall, build on this history with new features for new market requirements, as well as options that can fit current Crown transmitters for new applications.

New Crown FMX Series transmitters, with Crown's Digital System Management (DSM) design, make system monitoring and control faster, easier, and more complete. The four-line display details transmitter operation at a glance, and provides full menu-driven control.

Add the Remote System
Management (RSM) option,
and get full remote monitoring
and control from your cell
phone. Relieve the stress of
inaccessible sites with easy offsite checkup and adjustment.

Circle (107) on Free Info Card or go to www.beradio.com



If you have already invested in a Crown FM transmitter, the DSM and RSM can be added as upgrades to give you new capabilities without the cost of replacing your transmitter.

Please visit our website at www.crownbroadcast.com to learn more. And there will be more. Watch for a new, cost-effective redundant transmitter control for automatic backup switching...the revolutionary CardCast digital transmitter in a PC... the industry leading effects of Omnia processing software....



Crown Broadcast 25166 Leer Drive Elkhart, IN 46514-5425 219-262-8900 www.crownbroadcast.com

Your investment in Crown will always pay off.

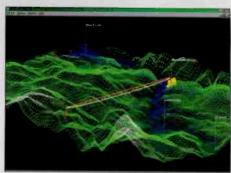
Speakers CAP Audio Professional

ADM line: A 3-way active studio monitor, the ADM1 features a 24-bit digital controller, FIRTEC internal 32-bit floating point, analog and digital input and AES3/EBU. The unit is remote controlled and includes a 200W amp. The ADM2 is a 2-way active studio monitor offering many of the same features as the ADM 1. The ADM2 features modern digital technology, optimized sound and emission performance and a compact design. The ADM3 is a 2-way active studio monitor featuring 24-bit digital analog and digital input and AES3/EBU. This unit is also remote controlled. The ADM3 is equipped with an integrated amplifier. In conjunction with the ADM_W, the threeway combination ADM2/ADM_W forms a precisely adjusted, large studio monitor system, which can reproduce even the largest volume levels over the entire transmission range from 25Hz to 20kHz.

727-447-9656; fax 727-447-9715 www.cap-audio.com; info@cap.de

Circle (220) on Free Info Card or go to www.beradio.com

Coverage and signal path software *V-Soft*



Terrain3D: Plots Longley-Rice coverage and radio paths over 3D terrain. Uses Open-GL technology to model signals and radio paths over 3D wire mesh or solid 3D representation of terrain. Users can use mouse to rotate or tilt 3D view; uses 03 sec USGS terrain elevation database.

800-743-3684; fax 319-266-9212 www.v-soft.com kmichler@v-soft.com

Circle (299) on Free Info Card or go to www.beradio.com



Sound Advice.

1.

Demand
UNCOMPRESSED
16-bit linear
audio in your alldigital air chain.
Compression
means compromise and we just
won't hear of it.

2.

Select a digital
STL that can be
configured with
UP TO TWO PAIRS
of linear stereo
audio. It's like
getting two
radios for the
price of one.

3.

Exercise your FREEDOM OF CHOICE. Choose 32, 44.1 or 48kHz audio sampling. It's your broadcast—select the rate that works best for you.

4.

Choose a digital STL that CAN ADAPT TO ANY RF ENVIRONMENT with user-defined 16, 32 or 64 QAM rates. (Flexibility is always a good thing.)

5.

Purchase a
950 MHz RF STL.
The channel
allocation is free,
and the money
you save over a
T1 STL goes
straight to your
bottom line.

Moseley's Starlink SL9003Q is the only 4-channel digital studio transmitter link on the market with all these features. Not just an STL, a sound investment.

Circle (108) on Free Info Card or go to www.beradio.com



FM digital processor Orban

Optimod-FM 8400: Has more than five times the DSP power of the 8200 as well as new features. Its intelligent peak limiting system and lookahead compression offer a

clean, loud sound without dis-



tortion, trashed baseband or pilot tone modulation. Selectable soft, medium and hard bass clipping are available. The limiting system eliminates the need to compromise between voice distortion and music loudness, allowing even loud, highly processed presets to offer pristine live speech. A composite processor allows the stereo composite signal to be limited while preserving stereo separation and protecting the stereo pilot tone and RDS/RBDS subcarriers. Software version 1.0 is now available.

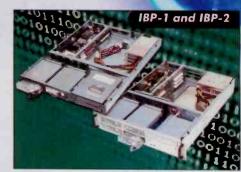
> 510-351-3500; fax 510-351-0500 www.orban.com; custserv@orban.com

Circle (270) on Free Info Card or go to www.beradio.com

RODUCTSOUR

Computer platforms I-Bus/Phoenix

IBP-1 and IBP-2: These computer platforms are suited to high-density computing applications and designed for 24/7 operation. The enclosures have been designed to accommodate and cool a wide range of components. Delivered as application ready platforms for quick time to market, low cost of



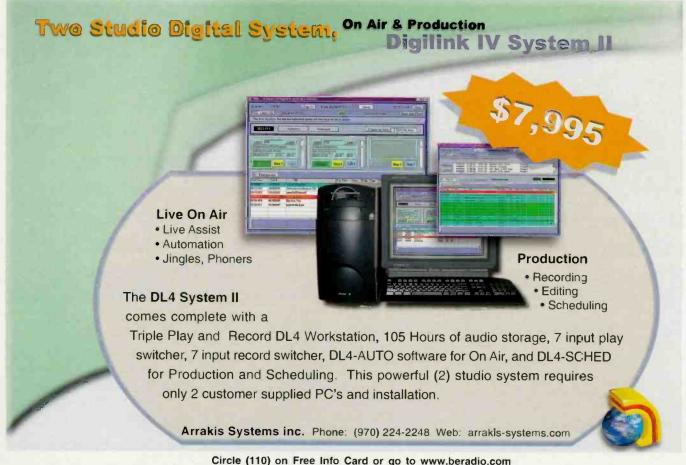
ownership and with long-term continuity of supply, IBP-1 and IBP-2 complement the I-Bus/Phoenix computer platforms range for OEMs. IBP-1 offers ISA or PCI expansion in a flexible 1U rack mount or desktop enclosure system with dual hotswap IDE or SCSI disks and exceptional cooling. IBP-2 offers flexible ISA/PCI expansion, four hot-swap hard disks, CD-ROM and Floppy Drive support and optional dual-feed, dual-redundant, hot-swap PSU. IBP-2 fits into rack mount or desktop applications and also offers internal cooling.

858-503-3000; fax 858-503-3005

www.ibus.com; www.phoenixpower.com; info@ibus.com Circle (245) on Free Info Card or go to www.beradio.com



Circle (109) on Free Info Card or go to www.beradio.com



Voice editing system **Audion Laboratories**



VoxPro PC: This PC version has the same look, feel and func-

tionality of the Mac VoxPro but includes many new features. Some of these are: a large re-sizable sound window that displays 7 to 15 seconds of a recording, the ability to import and export WAV, AIFF, MP3 and other file formats, unlimited undo, unlimited hot keys and the ability to run on any Pentium II or higher, Windows 98, ME and 2000. Mac versions released in Q3 2000 run on the G3 and G4 platforms.

206-842-5202; fax 206-842-6029

www.audionlabs.com

Circle (212) on Free Info Card or go to www.beradio.com

Web site enhancements Cartworks/dbm Systems

Web Update: Now CartWorks' Musicon-Hard-Drive systems can generate live content for a website automatically. Whether streaming audio is a part of the site or not, Web Update can help attract visitors and keep them longer. Web Update allows a website to display song titles and artist names in context with what is playing on the air. Links may be added for various sources of artist bios, so the site becomes more interactive for the visitor. Photos and graphics may also be displayed in context. Show a client's logo while his spot is playing. CartWorks Web Update will keep any station website fresh and alive, even while automated.

800-795-7234; fax 601-853-9976 www.cartworks.com sales@cartworks.com

Circle (221) on Free Info Card or go to www.beradio.com

MP3 Audio Card - \$1999



AudioScience's ASI4346 audio card features MP3 playback with on-board decompression. With It, MP3 audio files play quickly and smoothly. The card has four physical stereo outputs and one stereo input. It also includes a GPIO and an RS422 bitstream input, which supports direct input of a satellite receiver MPEG bitstream.

Exclusively at BSI

Portable Production - \$2599



The BSI FieldStation lets you take professional audio production, playback and editing capabilities virtually anywhere. The robust Dell laptop platform and versatile BSI software combine to form an amazing portable audio workstation.

Complete Systems - \$5299 starting price



Pictured - BSI Series 210

Our turnkey systems come equipped with all hardware, software, hubs and cabling you need to go on-the-air. Unlike some other companies, we do include the PC's... custom built or from Dell, your choice. We can even provide music from our 30,000 song library. Specialty recording and Sat-Net systems are also available.

Digital Automation - \$1499



Our WaveStatlon 3.0 digital automation software comes complete with triple-overlap playback, VoiceTracking, remote access and control, dynamic HTML/XML generation for web site display, time & temp announce, satellite interface and log import/export. More than 2500 users worldwide.

Pro CD Ripping - \$199



Our Speedy 3.0 professional CD ripping software gives you up to 20X ripping speeds into the format of your choice. RapidRip, automatic naming, autotrim, and normalization make building your library faster & simpler than ever. Free automatic labeling via the CDDB Internet service.

Be our guest at BSI on the Bayou the evening of September 5th at the NAB Radio Show. Call for your invitation.

Broadcast Software International

MP3 Audio Card - \$1499



The ASI4344 gives you professional audio playback of MP3 files. This 4 stereo output/ 1 stereo input audio device has on-board decompression for MP3. That makes audio playback fast and efficient. Now you can play multiple simultaneous MP3 audio files as clearly as linear audio files- and they take up a fraction of the hard drive space.

Exclusively at BSI

Look What We've Got For You



Download the actual software, or call for information WWW BSIUSA.COM 888-BSIUSA1

BEZALLO

Isocoupler Kintronic Labs

FMC-S.4G-SS: Isocouplers allow transmission lines associated with high-frequency antennas to be routed across the base insulator of a series fed, base insulated tower. Isocouplers make it possible to lease valuable AM tower space to potential paging, cellular or two-way customers. The FMC-S.4G-SS is an icosoupler designed for 2.4GHz spread spectrum applications.

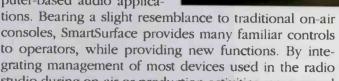


423-878-3141; fax 423-878-4224
www.kintronic.com; ktl@kintronic.com
Circle (251) on Free Info Card or go to www.beradio.com

PRODUCTSOURCE

Mixing control surface Telos Systems

Smart Surface: A control system designed to exploit the capabilities of mixing/routing engines and computer-based audio applica-

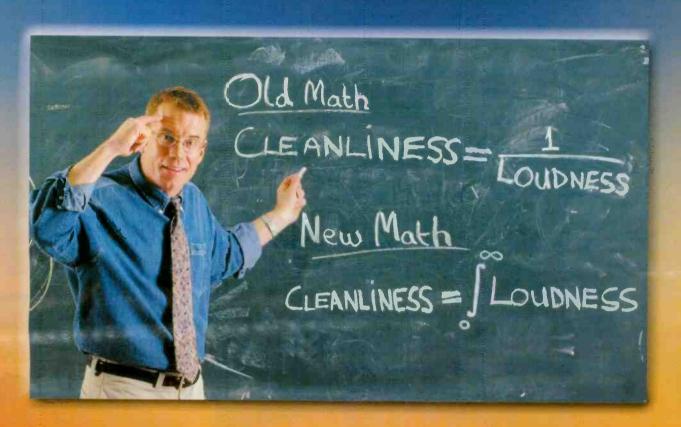


studio during on-air or production activities, near-complete control is provided for mixing, routing, playback, recording, editing, phone control, remote (codec) operation and more.

