

THIS IS THE NEXT BIG THING:



WHEATNET[™]— FUTURE PROOF!

WHEATNET LETS YOU ROUTE THOUSANDS of bi-directional signals at ONCE in just 60 microseconds—all secure, virus-proof and in just 2 rackspaces! WHEATNET leaps way ahead of conventional stacked router or IP-based designs, interconnecting up to 48 studios (each with its own independent mix engines and I/O resources) using just one CAT-5 wire per studio, plus providing systemwide X-Y control from one central location. You can even meter and monitor (in stereo) any signal systemwide.

REDUNDANCY? We've got that covered too: just add a second WHEATNET and CAT-5 link from each studio and have an AUTOMATIC standby interconnect for the ENTIRE system!

WHEATSTONE has a proven track record for digital networking; benefit from our experience!





48 CAT-5 PORTS with 128 audio channels (plus embedded control data) per port.

THAT'S 6144 TRAFFIC CHANNEL'S IN JUST TWO RACK SPACES!

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Harris is your end-to-end radio solution provider.

AM/FM Analog or HD Radio™

Audio Consoles

Broadcast Studios

High Power AM • Systems and Service • Intraplex Transport

HD Radio™ is a trademark of iBiquity Digital Corporation

Harris PR&E NetWave console with optional networking. Available in 8-16-24 channel frames, all with fully

modular construction.



ZX1000, 1 kW tri-mode FM/FM-HD or digital only transmitter. FM transmitters available from 250 W to 70 kW, in analog or HD Radio.



FlexStar HDx exciter-the gold-standard for FM and FM-HD exciters, featuring **RTAC (Real Time Adaptive Correction for** best mask compliance) and Exgine, the latest iBiquity platform in HD Radio.



Destiny 3DX-50. 50 kW medium wave direct digital drive high efficiency, high reliability AM transmitter, AM transmitters from 1 kW to 2 megawatts, all fully compatible with HD Radio.

Imagine Harris transmitters...

combined with legendary Orban audio processing.



OPTIMOD 9400-AM Digital

No-compromise, independent, multiband processing for analog AM and digital radio—in one box!

For over 20 years, OPTIMOD-AM has dominated the sound of major-market AM radio. Orban's new 9400 offers even better analog AM processing, while its unified analog and digital design substantially reduces costs compared to a two-box configuration.



Contact Harris at 800-622-0022 or email autoconfirm@harris.com



2006 PRODUCT SOURCE

All joking aside...

While cartoon characters span this year's issue, the 2006 Radio magazine Product Source is all business. Inside this issue you will find products for every need, be it a large station with a big budget, or a small station with a small budget. Many of the products featured in the Product Source debuted at NAB2006, including a review of the Radio magazine 2006 Pick Hit award recipients.

The Product Source is a resource that you can refer to throughout the coming year. This year's edition includes five special sections dedicated to production (Portable Production), remote broadcasting (Out and About), transmitter sites and field work (Beyond these Walls), and more. Some of the items do not fit the typical broadcast need, so you'll find some unique items that may fill a special void. For example, if Wifi equipment is your next big purchase, we've listed several manufacturers of wireless receivers, as well as a brief description of each one on page 22.

Also, I welcome your feedback on this annual supplement. Perhaps you use a product that has filled a need like no other. Please tell me about it. E-mail your comments and suggestions to radio@prismb2b.com.

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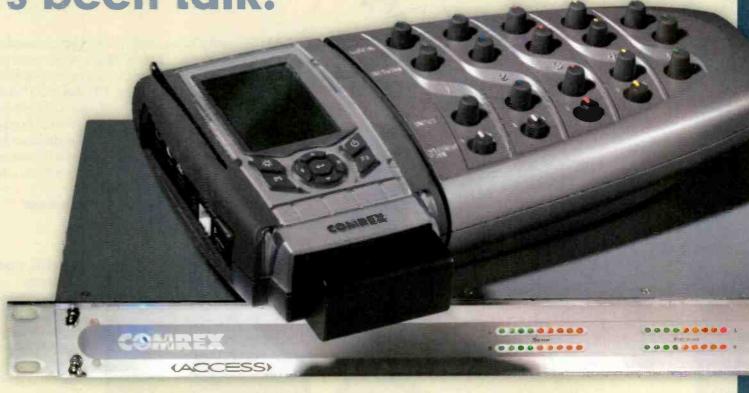
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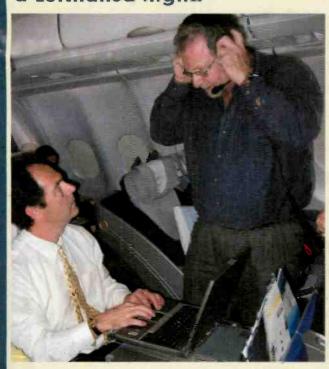
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there's been talk.



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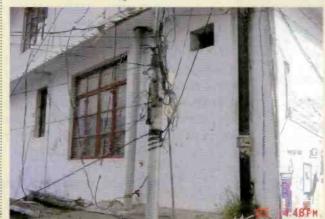


... successfully aired his three hour talk show from a commercial airplane Jusing ACCESS] at 37,000 feet on a regularly scheduled flight between Frankturt, Germany and New York, US.

Peter Greenberg—Host of the syndicated radio program Travel Today

For the complete story visit http://remotebroadcasts.blogspot.com

Radio Free Asia—Live from the Himalayas



"The results [with ACCESS] were especially reliable considering that Dharamsala has one of most "problematic" Internet infrastructures that we have come across."

David Baden, Chief Technology
 Officer Radio Free Asia

For the complete story visit http://remotebroadcasts.blogspot.com

Ski Mountain Remote



This picture, really demonstrates what ACCESS is about. This product truly has the ability to cut the wires.

For the complete story visit http://remotebroadccsts.blogspot.com

☑ JAMN 94.5—Walk for Hunger



"ACCESS was used on the air exclusively for JAMN945 at this one. It was all over EVDO with a tremendous amount of active cell phones in the area. The ACCESS was connected to the Verizon wireless Broadband...

For the complete story visit
http://remoteoroadcasts.blogspot.com

Put Comrex On The Line.