216-241-7225; fax 216-241-4103

www.telos-systems.com; info@telos-systems.com Circle (295) on Free Info Card or go to www.beradio.com

Process This!



Introducing

The NEW Aphex 2020MkII



he original Aphex Model 2020 audio processor set the standard for audio quality, loudness and extended coverage. Not content to sit on its laurels Aphex continued to research ways to improve performance even further. The result is the 2020MkH.

New processing algorithms and circuit designs, in addition to the fifteen proprietary circuits* from the original, allow even greater loudness without sacrificing a clean, natural sound. The MkII's increased flexibility also gives a station the ability to create its own unique sonic signature. New features include a split band optical high frequency limiter, a low distortion overshoot compensated low pass filter* (with no spurs), improved remote control interface, RDS, and dual composite outputs.

Audition the new 2020 MkII on your station and you'll find that Aphex has really done its homework—creating a processor with performance and features unmatched at any price. The 2020MkII—in a class by itself.



Improving the way the world soundssm

11068 Randall Street, Sun Valley, CA 91352 U.S.A 818-767-2929 Fax: 818-767-2641 www.aphex.com

*(patented or patent pending)

Circle (112) on Free Info Card or go to www.beradio.com

Lightning prevention systems Cortana

Stati-Cat line: A full line of lightning prevention devices for a wide range of installations. Models include the CN-4 crow's nest dissipater, which is designed to fit around a tower beacon and has more than 700 points. The SC-1 is mounted at regular intervals along a tower. The SC-4 is similar to the SC-1, but with a different mounting configuration. The Static Kitty is designed for smaller STL towers.

888-325-5336 fax 505-326-2337

Circle (224) on Free Info Card or go to www.beradio.com

Digital audio console Klotz Digital



Paradigm 16: Includes voice processing on all mic inputs; SRC's on all digital line inputs, machine control on all line inputs; mode, pan and phase reverse on all inputs; 12 faders with A/B switching and four faders with analog/digital six-source selectors. The LCD flat panel screens display a large time of day clock and an event timer. The screens double as a password-protected, intuitive, central control for console set up. The Paradigm 16 accepts 48 sources and has both digital and analog outputs. The console layout can be configured, saved and retrieved for each operator. The Paradigm 16 has familiar in-hand controls and a transparent mix-minus operation. Buses are PGM, AUX, TEL1, TEL2, and PFL (cue) with cue speaker, headphones and CR and studio monitor outputs. Talkbalk to TEL1, TEL2 and Studio is standard

678-966-9900; fax 678-966-9903 www.klotzdigital.com sales@klotzdigital.com

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AN IDT COMPANY

816R Series FM Transmitters

Known throughout the world as the best performing, most reliable FM transmitter.

Continental's 816R Series combines superior design and quality with exceptional workmanship to give it an unmatched, field-proven record.

The 816R Series comes in power levels from 11 to 70kW.

Now available through select RF Specialties offices!



www.rfspec.com

800.733.5011 www.contelec.com

Turnkey studios RAM Broadcast Systems

Cabinetry and prewiring services: Specializing in the fabrication of radio and television studios for more than 30 years, RAM has designed and pre-wired systems for all of the major networks, group owners and news organizations. Clients include Paul



Harvey News, ABC, CBS, Fox, NBC and WGN (pictured). Studio furniture is manufactured in both solid and laminated tops with multitrim options. RAM also manufactures products such as switchers, monitoring and metering systems, and is an authorized dealer for more than 200 broadcast equipment manufacturers.

800-779-7575; fax 847-487-2440

www.ramsyscom.com; sales@ramsyscom.com Circle (277) on Free Info Card or go to www.beradio.com

PRODUCT SOURCE

ISDN transceiver Telos Systems

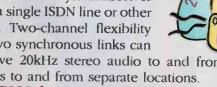
Zephyr Xstream: The newest member of the Zephyr family of ISDN codecs, Zephyr Xstream introduces MPEG4 AAC-LD coding, the newest compression algorithm from MP3 inventor Fraunhofer Labs, for Layer-3 audio quality with low transmission times. Zephyr Xstream is fully backward-compatible with the original Zephyr Zephyr Xstream is a reckmout.

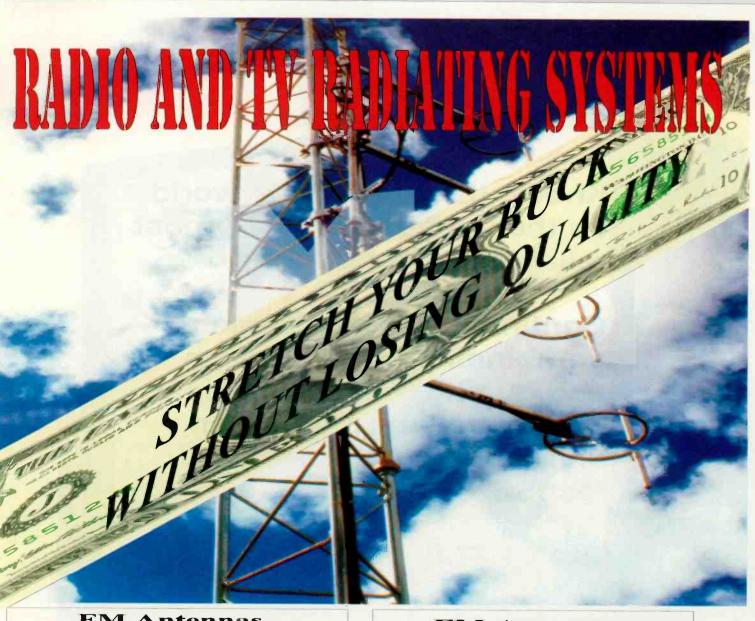
Zephyr. Zephyr Xstream is a rackmount-style transceiver specially designed for use with a single ISDN line or other low-bitrate transmission paths. Two-channel flexibility over a single ISDN circuit or two synchronous links can be used to transmit and receive 20LUs, research

be used to transmit and receive 20kHz stereo audio to and from a single location, or two mono channels to and from separate locations.

Circle (294) on Free Info Card or go to www.beradio.com

216-241-7225; fax 216-241-4103 www.telos-systems.com; info@telos-systems.com





FM Antennas Medium power circular polarization

SGP-1	\$690	4Kw
SGP-2	\$2,690	8Kw
SGP-3	\$3,595	10Kw
SGP-4	\$4,500	10Kw
SGP-5	\$5,300	10Kw
SGP-6	\$6.100	10Kw

FM Antennas Educational circular polarization

MP-1	\$250	0.6Kw
MP-2	\$680	0.8Kw
MP-3	\$980	0.8Kw
MP-4	\$1,280	0.8Kw
MP2-4	\$1,820	2Kw
MP3-5	\$2,270	3Kw
MP3-6	\$2,740	3kw

FM Antennas Low power circular polarization

GP-1	\$350 1.5Kw
GP-2	\$1,350 3Kw
GP-3	\$1,900 5Kw
GP-4	\$2,600 6Kw
GP-5	\$3,150 6Kw
GP-6	\$3,700 6kw

Other power configurations contact OMB America



3100 NW 72 Ave # 112 Miami, Fl. 33122 Tel:305-477 0974 Fax:305-4770611 ombusa@bellsouth.com

www.omb.com

Circle (114) on Free Info Card or go to www.beradio.com

Computer keyboards CyberResearch

OIX 2000: All keys (except for the extra Enter key) found on an AT enhanced IBM compatible keyboard are on the OIX 2000 desktop keyboards. The OIX 2010D desk model is weighted to hold its position while it is in use. The OIX 2011G is the same as the OIX 2010D, but the curser control key cluster is replaced with a Glidepoint trackpad. The OIX 2015D, an industrial version of this series, is made for harsher environments The OIX 2019 is a protective keyboard skin for the OIX 2010 and OIX 2015 models. The OIX 2020 is an industrial-duty flat tray model. This unit shares the same key layout as the desktop version, but it is not weighted. The OIX 2030 is the same industrial strength model as the OIX 2020, modified for panel-mounting. The OIX 2019-T is a protective keyboard skin for the OIX 2020 and OIX 2030 models.

> 203-483-8815 fax 203-483-9024

www.cyberresearch.com Circle (226) on Free Info Card or go to www.beradio.com

Microphone Audix USA

OM1: Released in 1985, the OM1 is the original flagship of the OM series. Machined from solid brass with a 2-stage design, the OM1 provides a frequency response of 50Hz to 18kHz and has exceptionally low handling noise. This classic hypercardioid provides 30dB of off-axis rejection with the ability to handle sound pressure levels in excess of 140dB.

Featuring the Audix hallmark E-coat finish and durable scratch resistant spring steel grill, the OM1 includes cordura carry pouch and mic clip.

800-966-8261 fax 503-682-7114 www.audixusa.com info@audixusa.com

Circle (214) on Free Info Card or go to www.beradio.com

Scott Studios' Digital Audio System by Jon Rivers Morning Show Host KLTY (FM)

USER REPORT

DALLAS I have no idea why everyone isn't using the Scott Audio System by **Scott Studios**. The Scott system is the easiest studio system in the world. In fact, it's the radio personality's best friend.

Scott's touch screen frees air talent to be creative and concerned about content. The simple screen layout means announcers don't worry about mechanics, and they can focus on what they want to do on the air.

The Scott touch screen is fast and intuitive, I can do whatever I want even if a bit changes. Audio plays instantly from the play buttons. Even if I have to go deep into the cart walls, I can play any of our sound effects and jingles within one or two seconds.

Avoid nightmares

As host of a busy morning show for decades, I can tell you that some other digital systems are absolute nightmares for major-market air talent.

Most other systems are obviously not designed by disc jockeys or with the disc jockey in mind. The systems are not laid out for those of us who need effective tools for our fast-paced work environment.

Digital systems should enhance our shows, and many other systems do just the opposite. After using some systems, I wonder if their designers asked, "How hard can we make it?"

But with the Scott system, everything is right where it should be. Buttons that need to be big are big. Those that should be out of the way are out of the way. The Scott system takes air talent out of bondage and into the light of day.



Ease-of-use and intuitive control for all announcers are high points of the Scott system.

We run our program log through separate faders. Then Hot Keys run through other faders. My producer has his own touch screen that parallels mine, and the news room has another touch screen to build news actualities, traffic, sports, sounders and spots.

KLTY does remotes—from my house in a freak snowstorm to a recent remote from the Gospel Music Association show in Nashville.

All we need to control our Scott system is a laptop, touch screen and an Internet connection. It's as fast at the remote location as it is in the studio.

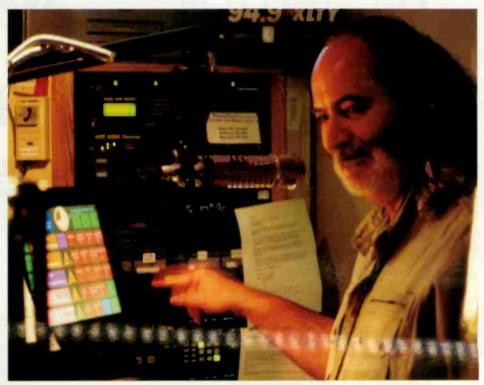
Two seconds

When we interviewed recording artists, they mentioned a song, and we played it in 2 seconds from the remote. Jocks from other cities are amazed what we do on remote with our Scott system.

We went through an ownership change and built new studios with another digital system. It had flat-panel touch screens, rack-mount cases, hard drives in the file server and workstations, digital ins and outs, but it was an announcer's nightmare.

We had used a Scott system for 6 years and the whole staff—including our manager—lobbied to get one again. Scott hard drives are much faster and don't choke when we have lots of events happening!

(972) 620-2211 FAX: (972) 620-8811 1-888-GET-SCOTT



Jon Rivers, morning air personality at KLTY, Dallas and host of nationally syndicated programs "20: The Countdown Magazine" and "Powerline."

The power supplies are redundant and right up front of the rack case, as are the air filters. The hardware is far superior to that of the other digital system.

Friends forever

On the technical side, KLTY sounds superb. All music is uncompressed at 44.1 kHz just like the CD. Scott has the best CD ripper.

My producer can put a 5-minute song in the system in half a minute. We trim levels and segue points in a flash—all from our desk! It's amazing!

Production with the Scott Studios system is also a gem. It interfaces digitally with our Audicy, so spots and promos are done quickly and sound great.

The Scott system is ideal for the bustling atmosphere at KLTY—the easy-to-use interface, its outstanding remote capabilities, fail-proof hardware and excellent production capacity make it my best friend in the studio.

See the Scott system at NAB Radio Booth 1838



13375 Stemmons Freeway, Suite 400

Dallas, Texas 75234 USA Internet: scottstudios.com

Circle (115) on Free Info Card or go to www.beradio.com.



MaxxStream LX: This entry-level version of the of MaxxStream family provides the same benefits as the original product line by offering multiple encoding resolutions, bit-rates

and multiple encoders. This PCI card reduces the hardware and software functionality of the already established MaxxStream PCI by eliminating the XLR connections and uses a lesspowerful DSP. It also offers two audio processors, the L1 Ultramaximizer and AudioTrack.

865-546-6115; fax 865-546-8445 www.waves.com

Circle (301) on Free Info Card or go to www.beradio.com



Time Sync and Time Sync II: Featuring a SIG led and relay, furnished as failsafe for either loss of satellite or power and invalid time, the Time Sync provides three separate GPS time referenced outputs. The first SPDT relay pulses once every 15 minutes. These times are programmed for 13:00, 28:00, 43:00 and 58:00 after each hour. The second SPDT relay pulses at the top of the hour. The final output is an open collector with a 100ms pulse every second. The Time Sync II provides four separate GPS time referenced outputs. The first three are identical to the Time Sync; the fourth output is an 4800-baud, RS-232 serial port providing

UTC time in HH:MM:SS format. Both units are supplied with a Garmin 12-channel GPS receiver with embedded antenna. The receivers are supplied with a 15-foot cable; longer cable lengths up to 100 feet may be used. Time Sync II is equipped with an optional RS-485 receiver input, allowing up to 1,000-foot separation from the receiver.

877-250-5575; fax 360-854-9479 www.broadcasttools.com bti@broadcasttools.com

Circle (217) on Free Info Card or go to www.beradio.com

Radio transmitting antenna Antenna Concepts Inc

Ultra Tracker II: The next generation of the original single-lobe FM CP antenna has higher gain with the same side-lobe suppression, superior building penetration, and more robust signal at the 60dBu contour, allowing full use of a licensed ERP

530-621-2015; fax 530-622-3274 www.antennaconcepts.com

Circle (205) on Free Info Card or go to www.beradio.com

Condenser mic AKG

C3000B: A largediaphragm cardioid condenser microphone for universal use, designed and made to suit the needs of musicians as well as the rigors of the stage. Features an active mylar foil diameter of linch (25 mm), and a cardioid pattern for both



615-360-0499; fax 615-360-0275 www.akgusa.com info@akgusa.com Circle (201) on Free Info Card or go to www.beradio.com

MUSICAM USA Delivers the BEST codec for you...



in the field



at the ballpark



- ▶ Portable ISDN Codec/mixer
- ▶ MUSICAM®-enhanced MPEG Layer 2, plus MPEG 3 and G.722
- ▶ Built-in automatic functions and remote control

POTS LINE CODE

▶ 15 kHz audio over one POTS line

▶ Remote control of mix levels

▶ Worldwide operation

Low delay bi-directional audio transmission

► Fast & reliable line rate re-negotiation while connected

▶ Directory for 20 Terminal Adaptor setups



at the studio



DrimalT"

- MUSICAM®-enhanced MPEG Layer 2, plus MPEG 3 and G.722
- ▶ Dynamic range better than 95 dB with 24-bit A/D & D/A
- ▶ 384 kb/s digital mastering quality audio
- Flexible, intutive and easy to use



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See us at NAB booth # R2935

Reliable Solutions.

Take advantage of them...

nformation has been spread throughout our civilization through a multitude of methods and technologies. But the importance still lies in getting the message to as many ears as is possible. So, imagine sharing music, sports, news and talk from your own corner of the world through space to your own network of stations. NPR Satellite Services offers this legacy of down to earth experience and affordable digital engineering savvy to give you results customized for your specific needs. And our space segment, C-band, and Ku-band receiver options are priced at under \$1,600! If you use your existing gear or build a network from the ground up, we're there to help you with 24.7 operational support anytime, anywhere. Visit us at www.nprss.org or call 202-513-2626 and we'll give you our ear!

Link Up With Us!



Circle (117) on Free Info Card or go to www.beradio.com.

Digital audio routing switcher Sierra Automated Systems

32KD: Performs switching, mixing, DSP, IFB and mix-minus functions using the SAS exclusive DTDM bus architecture, enhancing fault tolerance and minimizing single-point failure issues. Fiber-optic interfaces



allow multiple mainframes to be linked together for almost unlimited expansion capabilities. Both analog and digital inputs and outputs are supported on user-selectable connector panels. The system also

handles non-audio such as serial data and provides contact closures through a general-purpose interface. All SAS switchers use a variety of control methods, including rackmount and console-mount control panels, as well as soft panels and automation control. Special control panels for intercom systems and mix-minus programming are available.

818-840-6749; fax 818-840-6751 www.sasaudio.com; sales@sasaudio.com

Circle (282) on Free Info Card or go to www.beradio.com

Studio mixer Swissonic America



most equipment to be used in a typical small setup, such as two phantom-powered microphones, two hi-Z instruments, four stereo line inputs, tape input (with switchable phono preamp), S/PDIF input and output (optical and coaxial), tape output, monitor output and headphone output. Input and output volume can be adjusted individually. The built in USB interface connects the USB Studio with a computer for a complete DAW system. Each input source can be enabled for recording, and there is no need for a sound card.

800-613-2187; fax 707-577-7692 www.swissonic.com; infousa@swissonic.com Circle (290) on Free Info Card or go to www.beradio.com

CODUCTSOU

Studio ribbon microphone **Audio Engineering Associates**

R44C: An accurate reproduction of the original RCA ribbon mic that uses the same ribbon material, The R44C is a single diaphragm figure eight ribbon microphone. Mic pickup is 90dB down broadband at 90° from the front. Features include a custom AEA transformer; high SPL capability, max level is 140dB above 200Hz; low self-noise and consistent polar response. The unit is operable in high humidity environments and sounds equal to or better than the original RCA 44. A custom storage/shipping case, stand adapter, and manual and attached twometer microphone cable are included.

626-798-9128; fax 626-798-2378 www.wesdooley.com

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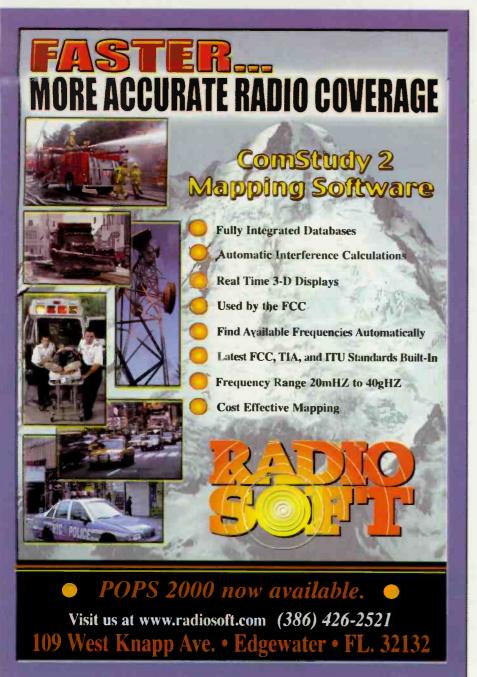
Intranet sound consultation utility **Netia Digital Audio**



Insider: This version includes new functions to enhance the program's ergonomics. Insider is a program for playing items in a database. Insider can now be used for consulting television video files. Insider provides easy access to audio and video files. Insider uses streaming technology for instant smooth playback and viewing. The on-screen commands are those of an ordinary tape recorder or VCR. The workstation needs no more than a standard sound or video card to relay the latest report on the schedule, with no loss of quality. The same file can be accessed simultaneously by several users, even when it is being recorded. The Insider processes radio and TV playlists in real time. On-air playlists can now be viewed directly via Insider. Insider has a user access rights management function.

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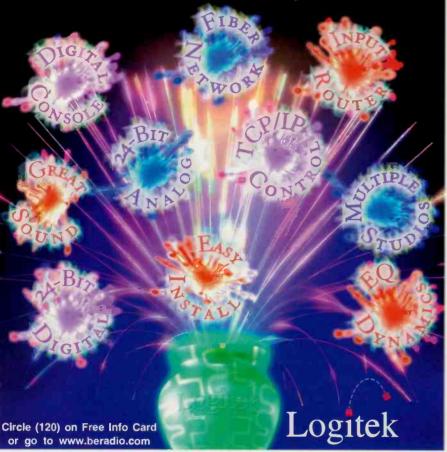
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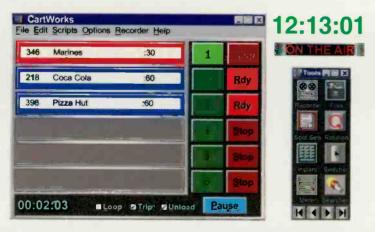
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12:20:26	M1732	Dance The Night	Van Halen	02:47	:13	F	MUS
12:23:13	V026	Voice Track 26		00112			VTK
12:23:25	DALIVE	SPOT SET		03:00		T	COM
12:26:25	J011	Jingle / Fast		00:06			Jim
12:26:31	M0713	Listen To Her Heart	Tom Petty	02:48	:11	C	MUS
12:29:19	V027	Voice Track 27		00:15	-		VTK
12:29:34	M2214	Black Friday	Steely Dan	03:40	:12	F	MUS
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CODUCT SOUR

Wireless telephone adapter JK Audio

Dapter One: This little black box converts the 2.5mm headset jack on your cell phone to a modular jack. This RJ-11 jack connects directly to any JK Audio Remote-Mix series mixers. You will continue to use your wireless phone to dial or answer the call, but you will use the

microphone and headphones plugged into your Remote-Mix during the call. Daptor One does not require any batteries or power supply. It contains a mini hybrid circuit that converts the earpiece and microphone signals into a balanced RJ-11 phone line signal. Mic signals from the RemoteMix are sent into the wireless phone, while the earpiece signals from the wireless phone are sent into the RemoteMix Headphones. The hybrid circuit minimizes crosstalk between transmit and receive.