COMREX



Look at all 2006 PRODUCT SOURCE the great

K 181, K 81: The stereo/mono selector on this headphone allows single-earphone monitoring without signal loss. 3D-Axis allows the ear cups to pivot side-to-side and up-down. The headphone features a magnesium alloy frame that folds into a small package for transportation. The K 181 delivers a frequency response of 5Hz to 30kHz. A detachable single-sided input cable with locking mini-XLR connector stows away for easy transportation. The cable can be replaced with a straight or optional coiled cable. The headphones feature a 99.9 percent oxygen-free input cable with hard gold-plated connectors and minito-1/4 adapter. The K 81 DJ is a smaller version of the K 181.

615-620-3800 www.akgusa.com; akgusa@harman.com







usb Matchbox: Replacing a computer sound card, this codec provides stereo line-level inputs and outputs at professional levels and eliminates the hum, buzz and other interface problems caused by in-PC audio cards. The Burr-Brown 8XADC/ADC provides audiophile performance with the ease of USB interface to any PC. The unit features XLR connectors and monitor output with muting. The unit occupies 1/3 rack width and is 1RU tall.

626-355-3656 www.henryeng.com info@henryeng.com



Audio codec

Access Portable: About the size of a camcorder, this hand-held unit may be powered for more than seven hours by its rechargeable battery. For broadcasts that require larger mixing and headphone capabilities, the system may be docked into the stereo mixer/headphone management section to provide a table-top, five-channel mixer/codec. The codec uses BRIC technology to deliver wideband mono

or stereo audio on a single POTS line or IP network including the Internet. A Web browser is included for connection to Wi-fi access points that require log-in. Other features include a built-in Ethernet port, and connection to a range of other networks via integral Cardbus slot including, modem, 3G cellular, Wi-fi and Wi-max.

800-237-1776; www.comrex.com; info@comrex.com

Console Wheatstone

Generation 6E: This console features a mixing router-based topology with a mouse-driven GUI that adds production tools expansion and compression on all input channels. Four-band parametric EQ is provided on all input channels, as well as variable high- and low-pass filters. The console provides event storage and recall, four stereo output buses, eight mix-minus outputs and two stereo auxiliary sends. Full scale digital peak and VU metering is provided.

252-638-7000; www.wheatstone.com; sales@wheatstone.com



Firewire processor Focusrite Audio Engineering

The Liquid Mix: Liquid Mix's onboard DSP hosts 32 classic EQs and 32 vintage compressors simultaneously. Each of the 32 channels provides compressor and EQ emulations selected from a pool of vintage and modern lassics. Forty compressors and 20 EQs are qualities.

day classics. Forty compressors and 20 EQs are available out of the box with an expanding library online. A hybrid seven-band super EQ can be built from separate classic EQ sections in each of the 32 channels. Each channel appears as a separate VST/AU/RTAS effect within the sequencer and will work within all major applications. Control each channel from the desktop control unit or from within the sequencer using a GUI that functions like a plug-in.

516-249-1399; www.focusrite.com

Digital audio hard-disk storage system Dmarc Broadcasting

Maestro: Maestro 2.5, the latest version of the Windows NT-based digital audio hard-disk storage system, provides multiple record/play audio channels, an easy-to-read display with on-screen countdown, and full integration of all digital and audio operations. Enhanced graphics and user-friendly options are features in this version.

888-438-7268; www.dmarc.net; pr@dmarc.net

Voice processor Aphex Systems

230: Features of this voice processor include a



reflected plate amplifier tube mic preamp, an easy rider compressor, a logic-assisted gate, split band de-esser and an aural exciter. The processor offers +4dBu and -1OdBV outputs, as well as 24-bit/96kHz A/D AES, S/PDIF and optical outputs. Low jitter word clock output, word clock input and a cough switch (soft mute) are also features of this unit.

818-767-2929; www.aphex.com; sales@aphex.com

IBOC combiner

Myat

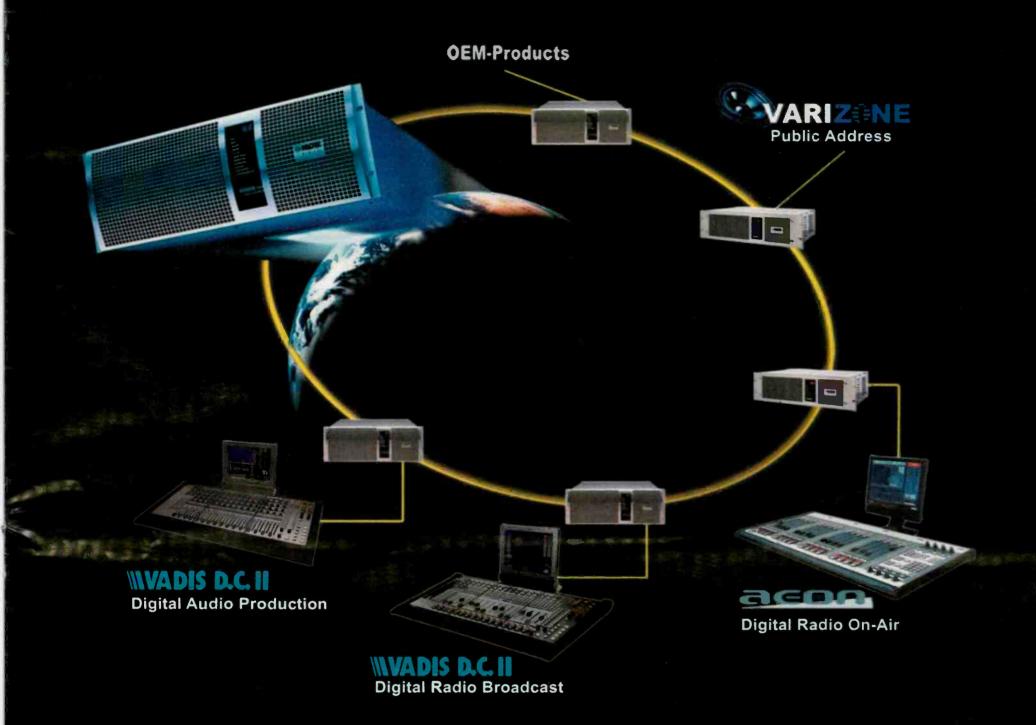
IBOC Coupler-Combiner: A compact UHF hybrid, this 3dB hybrid coupler is a four-port device. It can be used for equal power division or combining. The center frequency of the quarter wave coupling structure is chosen for all UHF bandwidth. Features of the coupler include low loss, high isolation, tunable over the entire UHF band, optimizable for specific channel and 3 $^{1}/_{8}$ EIA 50Ω .