800-552-8346; fax 815-786-8502; www.jkaudio.com; info@jkaudio.com Circle (249) on Free Info Card or go to www.beradio.com

Handheld interview mic Sennheiser

Electronics

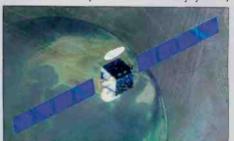
MD 46: This handheld cardioid microphone embodies unique design features not found in other interview mics. Created through the needs of the NBC project manager for the 2000 Sydney Olympics, the MD 46 features the performance qualities of leading handheld interview mics. but with the added clarity of a studio mic. The result is a long handle design with wind attenuation and good off-axis rejection. Features a frequency response of 40Hz to 18kHz, cardioid pickup pattern, a nominal impedance of 350 Ω at 1kHz. Overall length is 9.84 inches.

860-434-9190; fax 860-434-9022 www.sennheiserusa.com lit@sennheiserusa.com Circle (281) on Free Info Card or go to

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Satellite delivery **NPR Satellite Services**

Providing radio and audio satellite distribution to broadcasters throughout the country for over twenty years,



NPR Satellite Services leases full-time space to radio broadcasters, allowing stations to target specific program distribution hours, spread overhead costs, and build audience reach. NPRSS also sells equipment and provides equipment services such as repairs and access to a pool of loaners. NPRSS also offers SCPC and MCPC and uplinking from anywhere in the U.S. Around-theclock technical support is provided.

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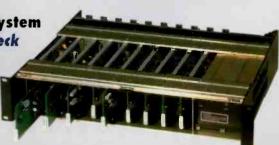
Turnkey studio and transmitter systems **Lightner Electronics**

System integration: This company offers complete turnkey studio and transmitter solutions. All equipment is pre-built at the factory and sent to any location. Complete documentation is provided for easily installation of the systems, or professional installation is available. Capabilities include: central rack rooms; pre-wiring and equipment installation, including testing and level setting; custom studio furniture systems; production/on-air control rooms and studios; equipment selection; acoustical, electrical and mechanical systems planning; coordination of architectural and engineering team; systems consultation and evaluation; telecommunications and computer systems; development of systems budget; and master planning and conceptual layout.

814-239-8323; fax 814-239-8402 www.LightnerElectronics.com; info@LightnerElectronics.com Circle (255) on Free Info Card or go to www.beradio.com

Card and frame system Ward-Beck

Serialboxx: This modular system consists of a versatile rack mounting card frame and a series of plug-in modules. The various modules are designed to handle analog and digital



audio and video signals. AES Audio modules currently available include the DA301A DA with onboard D/A converter, DA301B 1×8 AES DA. DA302A AES processing amplifier, DA302B AES DARS generator, DA303A AES A/D converter, and DA304A AES sample-rate converter. Analog audio cards include the AA101 universal audio DA and AA102 1×8 remote gain audio DA

800-771-2556; fax 416-335-5202; www.wbsltd.com; wbsltd@istar.ca

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OPTIMOD-FM 8400

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Circle (122) on Free Info Card or go to www.peradio.com.

Digital remote data link **Moseley Associates**

static encoder/decoder.

Aries 400S: The high spectral efficiency of Aries 400S allows users to send 64kb/s or 128kb/s data over narrow bandwidth 20kHz or 50kHz channels. An industry standard V.35 interface provides a seamless connection to an ISDN codec or data multiplex. A built in 300 to

9600b/s service channel is ready to connect to a remote control. Optional MPEG LII audio modules facilitate the transmission of stereo or mono audio over the link. Features include a frequency range of 330MHz to 512MHz, RF occupied bandwidth of 25kHz and 50kHz, user data rates of 64kb/s and 128kb/s, and modulation type 32QAM, 16QAM, QPSK. Additional features include XLR female and XLR male audio

> 805-968-9621; fax 805-685-9638 www.moseleysb.com; info@moseleysb.com

input connectors, an MPEG Layer II Option and a dynamic range 90dB

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DN-C550R: Professional features such as balanced XLR inputs and coaxial S/PDIF inputs (SCMS defeatable) make the DN-C550R invaluable for pro-quality CD recording. Drive 1 can be used as a dedicated playback deck,



accepting both pro and consumer CDs, CDRs, and CD-RWs, as well as supporting playback of HDCD encoded discs via the built-in HDCD decoder. Drive 2 can function as either a CD-R/CD-RW recorder, or as a second playback drive with the same playback functions as drive 1. Both drives of the DN-C550R are also PC/data disc compatible, while both analog and digital inputs of drive 2 are SCMS defeatable. The analog XLR inputs feature 24-bit A/D conversion. Digital coaxial or optical inputs are included.

973-396-0810; fax 973-396-7459; www.del.denon.com

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Transmitter remote control system **Burk Technology**

ARC Plus: The ARC Plus transmitter remote control system provides ultra fast response, more sites and an enhanced feature set. It's 60 times faster for instantaneous updates while still providing you with the ability to connect to more sites than ever before. Available in dial-up, full-time and multisite configurations. Flexible and expandable, with the ability to control from the front panel as well as options of telephone access and computer control for walk-away operations. Many accessories are available for all your transmitter remote control needs.

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Dual-disc CD recorder Denon Electronics



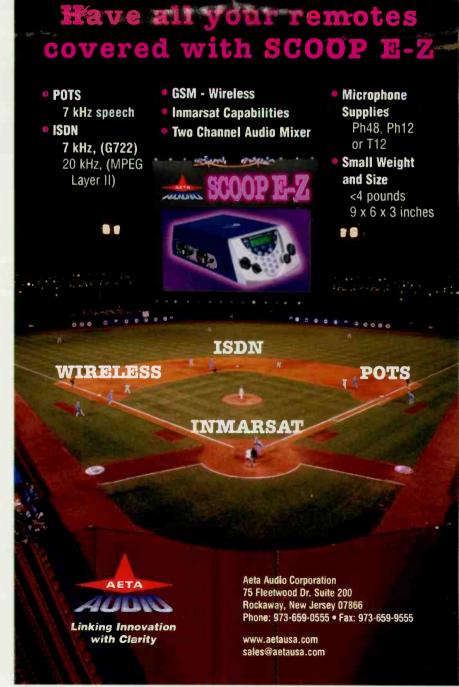
The Phantom: A radio-friendly audio

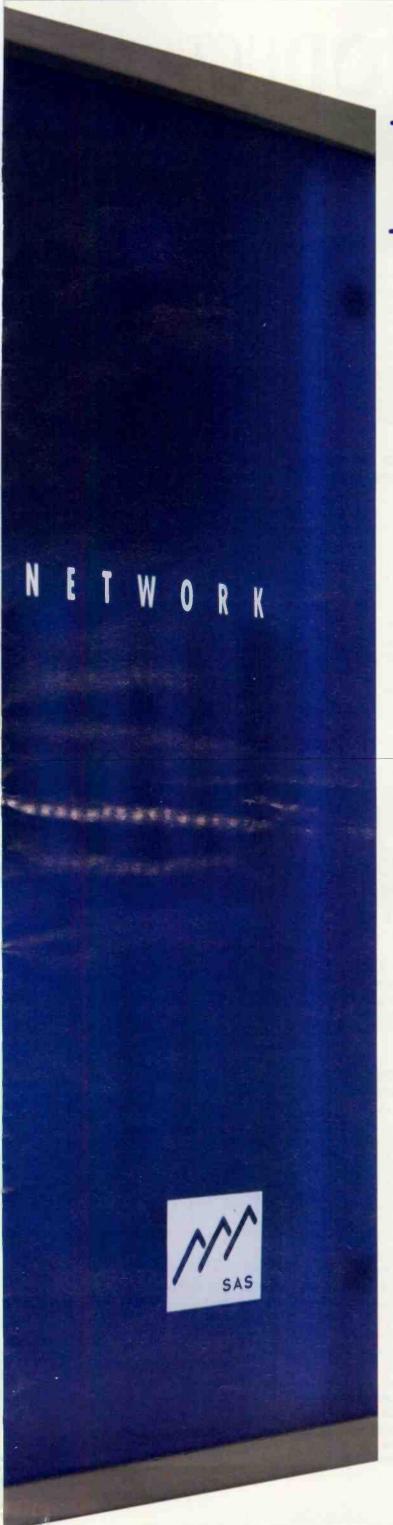
storage and playback system based on an open system architecture. Able to record audio feeds while playing back and switch external feeds. Information is displayed in a concise manner with pull-down menus to guide users. Schedules can be loaded for times years in the future. Audio files can be retimed to fit set windows. Time windows can also be filled automatically. Phantom can control seven stereo inputs using an external switcher. More inputs are available with additional switchers for a maximum of 50 inputs. Variable sample rates, encoding rates, stereo/mono settings and MPEG Layer II or Dolby AC-2 encoding algorithms round out the feature list

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PRODUCT SOURCE



Digital mixer Studer

On-Air 2000M2: The next evolution of the Studer On-Air 2000. the M2 includes extended functionality with an input configuration router and a newly-designed exterior. Protection of investment is part of the development as existing Studer

On-Air 2000s can be upgraded with the M2's functionality. The new Studer On-Air 2000M2 was developed for production and live broadcasting in network and local radio stations. Further potential applications include mobile and on-location production and broadcasting. The M2 can be equipped with 6, 12, 18 or 24 channel faders and with up to 24 input modules. A maximum of 24 input modules and 64 input signals can be controlled by the router. Each module can be either analog or digital offering two or six inputs, equipped with or without transformer and suitable for mic or line levels.

416-510-1347; fax 416-510-1294; www.studer.ch; studer@mail.studer.ca Circle (287) on Free Info Card or go to www.beradio.com

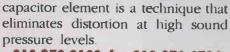
Stucio

Projects

SISTA THOM

Condenser microphone Studio Projects/PMI Audio

C1: A cardioid-only, MARKET STATES large diaphagm mic, the C1 is one of three Studio Projects microphones available through PMI. The C1 is a transformerless mic with FET impedance converters, touting good common mode rejection and RF interference prevention. The capacitor element is of the center electrode design, providing an even frequency response over 20Hz to 20kHz. The C1 Condenser capacitor membrane is 6 micron mylar, goldsputtered, with its voltage polarized by the application of phantom power.Dynamic feedback at the



310-373-9129; fax 310-373-4714 www.joemeek.com; www.pmiaudio.com sales@pmiaudiogroup.com Circle (250) on Free Into Card or go to www.beradio.com

Microphone preamp **Great River Electronics**

MP-2: A two-channel, single rack space unit. Each channel is a transformer coupled, class A discrete solid state design. All switches, relays and internal audio connectors have gold-plated contacts. Each part in the preamp has been carefully selected for maximum sonic value and long term reliability. Both channels have rear mounted microphone input jacks as well as front panel mounted 1/4" high impedance input jacks. Each channel also has a 15dB pad, a polarity control, phantom power switching, an overload LED and a 24-position gain switch. Input and output connections are goldplated XLRs. Power is supplied via a detachable AC cable

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or go to www.beradio.com

Digital AM transmitter Harris



DX Destiny:

Innovations include direct digital drive (3D) technology, digital serial adaptive modulation (DSAM), parallel/serial intelligent control (P/SIC), and the next level of hot-pluggability-hot serviceability. Each power amplifier module is driven directly by a lowlevel digital signal, eliminating the intermediate power amplifier. Harris has also developed a series of new technologies to make the DX Destiny virtually auto-serviceable. Digital serial adaptive modulation (DSAM) monitors each serial modulation encoder and RF power amplifier module in the transmitter and makes automatic adjustments. Parallel/serial intelligent control (P/SIC) provides another level of redundancy. A full logic level parallel control system is overlaid with a microprocessor-based serial control system. Additional options will allow transmitter control through a PC, a network, or over the Internet. Either control system can independently run the transmitter if the other is out of service.

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Multi-pair cable Gepco International



Riser-rated Gep-Flex: Gepco will feature an improved version of its Gep-Flex jacketing compound found on most Gepco multi-pair products. The new Gep-Flex compound elevates the cables to a higher UL-CMR riser rating, while maintaining the flexibility, durability, and all-weather properties for which Gep-Flex is known. In addition, the finish of the cable is now

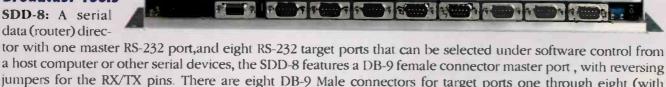
smoother, allowing for easier installation through conduit. This new Gep-Flex jacket compound is available on all of Gepco's main line of GA618 series (22 gage) and GA724 (24 gage) analog audio multi-pair cables, as well as Gepco's premier 5596GFC series of wide bandwidth digital audio multi-pair.

800-966-0069; fax 847-795-8770 www.gepco.com; gepco@gepco.com

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Serial data router **Broadcast Tools**

SDD-8: A serial



a host computer or other serial devices, the SDD-8 features a DB-9 female connector master port, with reversing jumpers for the RX/TX pins. There are eight DB-9 Male connectors for target ports one through eight (with reversing jumpers). A green LED indicator displays the status of each serial port. Two yellow LED indicators show the power status. A pair of LED indicators monitors the internal serial bus. The on-board switching regulator allows for operation on AC input voltages from 12 to 24VAC. The SDD-8 is supplied with a 12 Vac @500ma power cube. An expansion connector can be used to connect up to three additional SDD-8 units on the same local bus, allowing for a one of 32 target serial port selection.

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ODUCTSOU

MP3 controller **Numark Industries**

DMC-1: A rack mountable, multi-functioned dual MP3 controller that allows DJs to instantly locate, play, mix, sample, loop, and remix on-the-fly digital song files stored in MP3 format on their computer's hard drive, the digital media controller DMC-1 is modeled after Numark's CND-22 dual CD player, and loaded with Visiosonic's powerful PCDJ Pro Digital DMC software. This controller enables any DI to create and perform live musical compositions not possible with dual CD players or vinyl turntable systems. 401-295-9000; fax 401-295-5200

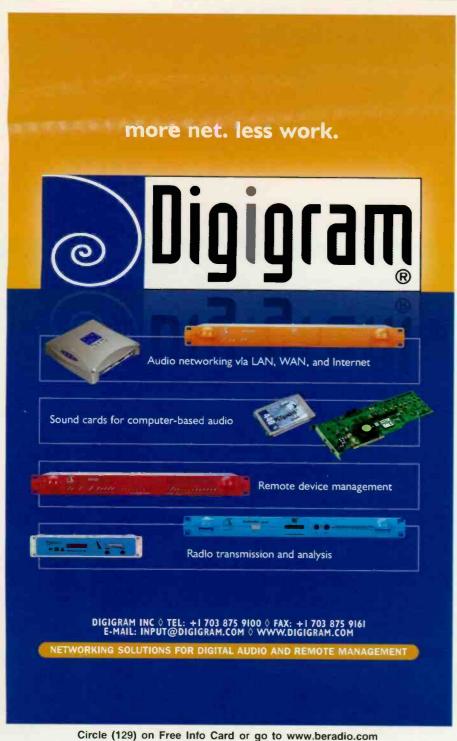
www.numark.com Circle (268) on Free Info Card or go to www.beradio.com

studio furniture Studio Technology



Basis: The line of Basis furniture is designed to be a standard-configuration built-to-order concept in studio furniture. Standard designs are made as versatile as possible to fit a variety of equipment and operational situations. With most of the company's products built to order, customers can start with this line as the basis for studio furniture and budgetary needs. Designs can be modifed to fit studio space, a specific piece of equipment or work habits. There are three standard configurations from which to choose. Basic options can be selected from existing drawings, colors and finishes for a fixed base price. The Basis U-GS is U-shaped with a guest space on the side, the Basis U-GF moves the guest to the front. The Basis L-GF is an L-shape with a guest space in the front.

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PRODUCT SOURCE

BEZALIO

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sone of Genelec's latest additions to its line of Active Monitoring Systems, the S30D brings the superior-sounding 24-bit/96kHz monitor system to a new level in digital audio reproduction. Based on the legendary Genelec S30 (launched in 1978), each 3-way enclosure features an 8" woofer loaded in a vented cabinet allowing accurate frequency response down to 36Hz; a 4" mid frequency cone driver sealed in a cast alloy aluminum housing; and a proprietary ribbon tweeter with a moving mass of only 32mg, with a frequency response extending up to 50kHz. This extended frequency response is critical in utilizing the maximum potential of today's 96kHz machines, setting a new standard of accuracy with minimal distortion. AES/EBU digital inputs and analog XLR inputs are provided. With an optional impedance adapter, S/PDIF signals can also be accepted for convenience

Genelec Announces the 2029B 24-bit/96kHz Digital Active Monitor

he 2029B Digital Stereo Monitoring System is a compact (9.75" H X 6.0" W X 7.5" D), two-piece, nearfield monitor system designed for sound professionals working in a wide range of critical listening environments, including digital audio workstation music production and editing, digital broadcast confidence monitoring, multimedia projects, and location/live sound recording.



in almost any format.



The 2029B is an XLR, AES/EBU 24-bit/96kHz version of the highly successful Genelec 2029A 24-bit/48kHz Active Digital Monitor, and supports the same modes of operation, including use in monitoring systems with a Genelec 1091A subwoofer. This faster brother of the 2029A is ideal for direct connection to on-line and off-line editing systems, making it the ultimate extension of any workstation. The 2029B system is comprised of one right master speaker and one left slave speaker. Stereo level adjustment is controlled by the right master speaker.

The 2029B's digital interface is built into one of the speaker system's enclosures, and like all Genelec monitors, the new 2029B also features built-in, perfectly matched amplifiers. The only connections required are the digital (or analog) input signals and AC power. The 2029B's digital input accepts an AES signal with a word length of up to 24-bits and sampling rates up to 100kHz. The built-in D/A converter yields a dynamic range of more than 112dB. The sophisticated conversion circuitry yields high resilience to the problem of clock jitter and also features excellent linearity specifications.

Low frequencies are reproduced by a 5" driver, which is magnetically-shielded in a rugged, vented, cast-aluminum enclosure. The enclosure features rear-panel heat sinks, which properly dissipate any heat from the speaker's built-in power amplifiers. The low frequency 3dE point is at 68Hz and the response extends down to 60Hz. The high-frequency driver is a 3/4" magnetically-shielded metal dome coupled to Genelec's Directivity Control Waveguide Technology™ (DCW) for superior imaging and balance. An active internal crossover network, fed directly from the system's D/A, is acoustically complementary and crossover slopes are 24-32 dB/octave; the crossover frequency is 3.3kHz. Rear-mounted frequency response controls allow users to tailor the monitor's characteristics to virtually any acoustic environment. The 2029B's built-in fast, low-distortion dual amplifiers can produce up to 40 watts of output power and are capable of driving a stereo pair to peak output sound pressure levels of 110dB SPL

For installation, a special audio cable connects between the 2029B's rear-of-speaker connectors (male-to-male XLR provided).

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Genelec Re-invents the S30 with Expanded Digital Performance

The S30D monitoring system is able to keep up with today's most advanced forms of digital audio, accepting digital signals with a word length of up to 24 bits and sampling rates up to 100kHz. The system's D/A converters are designed with an interpolator, which increases the internal sampling rate up to eight times the original before a fourth-order delta-sigma modulator. These converters are matched with corresponding power amps and speakers, ensuring a more natural sounding monitor with outstanding high frequency reproduction and uncommonly precise bass reproduction for a cabinet of its size (19" x 125/8" x 11 1/3"). The conversion process used in the S30D has a high resilience to clock jitter, along with excellent linearity and automatic detection of word length and sample rate. This not only provides the best sound reproduction in a given



situation, but also allows for virtually unlimited compatibility with the many digital audio systems widely used today.

Genelec's finely tuned cabinets and drivers are precisely matched with bass, mid and treble amps, each providing 120 watts—more than enough power and clarity for all applications. Designed for near-field environments, the S30D is available in both vertical and horizontal versions and is ideal for multichannel digital workstations, broadcast production, post production facilities and mobile recording vehicles.

Other features of the S30D include selectable D to Again settings, a digital-loop-thru allowing the signal to be retransmitted to other S30Ds or other digital equipment, and fast, low-distortion amplifiers capable of driving a stereo pair of S30D's to SPLs of 122dB @ 1 meter.

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Accuracy - from A to B.







Genelec's Digital Double Play.

The 2029A S/PDIF

Today's audio control rooms and media production facilities are fast becoming all-digital environments. With the proliferation of digital workstations, the only tools which aren't digital are microphones and audio monitors. Until Now.

The 2029A and 2029B Digital Active Near-field Monitoring

Systems are complete digital solutions that complement the interface from digital bitstream to acoustic energy. The extremely linear, integrated D-to-A-converters circuitry used in both models offers a precision-matched electrical interface to the active electronics and amplifiers.

This results in the best possible resolution and

reproduction of your carefullycrafted, all-digital productions —
whether they're from a desktop suite or
a mega-studio facility. Developed from our
highly-acclaimed 1029A analog near-field monitor,
the 2029A or 2029B can also be used in conjunction with
our 1091A subwoofer to create an incredible power-packed,

The 2029B

AES/EBU

full-bandwidth stereo monitoring system. The 2029A's are precision-aligned and balanced — from the single stereo 24-bit S/PDIF digital input — to their highly-efficient, 110dB/SPL matched drivers.

The 2029B offers the same precision alignment with an AES/EBU digital interface on a digital XLR-type input.

The 2029B is 96kHz compatible.

The 2029A is 48kHz compatible.



In both models, stereo listening level is controlled with a single, front-mounted adjust knob. And like any other Genelec Active Monitor, rear-mounted room response controls let you match the speaker's response to your room's response.

Want to hear what digital audio really sounds like?

Want to hear what digital audio really sounds like? Audition the 2029A for an S/PDIF digital rig, or the 2029B for your studio's AES/EBU digital network — two more great reasons to invest in Genelec.

the whole truth and nothing but the truth

GENELEC°

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BERRANGO

Field mixer/phone interface

RemoteMix Sport: Built around the RemoteMix 3, with features added specifically for the needs of sport broadcasts. The three-input mixer (for playby-play, commentary and crowd) also supplies three separate headphone outputs. Other features include a headphone cue input, an XLR output selectable between local mic mix or local plus backhaul mix, DTMF keypad, and universal handset interface. Ideal for use with POTS and ISDN codes. The contributions of the property of the prope

for use with POTS and ISDN codecs. The cue input jack on RemoteMix Sport supports two-way communications through any wireless phone that accepts a 2.5mm headset plug. Wireless-ready RemoteMix Sports include a 1/4" to 2.5mm shielded cord. If you own an earlier release of RemoteMix Sport, or any other JK Audio RemoteMix series mixer, you can use the new JK Audio Daptor One wireless phone adapter for your wireless broadcasts.

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PRODUCTSOURGE

Delivery platform ChainCast Networks

ChainCast Content Delivery Platform: A scalable, open platform, the CCDP provides cost-effective, high-quality content delivery. ChainCast offers the CCDP as a managed service, providing customers with complete, end-to-end operation of a streaming infrastructure. The technology allows customers to stream content at a lower cost by creating dynamic distribution links or chains between users. This peer-to-peer technology enables consumers with sufficient bandwidth to act as splitters—seamlessly sending streams to additional users. The CCDP features guaranteed quality of service (QoS), carrier-grade reliability, and a cost savings of at least 50% in the delivery of streaming content over competing options. Compatible with third-party streaming media applications, the CCDP provides the power to integrate with existing content delivery networks.