201-767-5380 www.myat.com; sales@myat.com



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I wonder what is on this page...

2006 PRODUCT SOURCE

DSP encoder Viaradio



CO2: A IP-controlled RDS/RBDS encoder, this device features scrolling PS text for real time title and artist, remote access and control via TCP/IP or serial ports and local control using a LCD screen and jogwheel. The encoder's input impedance is $10 \text{K}\Omega$, its frequency response is less than 0.5dB (40Hz to 53kHz) and its power consumption is 19W.

321-242-0001; www.viaradio.com

HD Radio exciter



Harris

Flexstar HDX-FM: This exciter provides real-time adaptive correction technology that offers noise reduction, and transmitter and antenna linearity. The unit also features adaptive group delay equalization; secondary auto-switching of AES3 and composite

inputs; and hybrid/straight FM outputs for the split-level combining method, which enables implementation of FM HD Radio using a station's existing FM transmitter and antenna.

800-622-0022 www.broadcast.harris.com broadcast@harris.com



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for a complete radio station

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SOFTWARE'

powerful Windows PC software
for live air, automation, scheduling, and produc-

No down payment
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Free Telephone support
Free Software upgrades
Free Hardware upgrades
Free PC and Network setup

The 'Bridge' hardware ...

supplied by Arrakis contains the audio sound cards, routing switchers, and control logic so that the PC requires NO special hardware or setup. This means that the PC can be off-the-shelf, and unmodified so that it is easily serviced locally. The Xtreme 'Solutions' program is per workstation for complete redundancy and backup. Imagine an AM/FM combo with production room for only \$300 per month. With more than 15 years of automation experience and thousands of Arrakis automation systems in the field around the world, Arrakis can provide you with the solution that meets BOTH your business AND technology needs.



Xtreme 'HARDWARE'

a 16 x 3 stereo routing switcher, dual PC sound cards, & control logic

the XTREME 'Solutions' program

Xtreme is a complete solution for live & automated On Air Radio systems. Pay one very low monthly fee, and we do the rest. We supply the audio hardware, software, and support, while all that you supply is the PC. Without a large initial equipment investment there is no financial risk or capital expense; the old automation system can be upgraded out of current operating costs. With free system configuration and training you receive the help you need to make a smooth transition to the new system. With free hardware replacement, ongoing repairs are worry free. Free telephone support helps train new staff, and free software upgrades means you have the latest product features at no cost. The only hardware that is not included is the PC computer and we can help you with that too... also for free.

...the risk free automation system XTREME~digilink



Arrakis

FM panel antenna ERI-Electronics Research



1180: Based on the 1080 FM panel antenna, the 1180 offers improved match, isolation and pattern performance in dual input applications for combining analog, and digital FM signals in a single master FM antenna. The antenna system is designed with all elements at dc ground and the screens, transmission lines and power dividers bonded to the support structure. This eliminates static build up and protects the system from lightning. The antenna system can be supplied in configurations with omnidirectional or directional azimuth patterns. Required power gains are achieved by stacking layers of the arrangement vertically on the support structure. The antenna system provides 25kW power handling capability per element.

812-925-6000 www.ERlinc.com sales@ERlinc.com

970-461-0730

8

www.arrakis-systems.com

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• Our ECS Studio was selected by the Nevada Broadcasters Association for their Headquarters' Radio Studio.

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 An ECS Studio is installed at the Whitman-Hanson Regional High School near Boston, MA.



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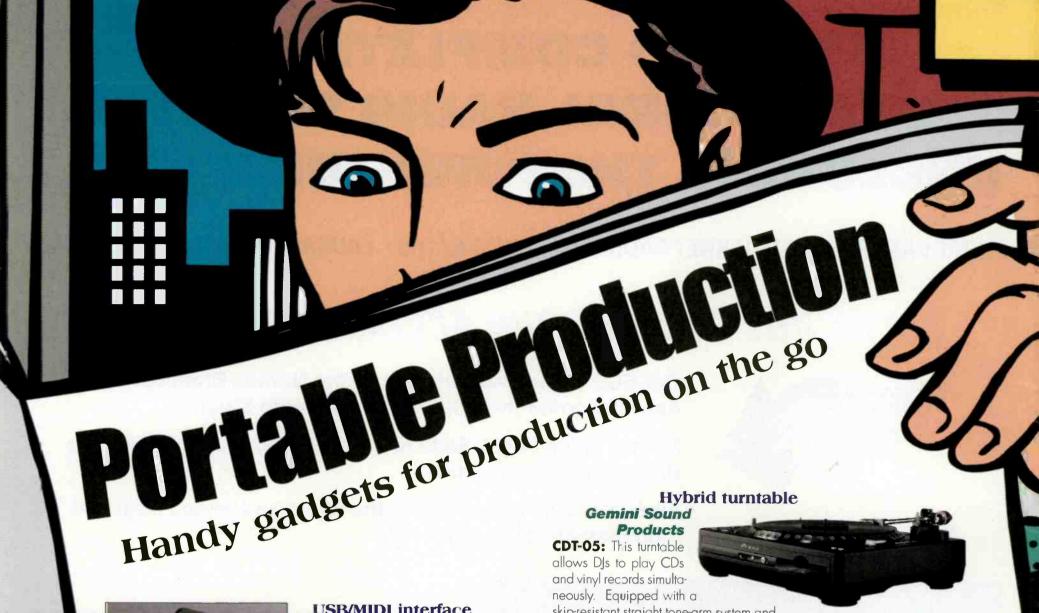
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USB/MIDI interface Tascam

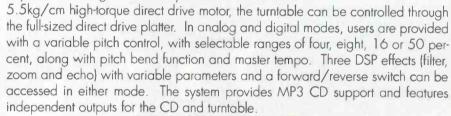
UD-144: Record two tracks at a time with zero latency using a PC or a Mac with this interface. It features MIDI input and output, 96kHz/24-bit recording and two XLR mic inputs with phantom power. The interface offers S/PDIF digital input and output, two analog line inputs and is USB 2.0 equipped. Other features include zero-latency hardware

monitoring and separate headphone output and level controls.

323-726-0303; www.tascam.com; tascamlit@tascam.com

neously. Equipped with a

skip-resistant straight tone-arm system and



732-969-9000; www.geminidj.com

Recording interface Edirol



UA-1000: A multi-port high-speed USB audio recording interface, this system provides 10 channels via XLR/TRS combo jacks with phantom power, high impedance guitar, S/PDIF, eight-channel ADAT, MIDI and inserts for effect send/return. A USB 2.0 drive supports a 480Mb/s transfer speed, allowing the unit to offer 10 in x 10 out 24-bit/96kHz full duplex performance. A word clock is provided as well as ASIO 2.0 and WDM drivers.

360-594-4273; www.edirol.com; sales@edirol.com

Workstation with liquid cooling **Alienware**

MJ-12: Alienware's Liquid Cooling technology reduces overall system noise levels. By reducing the need for internal fans, this technology allows systems to operate at less than 35dB. The technology also keeps system components cool by delivering as much as a 30 percent improvement in thermal performance (15° to 20°)

1-800-ALIENWARE www.alienware.com

Desktop audio interface

Alpha: This USB desktop recording system includes the Alpha Studio USB I/O mixer, Steinberg's Cubase LE multi-track PC and Mac recording software, and the Lexicon Pantheon VST reverb plug-in. The interface



is a bus-powered 2x2x2 USB I/O mixer packaged with Cubase LE and the Lexicon Pantheon VST Reverb plug-in. The system teatures one XLR microphone input, two TRS line inputs and two TRS and

RCA line outs. The front panel features a high impedance 1/4" instrument input for direct to computer recording and a 1/8" headphone output. The studio can stream two channels of 44.1kHz or 48kHz audio at 16- or 24-bit resolution to Mac or PC computers. Users can record two tracks at once from two input sources. The microphone and line inputs have individual level controls and peak meters that are summed at the analog-to-digital bus. Mono/stereo monitoring is provided, as well as zero-latency direct/playback monitoring, allowing for delay-free overdubs.

781-280-0300; www.lexiconpro.com

Multi-track recorder Acoustica

Mixcraft 2.0: Record and mix quickly with this recording software. Cut, paste, edit and shape sounds, use built-in effects like reverb, flanger or EQ, or install Direct X or VST effects to add tremelo, distortion, chorus or even remove the vocals from a song. This software can be used for recording a first solo album, remixing a song, podcasting or editing commercials. Mixes can be exported to MP3, WMA, OGG, WAV or burned to a CD.

ACOUSTICA Software should be easy to use! www.acoustica.com

559-692-2224; www.acoustica.com

2006 PRODUCT SOURCE



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MUSICAM LSA is the c/b/a of Corporate Computer Systems, In-





wireless mic transmitter Lectrosonics MM400B: The MM400A transmitter has been

updated as the

MM400B to include a waterproof, programmable switch, a steel cable battery door retainer and an IFB compatibility emulation mode. The new transmitter features 100mW RF power with a circular isolator at the output for reduced IM distortion. The case for the transmitter is plated with a special corrosion-resistant surface. The new switch assembly is user-friendly, yet remains sealed to water and other elements by employing a magnetic reed system. The switch turns the unit's power on and off. However, it can be programmed to operate as a mute switch, therefore maintaining the carrier signal while muting the audio.

800-821-1121
www.lectrosonics.com; sales@lectrosonics.com



SKM 5200: A hand-held wireless transmitter, the mic may be paired with six Sennheiser and two interchangeable Neumann microphone heads. The new mic incorporates sensitivity that can be switched in 1dB steps. Sennheiser's Hidyn Plus noise reduction system reduces RF noise, providing wide dynamics. The mic offers two channel banks, one fixed and one variable. A backlit LCD display indicates all audio and RF settings, while an automatic lock mode avoids accidental changes. The transmitter's LCD indicates battery charge status, which s also transmitted to suitable receivers. The mic offers more than eight hours of continuous operation using the rechargeable battery pack or standard alkaline batteries.

860-434-9190 www.sennheiserusa.com; lit@sennheiserusa.com

Mobile sound system

Roadgear 260: The system houses two full-range 8" speakers, an eight-channel powered mixer, two dynamic microphones and 16 effects. The high-impact modular polymer construction in a wheelbase, luggage-style cabinet makes the system useful for quick five-minute setup. The two detachable speakers feature an advanced high-pressure molded enclosure designed for better handling of audio acoustics and improved sound dispersion. The 260W-powered mixer also includes tone control, universal phantom power, a three-band system equalizer and two speakers. The system is powered with ac power or battery operation.

813-890-8872; www.phonic.com; info@phonic.com



Rack bags Gigskinz

GSRB2, GSRB3, GSRB4: These soft rack bags are constructed of a hard plywood shell and covered with carbon fiber-style fabric. Available in 2RU, 3RU and 4RU sizes, these bags come standard with mounting hardware, an oversized pocket to hold cables and accessories, and a zipped back panel for easy connections. Transport the bag messenger-style with a shoulder strap or briefcase-style with

a molded rubber carrying handle. The bags are water resistant and provide cushioning and protection with a plush felt-lined interior.

www.gigskinz.com

2006 PRODUCT SOURCE Radfo



Console Logitek



Artisan: This flexible, modular control surface for the Logitek Digital Audio Engine, a modular X-Y router, offers a low-profile design. Multiple frame sizes are available to accomodate two to 30 faders along with two master mixes, eight sub mixes, four aux mixes, 24 mix-minus outputs and three monitor outputs. 5.1 surround processing is available on one master mix, one sub mix and one monitor out. Available modules include fader, monitor, master and effects. Two sizes of meter bridges are also available, along with the Vscreen software application. A separate rack mount power supply can be located out of the way. All parts in the surface are isolated from the ac main power for safety. The power supply includes 25 GPI in and 25 GPI out connections for external device interfacing.

800-231-5870; www.logitekaudio.com; info@logitekaudio.com

Hand-held analyzer

Fluke Networks

CAT-5E cable **Gepco International**



CT504HDX: Similar to the CT504HD cable, this cable features double jacket construction for durability and reliability in remote and portable applications. Unique to the cable are solid conductors and an extended 350MHz bandwidth that enable full-length TIA/EIA transmission distances of as far as 295' or 328' point-to-point.