408-467-4040; fax 408-467-0448

www.chaincast.com; info@chaincast.com

Circle (222) on Free Info Card or go to www.beradio.com

Resistance tester

1520MegOhmMeter: For testing insulation resistances up to $4000 \mathrm{M}\Omega$ and AC/DC voltages up to 600V. The Fluke 1520 offers a backlit LCD, which displays an analog bargraph and digital readings simul-

taneously. It autoranges to the proper test voltage: 250, 500, or 1000V. It also automatically switches to voltage test when it detects either AC or DC voltage greater



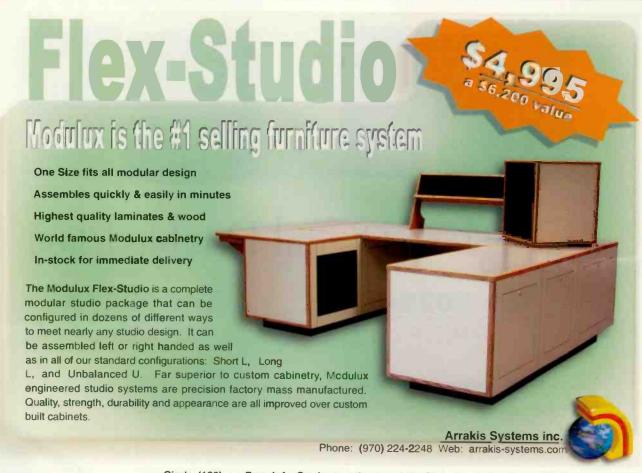
than 30V. Switch to the Lo-Ohms function for testing connections. It even has a last reading memory display function. The 1520 safely autodischarges the test capacitors when done. The 1520 comes with TL27 heavy duty test leads, TP74 lantern tip test probes, AC86 large jaw alligator clips, protective holster with hand strap, carrying case with accessory storage, four C-cell batteries, and an instruction manual.

800-44-FLUKE; fax 425-446-5116
www.fluke.com; fluke-info@fluke.com
Circle (237) on Free Info Card
or go to www.beradio.com

Automation system

Broadcast Electronics VaultXpress: Designed specifically for small- and medium-sized radio operations, VaultXpress provides the same digital audio and studio system software found in the AudioVault, but it is scaled to meet the unique demands of small- and medium-sized radio operations. Provides a complete turn-key system that gives small radio operations the core software applications and hardware to effectively serve their markets. The software applications provide on-air management tools. program creation and editing applications, station-automation features, dynamic Internet applications and program creation workgroup programs. Users can completely customize their unit to meet their unique environment with a complete suite of pick-andchoose applications. Comes in five outof-the-box packages

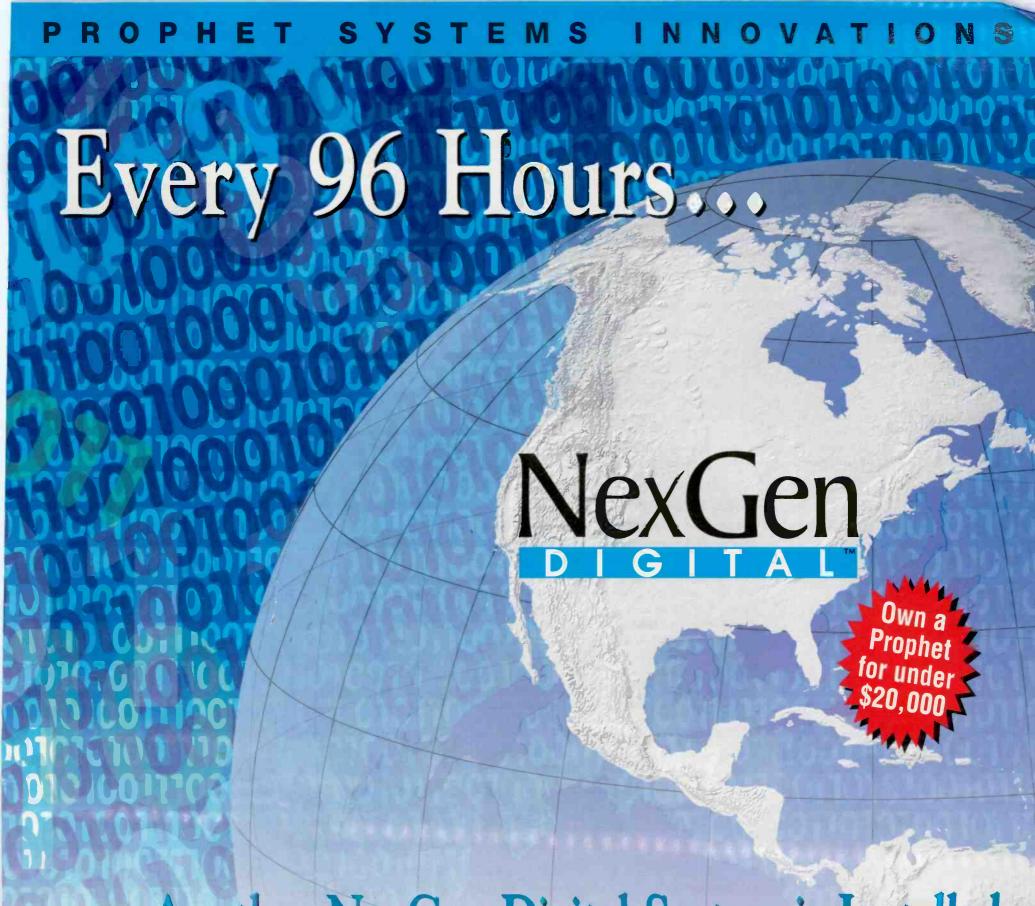
> 217-224-9600 fax 217-224-9607 www.bdcast.com bdcast@bdcast.com Circle (216) on Free Info Card or go to www.beradio.com







Circle (133) on Free Info Card or go to www.beradio.com



Another NexGen Digital System is Installed.

What do Clear Channel, CBS/Infinity, Sirius Satellite Radio, and the largest private group of stations in Mexico have in common?

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- Wide Area Networking
- High speed digital audio extraction
- Automatic phone call recording
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What sets Prophet Systems apart from our competitors?

Our attitude towards service and support!

NexGen Digital, the latest generation in a long line of cutting edge digital audio systems.

Circle (134) on Free Info Card or go to www.beradio.com

Agilent

Aurora Presto: This compact, flexible unit can provide analog line testing, ADSL layer testing with "Golden Modem" operation and ATM layer or IP application layer testing, all using one touch, fully automatic testing or manual expert mode for more in-depth diagnosis. Fully automated Go/No go testing is provided from up to 20 selectable userdefined test profiles which may be edited on screen or via PC. Aurora Presto with the ATU-R can function as a "Golden Modem". In this mode the Presto replaces the remote modem, connecting to the user equipment through either its built-in 10BaseT Ethernet port or the optional ATMF 25.6 interface card. With the modem card installed, the

Presto can measure upstream/downstream rates and DMT BIN capacity, perform line BERT and other tests, providing results in exportable text or graphical form.

> 800-367-4788; fax 650-553-3905; www.agilent.com Circle (200) on Free Info Card or go to www.beradio.com



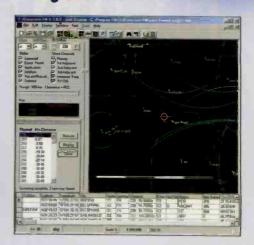
On-demand Web audio musicmusicmusic

Live at the BBC in Concert: The legendary Live at the BBC in Concert series is available for streaming through musicmusicmusic in North America. Internet listeners can choose what concert they want to hear when they want to hear it. The series features exclusive live recordings of some of the greatest bands in music history. Stations can stream the one-hour segments online through their own websites and sell advertising within the program. A station-branded player is also available. Agreements are market exclusive.

416-537-2165; fax 416-537-2510 www.musicmusicmusic.com geri@musicmusicmusic.com Circle (263) on Free Info Card or go to www.beradio.com

FM channel study software RFEngineers.com

ODUCTSOL



RfDetective-Pro: RfDetective-FM is an engineering tool to help locate frequencies for new FM broadcast stations and change class or power. It also displays antenna height, location and channel of existing broadcasting stations. An intuitive user interface makes it useful to experienced engineers, while its easy-to-use menus make it friendly for station and group owners. Four editions of rfDetective-FM are available. The Pro and Standard editions can create and modify jobs. The Pro edition can also create its own database directly from raw FCC data that can be downloaded from the FCC website daily. The Light edition can read and modify jobs created with the Pro or Standard editions, but cannot create a new job. The Reader edition can display any jobs created or modified by the Light, Standard or Pro editions. Requires Windows 95B/ Windows NT4 or later, a Pentium 166 or faster, 32MB RAM or more (128MB for Pro), 250MB or more (1.2GB for Pro) hard drive space, and a 640×480 monitor with 256 colors

352-336-7223; fax 352-367-1752 www.rfengineers.com info@rfengineers.com Circle (279) on Free Info Card or go to www.beradio.com

Digital on-air broadcast console Harris

Pacific Legacy: Legacy offers a fully modular, low profile ergonomic design. Features include: mainframe sizes 14, 22 and 30 input modules; A and B inputs that accommodate analog and digital sources; hot swappability of all modules; digital and analog outputs for four program buses, stereo send and telco record mix; off-line and mix-minus outputs for up to fourtelco/codec input modules; stereo cue with automatic metering; Easily accessible I/O connections and set-up switches; and a full suite of opto-isolated control logic

800-622-0022 fax 513-459-3890 www.harris.com broadcast@harris.com Circle (243) on Free Info Card or go to www.beradio.com

Studio furniture Spacewise Broadcast Furniture

BlendedTone Airshow 2000: A premium wood-built and laminate system, it comes in three suggested configurations: guest show, with guests on one side of the operator; the morning show, with morning talent opposite the operator, and the general studio configuration, a full-sized studio. Features all finely finished solid woods for bullnosing, trim and kicks. Tops are 1.5" thick throughout and finished with 1,005 premium laminates. Sidewalls are birchfinished plywood, with 100% choice laminates on the exterior. Units come in large-scale modular components. Options include upgraded woods (like cherry or walnut), wood finished sidewalls and customization.

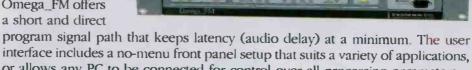
800-775-3660; fax 480-704-6149; www.spacewise.com; info@spacewise.com Circle (286) on Free Info Card or go to www.beradlo.com

Digital FM processor Inovonics

Omega_FM: A largely soft-

ware-based digital on-air processor/generator, Omega_FM offers

a short and direct



or allows any PC to be connected for control over all processing parameters. 800-733-0552; fax 831-458-0554; www.inovon.com; info@inovon.com

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provides contact closure on loss of audio adjustable from 7 seconds to 4.5 minutes monitors two audio channels integrated rack panel cost-effective, reliable

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BE Radio Product Source August 2001



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Gone are the days of hunt-and-cut editing, warbling time compression, and sped-up chipmunk audio. Now overstuffed, overtime audio productions can be reduced through a real-time, undetectable process that can cut up to one minute of audio from every twenty without reducing program content.

The Cash audio time machine from Prime Image is a fully digital, easy-to-operate device that utilizes a patented system of random "micro-edits" to reduce the length of any production, whether voices, sound effects, or music. And Cash works automatically, in one pass, with no additional processing. Simply enter the amount of time you want to lose and the period of time over which to lose it. Then push the start button and find

something more important to do. Like kicking back and enjoying a cup of coffee—but, in the interest of your waistline, take a pass on the donuts.