800-966-0069 www.gepco.com; gepco@gepco.com

Balun kits Intelix

AVO-MIC, AVO-MIC-WP: These balun kits transmit microphone audio and phantom power over standard CAT-5 cabling. Featuring a built-in preamplifier, the kits transmit mic level audio and phantom power as far as 2,500' over CATt-5 cabling, while providing selectable zero to 60dB of gain. Designed for fixed installations, the AVO-MIC includes a rackmountable send unit, a rack-mountable receive unit and a 24Vac power

supply; the kit is powered at the send or the receive end. Designed for flexible applications, the AVO-MIC-WP includes a decora-style wallplate send unit, a rack-mountable receive unit and a 24Vac power supply; the kit is powered at the receive end.

608-831-0880; www.intelix.com; intelix@intelix.com



Etherscope Network Assistant: A hand-held device, this analyzer aids the rapid installation, maintenance and troubleshooting of 10/100/gigabit enterprise networks. Etherscope's Nearest Switch utility eliminates navigation obstacles when connecting into the network to diagnose user issues. The Switch Scan utility allows the technician to

see into switches for visibility of traffic statistics, errors and connected devices on each port. Duplicate IP addresses are pinpointed along with network misconfigurations, frame errors, auto-negotiation failures, high-utilization segments and cable problems. As many as 1,000 devices can be discovered, viewed and stored in the on-board database. Etherscope is a Linux-based device. It supports Web-based access and control for remote network testing. Features such as USB and audio ports, expandable memory and expansion slots (Compact Flash and PCMCIA) allow it to address wireless and throughput testing.

800-28-FLUKE www.flukenetworks.com; info@flukenetworks.com

Software programs Liberty Wire and Cable

Cadblox, Cadquote, Cadblox V-Series, Webblox: Containing Liberty's standard plate sizes and connectors, these programs are compatible with Autocad and Autocad LT by Autodesk. Cadblox's drag-and-drop operation simplifies layout and eliminates lengthy design and proofing cycles. Cadquote bridges the gap between drawings and cost quotes, allowing Cadblox users to quote their panel designs from their desktops, then save the parts to their accounts. Proofs are automatically generated, and quotes can be generated combining any quantity of parts stored in the account. Use requires a full version of Autocad. Cadblox V-Series is a design template for non-Autocad users, developed

for Microsoft's Visio. Webblox is a graphical, Web-based content management program that lets users add connectors to wall plate layouts. 800-530-8998

www.libertycable.com; sales@libertycable.com

Utility drawer cases Road Ready Cases

RRD12UC, RRD14U1C, RRD14UC, RRD16U1C, RRD16UC: Each of the utility drawer cases features a cover to keep everything snug and tight during transport, as well as $3^1/2''$ casters for easy mobility. The RRD12UC features four drawers: one 4RU drawer with ad-

justable dividers, two 3RU drawers and one 2RU drawer. The RRD14U1C features four drawers—two 4RU drawers with adjustable compartments and two 3RU drawers. The RRD14UC features five drawers—one 4RU drawer with adjustable dividers, two 3RU drawers and two 2RU drawers.

310-767-3536; www.roadreadycases.com; usa@roadreadycases.com

Clustered storage system Isilon Systems

Isilon IQ: This clustered storage system combines modular storage nodes with the company's software. Modular design self-contained nodes include server, software and disks in 2RU. The system creates a cluster with a single file system and single global namespace. It offers a self-healing design to protect against disk or node failures. Add new nodes for performance and capacity in 60 seconds. The system supports Client Support Windows, UNIX and Macintosh.

877-2-ISILON; www.isilon.com; sales@isilon.com

Tuner adapters Audio Science

ASI8712, ASI8713: The ASI8712 contains four AM/FM tuners. Each tuner may be set to an independent AM or FM radio station. The audio from each tuner is presented to the computer host as a mono or stereo record stream that may be accessed through a highspeed bus master PCI interface. The ASI8713 is similar to the ASI8712 except it contains four FM/NTSC-TV audio tuners. The AM portion of the ASI8712 has a medium wave tuning range of 520kHz to 1,750kHz. FM capabilities include a tuning range of 76MHz to 108MHz with softwarecontrolled stereo decoding. An RF connector on the card bracket supplies the AM/FM/TV signal to the tuners. Each tuner has a software selectable attenuation of zero or 20dB. A DB-9 connector supplies a line level mono version of each tuner audio signal. The full stereo signal is available from a 50-pin header on the board.

302-324-5333 www.audioscience.com sales@audioscience.com

Indecency Processor



No, this product doesn't remove naughty words, but if you do run a profanity al latency, talent processed air signal. Instead, their feed is probably direct from the console. Compared to the air sound, this can seem weak, dull and lifeless.

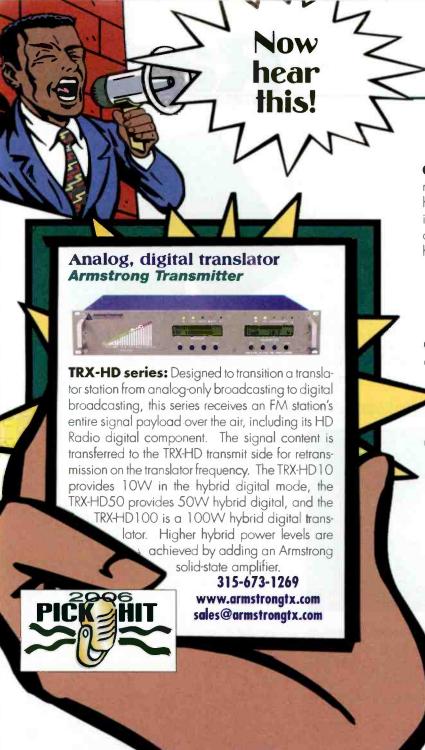
Our Model 255 Triband Spectral Loading™ processor has zero delay and can deliver a dense, tight, and punchy 'broadcast' sound to headphones and control room speakers... a sound you can't achieve with a general-purpose "utility compressor." Other 255 applications include the program feed to telephone hybrids and IFB processing.

Give talent and other house feeds a sound that's closer to your air sound. See your preferred equipment supplier for a demo of the 255 in your monitor channel.



Model 255 - \$2100

Visit www.inovon.com for full technical details



>2006 PRODUCT SOURCE

Equipment isolation pad **Auralex Acoustics**

Great Gramma: The gig and recording, amp and monitor, modulation attenuator offers a large acoustic isolation platform for heftier speakers and instrument amplifiers. The isolation platform is $30^{\circ}L \times 19^{\circ}W \times 2^{\circ}H$ and exceeds the 300lb weight limit of the original Gramma. The new system comes complete with a carrying handle, road-ready carpet, Studiofoam wedges and platfoam.

317-842-2600; www.auralex.com; auralexinfo@auralex.com



Streaming encoder Orban

Opticodec-PC V. 2.0: Version 2.0 adds several new features to the SE (standard), PE (professional) and LE (light) editions. All editions of the software let streaming providers supply content encoded with the Coding Technologies AAC/HE AAC/aacPlus codec. The SE edition is a Microsoft Windows XP/Server 2003 application that can be used with Orban's Optimod-PC signal processing sound card or with a Windows sound card. A console user interface supports batch file execution to enable easy launching and automation. SE allows four encoder instances per stream, supporting 128kb/s using the aacPlus codec and 320kb/s using the AAC codec. Streaming is possible using the MPEG-2 and MPEG-4 standards. The PE edition now supports streaming to 3GPP mobile devices, providing FM stereo entertainment from these devices. An improved user interface in the SE and PE editions offers savable configurations and the ability to launch via a GUI, a command line or a batch file.

510-351-3500; www.orban.com; custsery@orban.com



AT-MX381 **Smartmixer:**

A microprocessor-controlled. programmable, automaticswitching eightchannel mixer

this device automatically keeps the number of open microphones to a minimum, bringing background noise and feedback under control and providing increased clarity and audio quality. The mixer features eight balanced mic- or line-level inputs, each with selectable 48V phantom power, gain and volume controls, adjustable gate attenuation and a low-cut filter to minimize pickup of undesirable noise. All audio connections terminate in block screw connectors for ease of installation. External control capability (via channel contact closures on a DB25 connector) enables the equipment to interface with other devices.

330-686-2600 www.audio-technica.com sales@atus.com

Automatic mixer Audio-Technica

Sine Systems



LED sign interface

MBC-1: This interface replaces the basic signaling lights with a customized message on a Beta-Brite or other Adaptive Micro Systems LED message boards. Each interface can control several displays. The MBC-1 monitors as many as 15 control room devices and can display a unique message for each one. Any message that can be displayed on the message sign can be triggered by the unit. Several messages are preprogrammed and can be changed. Inputs are individually programmed for a momentary or latched display. Latched messages are cleared with a common reset input.

> 615-228-3500 www.sinesystems.com info@sinesys.com

LED obstruction light

Orga Aviation Lighting

www.ada-usa.com

literature@ada-usa.com

L340: This light features low power consumption, stabilized intensity regardless of input voltage fluctuations and internal photocell for automatic day/night intensity control. The light is offered in two modes: steady burning or flashing, Replacing existing 300mm incandescent fixtures, the light offers 100-240Vac 50/60Hz input supply voltage and automatic shutdown if 20 percent of LEDs are not operating. Two stage over-voltage protection is provided Level indicators help with correct installation

281-358-2544 www.orga-aviation.com; willem@orga-aviation.com

Pre-made assemblies Belden



Brilliance A/V Cable Assembly: The Belden Brilliance A/V Cable Assemblies line includes breakouts, BNC, Catsnake, composite A/V, dubbing cable, DMX, DT-12, fanouts, MIDI, mults (snakes), musical instrument, patch cords, RCA, RGB, speaker and XLRs.

800-BELDEN1; www.belden.com; info@belden.com

Rackmount cabinet Gizmac



Xrack Pro2: This 25RU noise reduction cabinet is useful for rackmount Apple, Windows, Linux, Sun, SGI and other servers as well as RAID storage, tape and disk backup, networking and battery backup. The height of the cabinet allows some vertically standing non-rackmount equipment to fit inside the rackmount cabinet. The cabinet allows computer, audio and other equipment to be placed in areas that require low noise. The unit also comes in 4RU and 12RU.

800-475-1677 www.gizmac.com; Sales@Gizmac.com

Audio Design Associates (ADA)

Dual-tuner receiver

TUNER 1 940 AM B

Duo Tuner: This 1 RU receiver features two independently controlled modules, an RCA audio output for each module and optical digital audio output for each module.

800-HD-AUDIO

COAXIAL DYNAMICS **SPECIALISTS IN RF TEST EQUIPMENT & COMPONENTS** COAXIAL DYNAMICS has been a leading manufacturer of precision equipment for the measurement and termination of RF power for over 35 years. Our equipment is used by engineers and technicians in a wide variety of applications throughout the world. Check out our website for more information! www.coaxial.com 6800 Lake Abram Drive Middleburg Heights, OH 44130 440-243-1100 • 800-COAXIAL Fax: 440-243-1101



Connectors Neutrik **D**-series Ethercon: An assembly kit for its D-Series Ethercon connectors, this

device provides a waterproof IP54 connection. The kit is useful for all Neutrik Ethercon D-Series chassis connectors (NE8FD). IP54 protection is achieved by replacing the front plate and pushing the lever with the kit components.

732-901-9488 www.neutrik.com info@neutrikusa.com

Digital audio codec **Tieline America**

888-211-6989 www.tieline.com sales@tieline.com

Radio newsroom system **Burli Software**

Podcasting for Radio News:

Create podcasts from news audio such as reports, bulletins, interviews, actuality and entire shows. Click on an audio item, select Podcast and upload. Create and manage multiple podcasts, servers and standards-based XML data. Control the number of episodes and expiration time. Manually edit name, date, author and summary information, or let Burli create it automatically based on configurable presets. Create MP2 or PCM podcast files at a wide range of standard sample and bit rates. Include images. The system is fully Apple Itunes compatible.

604-684-3140 www.burli.com; info@burli.com

Acoustic treatment SE Electronics



Reflexion Filter: This portable device records live sources with reduced room ambience. It is a composite wall that is positioned behind a microphone with a variable position stand clamp assembly. The main function is to help obtain a dry vocal or instrument recording. The main absorber has formed pieces of polyester fiberboard attached to it via the extended separation rods, which absorb and diffuse sound waves as they pass through the

main filter. The stand assembly comprises a horizontal bar onto which the filter and any standard fitting shock mount can be fixed. The microphone and the filter can then be moved vertically and horizontally along the bar. The filter prevents reflected sound reaching the back and sides of the mic. Its shape and size maximize absorption while keeping coloration down to around 1dB, and leaving the microphone's polar pattern unaffected.