For specifications, information, or orders contact Prime Image: www.primeimageinc.com
408-867-6519



The Digital Video People Tel (408) 867-6519 Fax (408) 926-7294 www.primeimageinc.com

BER Handheld test instrument

NTI (Neutrik Test Instuments)

Digilyzer DL1: Provides a comprehensive set of analysis functions for digital audio- and video-related audio signals. All commonly standardized sampling frequencies up to 96kHz are handled in consumer and professional formats. The Digilyzer DL1 is a handheld, battery-powered device in the size of the analog analyzer Minilyzer ML1. Features include AES3, S/PDIF, TOS-link; ADAT interface; sampling frequency 32 to 96kHz; digital audio analysis; carrier status analysis; carrier signal measurement; monitor speaker and event logger.

+42 323 96060; fax +42 323 96089 www.nt-instruments.com

info@nt-instruments.com

Circle (267) on Free Info Card or go to www.beradio.com



PRODUCT SOURCE Voice formant and pitch processor Helicon Vocal Technologies

VoicePrism: A vocal processor for stage and studio, the VoicePrism has a full range of lead and backing channel vocal processing under preset control. The VoicePrism provides the ability to go directly from a phantom powered mic into its 48V mic preamp to access any of the onboard processes including compression, gating, dual fully parametric EQ, four-voice harmony (with individually adjustable gender controls and humanizing parameters), fifth lead-doubling voice for automatic double-tracking, two separate post-effects blocks (incl. chorus/flanger, delay and reverb with predelay), effects and harmony libraries, preset browser with context sensitive help menus, and audition sampled human voices for preset previewing. Outputs include ¹/₄" analog and S/PDIF digital I/O.

805-373-1828; fax; www.tc-helicon.com; info@tcelectronic.com

Circle (244) on Free Info Card or go to www.beradio.com

Analog/Digital audio generator Dorrough Electronics

TG-10A: An audio signal generator that can be used in a variety of test situations where a stable and accurate test and tone source is needed, TG-10A features digital and analog audio outputs along with a full set of connectors. Pass-through connectors for digital and analog inputs are supplied for normal program sources when the TG-10A is in the bypass mode. Functions include: mute, digital quiet, continuous tone, burst tone, step tone, parabola, burden, overs test, sample rate conversion and digital audio to analog conversion. Generator can be locked to an external AES bitstream. Digital sample rates are 32, 44.1, 48, 64, 88.2 and 96k samples per second. Frequency range is 10Hz to 0.45 of sample rate with 1Hz resolution.

818-998-2824; fax 818-998-1507; www.dorrough.com; dorroughel@aol.com Circle (231) on Free Info Card or go to www.beradio.com

Active nearfield monitor Klein + Hummel

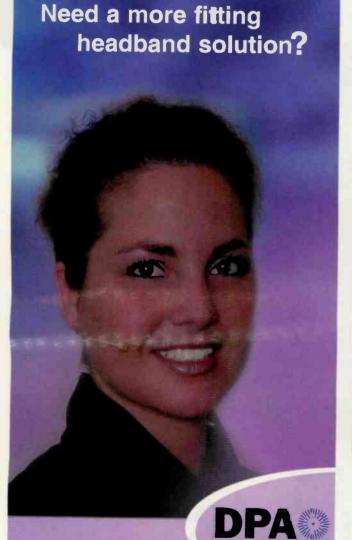
O 300 D: Within the framework of a planned reorganization of model descriptions for studio monitors, this model offers the same acoustical features as the O 198. The bass frequency response has been extended to 40 Hz. All other measurements and the outward appearance of the O 300 D remain the same. Features include a digital input with a 24-bit/96kHz D/A-converter, allowing the direct connection to a digital source in AES/EBU or S/PDIF-format. The output power of the amplifier for the tweeter, mid and woofer have been extended, technical values have been improved. The room equalization can now be aligned with all set up variants and the room acoustic. Limiter protection has been optimized for all three parts. The balanced floating input reaches better distortion values, and the groundlift switch is on the rear panel.





+49 711 45 89 30; fax +49 711 45 89 335; www.klein-hummel.de; sales@klein-hummel.de

Circle (252) on Free Info Card or go to www.beradio.com



Configurable as either left or right-side boom allowing easy adjustment for different users, the new Type 4066 miniature headband microphone is incredibly lightweight and comfortable.

The 4066 headband microphone continues the DPA philosophy of offering superb sound quality and robust design and is perfect for live performance and broadcast applications.

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E-mail: inquiries@tgina.com
www.dpamicrophones.com

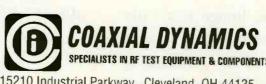
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Digital consoles Arrakis

Revolution: Both analog and digital, the Revolution is a radio console that is at home in either type of studio. The Revolution console is a modular, two piece design made up of a rack mounted digital audio engine and a control system. The control system can be a traditional-looking console or a PC computer, or both at the same time. The control console is also modular, making it quick and easy to replace worn faders or to expand the system. The digital engine features two serial control ports, enabling the console to be monitored and controlled from two places simultaneously. Turret control software for a Windows PC is suitable for the talk studio. For telephone talk radio and contest caller applications, the console supports two simultaneous callers via two mono mix-minus buses.

970-224-2248; fax 970-493-1076
www.arrakis-systems.com
sales@arrakis-systems.com
Circle (207) on Free Info Card
or go to www.beradio.com

PRODUCT SOURC

Portable studio

TieLine America

I-Mix: Combines all the features of a remote broadcast portable mixer with built-in ISDN and POTS codec capable of 15kHz audio. The remote broadcast mixer accepts up to five mic/line inputs and provides a mix-minus bus. Intercom buttons on each input allow off-air communications between headsets. Also features chan-



nel on/off buttons, and cue and relay control buttons. All hardware features are software controlled and can be upgraded. The codec has G3 GSM Cellular and IP data network interfaces. Proprietary, full-bardwidth ISDN and POTS speech and music algorithms deliver 15kHz audio with less than 100ms delay. The unit can also interface with generic codecs using G.711 and G.722 algorithms. Fully interfaces with the TieLine Toolbox software package, which allows PC remote control for chat, upgrades and system monitoring.

317-334-9390; fax 317-416-7366

www.buytieline.com; sales@buytieline.com Circle (296) on Free Info Card or go to www.beradio.com

Broadcast system Prophet Systems

NexGen Digital NS: This entry-level NexGen automation broadcast system is designed for smaller stations or radio groups. Stations not requiring all the features of a fully-loaded NexGen Digital Broadcast system can purchase the NS system and still take advantage of PSi's technology. Runs on a Pentium III computer or better, Windows98 or WindowsNT or higher, with at least 128 MB RAM, a 9GB hard drive, 800×600 monitor and a 10/100BaseT network interface card.

800-658-4403; fax 308-284-4181

www.prophetsys.com; sales@prophetsys.com Circle (273) on Free Info Card or go to www.beradio.com

RF field-strength meter and modulation analyzer **Avdemat**

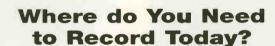
FM_C3: A mobile RF field-strength meter and modulation analyzer, the FM_C3 automatically measures up to two stations or programs simultaneously. The unit displays readings in text, chart and curve representation of stations monitored. Features include: GPS receiver and RDS/ RDBS decoder; calibrated antenna; modulation analysis; high performance FM receiver and text and curve display.

866-AUDEMAT; fax 703-433-5452; www.audemat.com; info@audemat.com Circle (209) on Free Info Card or go to www.beradlo.com

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The Online Radio Technology Leader: The BE Radio website has been redesigned to offer you more information and features than ever before. Read the latest radio technology news in the Currents Online. View demonstrations of the hottest products in the Demo Room.







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Circle (142) on Free Info Card or go to www.beradio.com



Storage area network

Dot Hill Systems Corp



SANnet 7100: The initial member of the full fibre SANnet 7000 series, SANnet 7100 delivers seamless migration from the SANnet 3000 series (SCSI/SCSI) and the SANnet 4000 series (SCSI/ fibre). This allows customers to maximize their in-

vestment by integrating the new system into their existing SANnetbased storage area networks. The system delivers unparalleled capacity and scalability with a SAN-ready redundant Fibre Channel network that directly supports up to 16 servers and can scale to over 58 terabytes (TB). The SANnet 7100 also features Fibre Channel server-attached RAID controllers that can support up to 160 disks each, depending on configuration. Usable disk space is 5.8TB space per controller pair with 10,000-RPM 73GB drives.

> 800-872-2783; fax 760-931-5527 www.dothill.com; websales@dothill.com Circle (232) on Free Info Card or go to www.beradio.com

PRODUCTSOURCE

Numix enhancements Logitek

Blank wedge, Button 24 wedge and Euro-version control surface: Enhancements to the Numix Console control surface include the Blank wedge, a wedge with blank top panel and empty pan for mounting custom devices or control hardware. The Blank wedge adds extra space where needed in a studio, allowing for custom button installations or other desired functions. Also included is the Button24 wedge. Usefulness of this product is enhanced through Logitek's Supervisor software. The buttons can be programmed to accomplish a variety of tasks and functions both inside the Logitek system and with external equipment. Finally, there are the Euro-Version Numix control surfaces, which incorporate GPI buttons on Selector wedges to provide functionality commonly requested by European customers.

877-231-5870; fax 713-664-4479 www.logitekaudio.com; info@logitekaudio.com Circle (256) on Free Info Card or go to www.beradio.com

Mic kit Audix USA

Fusion series: The new series features three models: F10 dynamic, optimized for snare, toms, and bongos; F12 dynamic, optimized for kick drum and congas;

and F15 condenser, for overheads, high hat, and toys. The F-10 and F-12 dynamic microphones each come



with an integral clip in order to simplify set-up. The mics are available in two package configurations: Fusion Series 4 contains three F10 and one F12; Fusion Series 6 contains three F10, one F12, and two F15.

800-966-8261; fax 503-682-7114 www.audixusa.com info@audixusa.com

> Circle (215) on Free Info Card or go to www.beradio.com

PC-card audio processor

Optimod-PC: Tailors audio signals to aid in digital audio broadcasting (DAB), Internet Web/netcasting, and recording applications. Optimod-PC is a PCI Sound Card with on-board digital signal processing that is suitable for both live streaming and ondemand programming. The DSP provides a loud, consistent sound to the consumer by performing automatic gain control, equalization, multiband gain control, and peak-level control. Optimod-PC offers such features as two digital inputs with mixing of asynchronous sources, and sound card emulation that allows Optimod-PC to talk through the operating system to applications running on the host. Optimod-PC uses look-ahead limiting with low overshoot, effectively preventing clipping in the sound card or encoder overload. Optimod-PC ships with more than 20 factory presets.