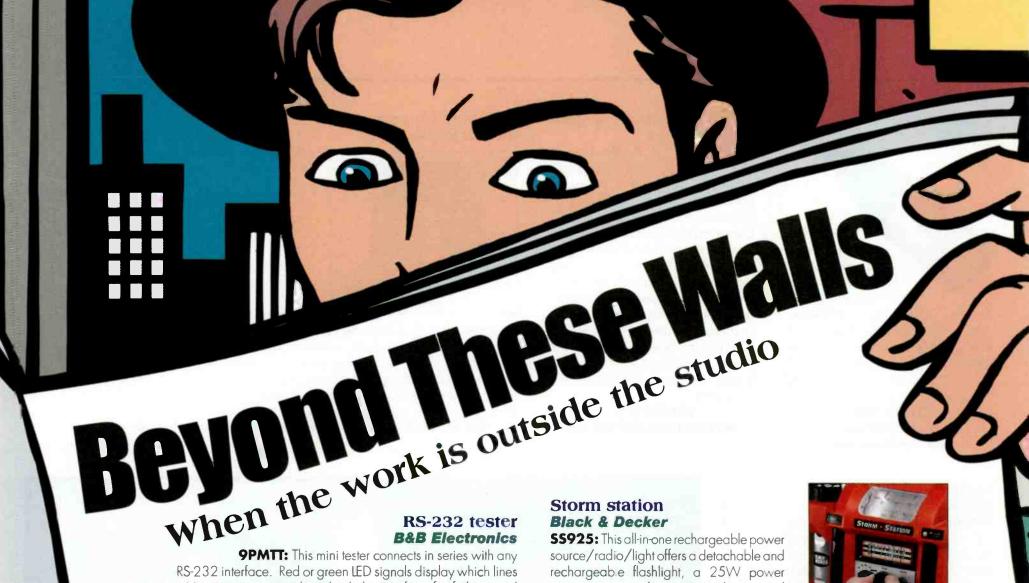
408-873-8606; www.seelectronics.com; microphone@seelectronics.com

TLR300B Commander G3: The 1RU codec can be controlled by a PC screen interface connected via LAN, WAN, USB, serial or remotely controlled over the Internet. The 2RU features comprehensive front panel hardware control with PC remote control via the PC GUI. Two expansion slots accept POTS, ISDN, X.21 and IP. The codec features a configurable 11x6 cross point matrix audio router, and front panel configurable communications buttons for local and off-air real time communications. On-board relay and RS-232 control system provides local and remote control of equipment. LAN/USB masters/slave and serial interfaces connect to IP control networks and computers.

Design » Build » Installation Radio and Television Studios Ram Broadcast Systems bullds studios for most of North America's major networks, group stations, and news organizations. Ram offers comprehensive studio design, fabrication, systems integration, and components. Put Ram's 35 years of experience to work for you: Studio Design & Fabrication Pre-Wired Systems Broadcast Furniture Switchers Metering Amplifiers • Wire & Cable Racks Accessories Used Equipment RAM Broadcast Systems And More! www.ramsyscom.com 800.779.7575







RS-232 interface. Red or green LED signals display which lines are active. Mini testers are used to check the interface for failures and to help identify equipment that has failed. The tester may be left in the line permanently. It is transparent to data transfer. Seven LEDs indicate the status of the TD, RD, RTS, CTS, DSR, DTR and CD lines. The tester features male and female DB9 connectors. Dimensions: $2.0^{\circ}W \times 2.14^{\circ}L \times 0.63^{\circ}D$.

815-433-5100; www.bb-elec.com; orders@bb-elec.com



Tool belt Journeyman Line

Pro-Pack: The Pro-Pack tool belt features an interchangeable modular tool pouch fastening system that allows customization of tool placement. The tool belt comes pre-assembled, but its pouches can be moved to any location using a screwdriver. They can also be attached to the belt or directly to each other. Available with a variety of pouch types, such as pockets with small pouches and hammer sleeves, the belt's pouches come with automotivegrade velour lining to protect the user's knuckles.

888-266-0731; www.journeymanline.com

rechargeable flashlight, a 25W power source to operate low wattage devices and an AM/FM/TV audio/weather-band radio. An integral room light illuminates the immediate area. The built-in light automatically turns on when power goes out. 800-544-6986

www.blackanddecker.com



Tool transporter Duluth Trading Company

Master Series Tool Backpack: With a padded back and shoulder straps, users can carry a heavy load comfortably. It also solves the problem of needing both hands free to climb a ladder or carry equipment. The backpack contains 38 pockets and 24 elastic straps for tools and gadgets. A larger back section holds bulkier items like extension cords, power tools, files and clipboards. A semi-rigid design allows it to stand upright. The backpack features lockable heavy-grade zippers and plastic feet on bottom. Its dimensions are $20^{\circ}\text{H} \times 14^{\circ}\text{W} \times 9.5^{\circ}\text{D}$.

800-505-8888; www.duluthtrading.com; customerservice@duluthtrading.com



Nightlight bulb Ledtronics

LSL464: This LED bulb plugs directly into a commercially available S6 candelabra base 120Vac nightlight socket. The bulb operates reliably for more than 50,000 hours (5.7 years). The bulb is energy-efficient, consumes 0.918W of

energy and features six 5mm discrete incandescent white LEDs. The bulb measures 2" in length and remains cool to the touch when used.

800-579-4875; www.ledtronics.com

Introducing the FIRST Analog & HD Digital FM Translators.



The TRX-HD Series from



www.armstrongtx.com 315-673-1269

All of your listeners can now hear your analog and HD Radio® Programming!