510-351-3500; fax 510-351-0500 www.orban.com

custserv@orban.com Circle (269) on Free Info Card or go to www.beradio.com



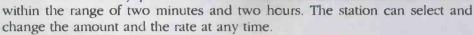




Circle (144) on Free Info Card or go to www.beradio.com

Time insertion processor **Prime Image**

Cash: Cash allows stations to create an additional 60 seconds for every 10 minutes of programming. The system does so undetectably, without altering pitch or creating digital artifacts. It works live, in real time, on the air. The amount of time Cash creates varies from zero minutes to four minutes and can be added to any period of time



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408-867-6519; fax 408-926-7294

www.primeimageinc.com; primeimagein@earthlink.net

Circle (271) on Free Info Card or go to www.beradio.com

Audio failure control unit SBS

Guardian: The Guardian Broadcast Audio Fail

Control Unit is

designed to provide sophisticated management of audio signals, such as telco lines, STLs and multiplex signals. Incoming signals are monitored, and if a fault is detected on one channel, it will derive a mono feed from the remaining channel. If both channels are lost, it will switch to an external source, such as a CD, to keep the transmission running. Audio signals are passed through the Guardian on relay contacts, giving a fail-safe system with no active components in circuit. Uses 300Hz to 3kHz bandpass filters followed by separate dynamic range and static level detectors to discern between fault conditions such as 50Hz or 60Hz hum on a line and valid program feeds. This technique almost eliminates false triggering. A pilot detector (which can be disabled) is included in the multiplex detector, switching to the

backup immediately if it is lost. +44 14244 45588 fax +44 12424 43388

www.sbs.uk.com; sales@sbsfm.com

Circle (280) on Free Info Card or go to www.beradio.com

Studio microphone arm LPB

Silent Boom:



solid aluminum stock, eliminating the echoes found in hollow frames. The extruded channel is sized for microphone cables to be dropped into the outside edge of the boom, allowing immediate threading of any cable with connectors. A set of clips ensures that even undersized cables are secured in the channel. Perhaps the most striking visual change to the standard microphone boom is LPB's use of flocked springs. The soft felt-like coating is black, hiding the springs from view, and deadening any twang that might occur from impact or operation. A Delrin bushing isolates the metal base from its riser, ensuring squeak elimination, and a lower occurance of metal fatigue.

610-644-1123; fax 610-644-8651 www.lpbinc.com; lpbinc@aol.com

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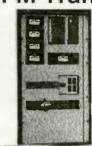
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17194 Preston Road Suite 123-297 Dallas TX 75248 Ph. 972/473-2577 800/279-3326 Fax 972/473-2578 800/644-5958 E mail jjoynt@superiorbroadcast.com web site superiorbroadcast.com

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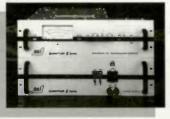
Modulation Monitors



Modulation Monitors



Digital STL / TSL Systems



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For More Information Call Us Toll-Free At (800) 334-9154

Audio console

Auditronics

2600 Series: This series combines elegant design elements with solid construction. The modular design uses gold contact connectors that plug straight into motherboard sockets, and



features 12 input channels, a monitor module with control room, studio, headphone and talkback functions, an output module that provides program, audition, pre- and post-mono fader outputs, and independent meter selection. Additional line selector and tape remote modules are also offered. The 2600's design also features a flip-up meterbridge to access I/O connectors, logic programming dipswitches and calibration trimpots. Stereo program and audition buses, plus two additional mono outputs. optimize flexibility for caller feeds and broadcast recording.

> 252-638-7000; fax 252-637-1285 www.auditronics.com; sales@wheatstone.com

Circle (213) on Free Info Card or go to www.beradio.com

Power amps Alesis/GT Electronics



RA Series: The amps incorporate a convection cooling system

The RA150, RA300 and RA500 also feature DC coupled, fully complementary discrete amp topology, dual differential input stages, wide bandwidth, detented front panel level controls, overload/protect indicators, bridged mono operations, balanced 1/4" and RCA connectors, heavy duty, dual binding post output connectors, and a relay-controlled turn on/off system, in a heavy-duty steel chassis. Additionally, the RA300 and RA500 offer XLR input connectors and bar-graph metering.

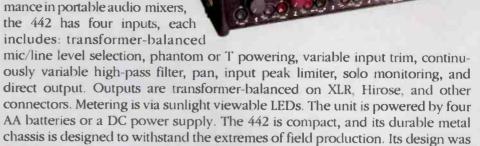
800-5-ALESIS; fax 310-255-3401; www.alesis.com

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RODUCTSOUR

Field production mixer **Sound Devices**

442: A field production mixer that sets a new standard for functionality, size, and performance in portable audio mixers, the 442 has four inputs, each includes: transformer-balanced



radio, effects recording, and music production. 608-524-0625; fax 608-524-0655 www.sounddevices.com; info@sounddevices.com

driven by the requirements of professionals in film, TV news, documentary,

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Automation system Smarts Broadcast Systems

Simply Smart: Using the Windows interface, this free software package incorporates multiple MP3 audio streams, creates dynamic play lists and can handle commercial breaks. Silent

Sense technology detects when audio is missing and will automatically start the next item in 10 seconds. Ideal for smaller installations or overnight operations.

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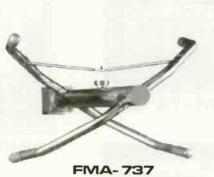
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Microphone Neumann **TLM 103** Monolith:

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LED display audio interface **Prime LED**

ALI-53D: A PC board to drive LED meters from analog or AES3 audio signals to generate a range of audio parameters for display. The unit can be configured to show VU, PPM, loudness, peak hold, correlation/phase, or any combination of these displays. The board creates a serial data stream that is sent to DDV display driver boards. Various ballistic and scale characteristics are possible, including multiple simultaneous display modes, such as a PPM dot over a VU bar. Requires 5VDC power. $27k\Omega$ input impedance with Phoenix or XLR connectors. Maximum input level is +19dBu. Sample rate detects 32 to 48kHz automatically.

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AFC3: The company's line of receivers is designed for professional or EAS monitoring. The receivers are available as stand-alone, or three can be housed in a 1³/₄-inch rackmount, the AFC3. The AFC3 contains a front-panel audio selector switch, mounted small speaker and headset outputs controlled by a volume control. Also mounted on the front panel are LED indicators that indicate carrier and modulation activity for each receiver. An alert indicator and test/reset switch is mounted on the front panel for those receivers that use alert tone detectors, such as the weather and public-service monitors. The rear panel contains outputs for the receivers. Uses a 12V power source. 941-351-4454; fax 941-351-6081

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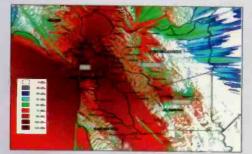


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Transmitter remote control **Electronic Associates**

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interface with speech responses (optional). The interface mode is sensed automatically. In addition, the multi-purpose interface may be directed to automatically call out to selected phone numbers with announcements describing the condition or problem that caused the call. Up to eight different phone numbers are stored. The DataWorks user may program up to 16 custom voice messages using the voice dictionary.

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Streaming media tool **GMV Network**

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Galaxy 3000: The online three-phase UPS offers scalable power protection from 10 to 30kVA and uses MGE's Ultra High Availability Topology (UHAT) to ensure that all critical loads are protected. The Galaxy 3000 supports 10 to 40 network servers. To increase battery efficiency, the Galaxy 3000 now incorporates a new battery testing module that increases UPS reliability and extends battery life. In addition, this management system can perform predictive failure analysis of the batteries—an essential feature, as batteries are the weakest link in any UPS system. Also new to the Galaxy 3000, is a load surge stabilization feature that allows the UPS output to be steady.



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Digital audio mixer Fairlight On Air

Fusion: A digital audio router and mixer in which the internal signal processing is carried out with 32-bit floating point DSP's (Analog Devices SHARC's). Internal over-modulation that sometimes occurs in devices with fixed-point processors will not occur, since the internal dynamic range is greater than 1,000dB. Asynchronous sample rate converters are used in the digital inputs of the Fusion engine; this makes input of digital consumer devices and non-synchronisable professional devices possible. Despite its features and flexibility in adapting to different applications, the cost of ownership for the mixer are competitive compared to an all-analog setup. +31 26 3684925; fax +31 26 3684927; www.fairlightonair.com

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DSP hardware platform TC Works

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Radio automation software Tiesseci

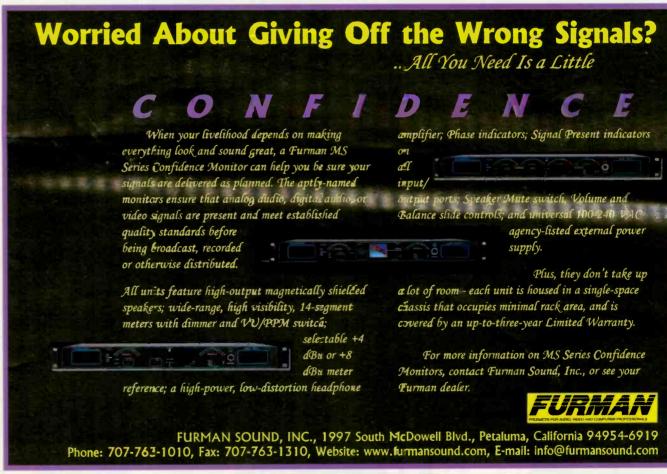
TS2000 pro K9: This software provides broadcasters with world-class, high-quality, multi-format, digital radio automation products to suit the needs of a growing and diverse stations into the professional broadcast market. The new TS2000 pro K9 builds on the success of the TS2000 K8 digital automation platform that has been delivered to more than 7,000 stations worldwide in just over a year. The Tiesseci TS2000 is available as a software kit or as a complete turnkey studio system with all the hardware and software for production and air studios.

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Supervisory system Itelco USA

ISS: This system, with its windows-based software, enables control and management of a single transmitter to a whole network of transmitters. The ISS can be applied to any Itelco transmitter as well as to transmitters from other manufacturers. The open system architecture allows tailoring the system to the customer's specific requirements as well as modifying or expanding its features in the future. The ISS enhances the ease of transmitter maintenance by identifying the location and number of faults, providing maintenance date and time information, and allowing long-term trend analysis.

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lamps **LEDtronics**

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DRODUCT SOUR

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Stereo mixer Radiomax/Intermax

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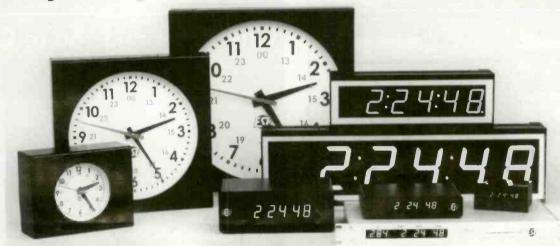
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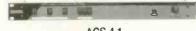
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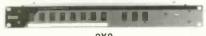
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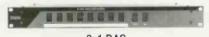


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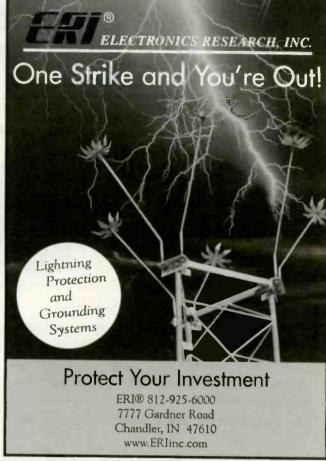
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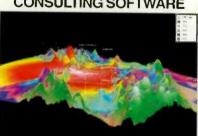
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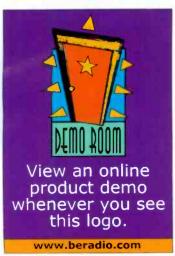
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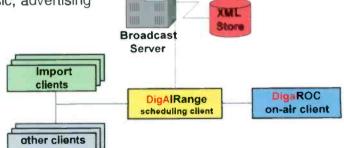
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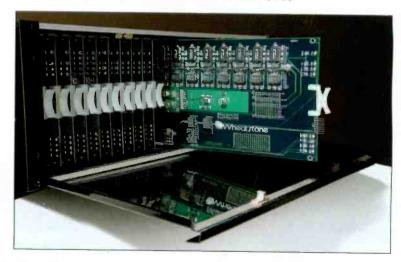
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