HD Radio* is a registered trademark of iBiquity Digital Corporation

Waterproof PDA case Otterbox

Armor 1900: The newest PDA plastic smaller form-factor PDAs. The case features a crushproof, drop-proof, ergonomic design and allows quick access to CF and SD slots through the top of the case. Access the PDA connection

through the bottom of the case. The case offers an adjustable neoprene hand

strap and external stylus holder. 888-695-8820; www.otterbox.com

2006 PRODUCT SOURCE

Mixer Klotz Digital



Xenon: Designed for small ratio stations that are part of large radio facilities, this stand-alone digital radio console provides integrated mic pre-amplifiers, DSP such as EQ and voice processing, signal routing and free configurable GPIs. The console offers audio inputs and outputs in analog and digital formats, routing capabilities and free assignments to faders and DSP functions for audio treatment and processing. It is

available as a six- or 12-fader console. Each channel strip is equipped with a 104mm fader assignable with a signal through the GUI configurable input router. Large on/off buttons, a cue button for pre-fade listening, alternate source selection and an individual bus assignment to the three main buses PGM, REC and UTL, complete the fader modules.

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

Active subwoofer **Dynaudio Acoustics**

BM14S: The active subwoofer from Dynaudio Acoustics delivers detailed and powerful bass reproduction in stereo or multi-channel monitoring setups. The unit is equipped with an LFE output for daisy-chaining several subwoofers, and a high-pass filter provides bass management in a 2.1 system. The system delivers 300W of power and a frequency response of 18Hz to 250Hz.

+45 87-427000; www.dynaudioacoustics.com



Mapping software Softwright



Terrain Analysis Package soft-

ware v6.0: Version 6.0 of TAP for Windows W2K/XP consists of 25 modules that, when combined together, bring broad capabilities of RF system design to a personal computer. Most studies are accessed through one of two main screens: HD Path and HD Coverage. Presentation-quality coverage calculations made in HD Coverage may be displayed and printed as maps with customized configurations by using the HD Mapper screen. HD Path is completely new RF software for point-to-point path design. Select any two fixed facilities and instantly see the details of the path. Studies such as reflection analysis, antenna heights, path clearances and shadow studies are all created within this screen.

303-344-5486 www.softwright.com sales@softwright.com

Audio software suite **KLZ Innovations**

Audiofile: Use the GPI delay system, mic skimme⁻, audio logger, silence detector and MP3 streamer/extractor simultaneously on eight channels with this post-broadcast audio suite. Users can choose from two, four, six or eight channels, each pair configured as stereo or dual mono. MP3 archiving, skimming and streaming are built in. Remote access is also included via KLZ Webserver technology. Audio is linear 48kHz PCM. GPI delay requires a GPI interface that includes four opto-coupled inputs and eight

relay outputs. The interface features a timeline, channel/date tree, skim seaments and three players.

800-334-9640 www.klz.com; Info@klz.com

DJ mixer Soundcraft USA

UREI 1601E: This mixer offers a built-in digital effects section of five effects: filter, delay, pan, cutter and flanger. It also features a set of 25 combo presets in five banks. The effects can be individually assigned to each channel. Two effect parameter controls provide a way of modulating key parameters of each effect currently selected, plus there are five selectable effects speeds from 1/4 to 2/1. A three-band isolator allows the user to select which frequencies of the music pass through the effects section. The mixer features connectivity for six inputs, headphone EQ and adjustable channel fader curves.

818-920-3212 www.soundcraft.com soundcraft-usa@harman.com

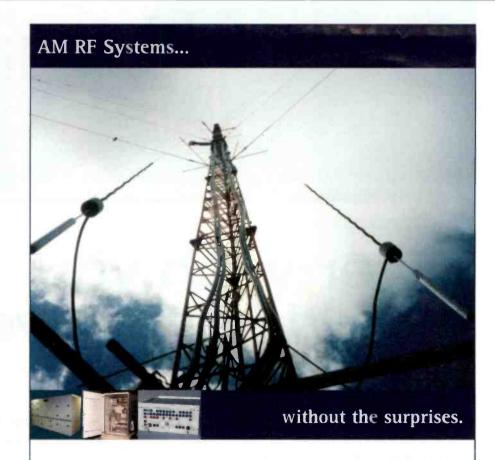


Desk surface **Omnirax**

Presto: The desk surface of this product is wide enough for large keyboard controllers, control surfaces or smaller mixers, while providing eight rack spaces in two bays within easy reach. The shelf above the rack spaces can hold computer monitors and nearfield monitors. The shelf below is available for a computer and storage. The unit is available in melamine laminates or melamine with aray slate. mahogany or maple Formica top surfaces. The dimensions of this unit are: 37.13"H, 31.38"D,

55.9"W and it weighs 125lbs.

800-332-3393; www.omnirax.com; info@omnirax.com



Analog stereo matrix switcher

ADMS 44.22: The device is a four-input stereo

AES and four-input stereo analog matrix switcher

with two independent stereo analog and AES

outputs in a 1RU profile. Each input is equipped

with a three-band EQ, five types of filters and a

leveler function. Any or all of the inputs may be

mixed, faded or dimmed to either or both output

pairs. Additional features include selectable stereo VU meters; headphone amplifier; powered monitor

output; 16x16 GPIO port and RS-232/USB port.

The switcher is also equipped with an expansion

port allowing a second unit to be added, increas-

877-250-5575; www.broadcasttools.com

bti@broadcasttools.com

Broadcast Tools

ing the inputs to 16.



LBA Technology, Inc.

Reach Farther, Sound BetterSM

LBA Technology is your proven, worldwide supplier of HD radio ready AM antenna systems. Our array of RF products includes directional antenna systems, diplexers and triplexers, ATU's, and components for every power level. LBA systems are designed and custom fabricated to your distinct requirements.

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252.757.0279 • www.LBAgroup.com • 3400 Tupper Drive • Greenville, NC 27835

I know just where to use this. **Broadcast logger Eventide**

2006 PRODUCT SOURCE



tal voice logging and archiving, as well as various control functions including optional front panel access for use as a stand-alone logger and network capabilities via password-protected PCs. The logger can record eight or 16 channels, as well as record rebroadcast quality for podcasting or repurposing content. Storage capabilities include a standard mirrored RAID-1 system with dual 250GB hard disks, which can record 323 channel/days at 44.1 kHz. Also standard is a DVD-RAM offering more than six

VR615B: The

logger features

Linux-based digi-

Windows XP or 2000-networked PC workstations. 201-641-1200; ww.eventide.com; audio@eventide.com

channel/days of storage, at 44.1 kHz, per DVD. The logger can also function as

a network server, allowing 16 users to simultaneously access the system via any

Balanced isolation transformer



Furman Sound

IT-20 II: This transformer can supply 20A of balanced ac power with more than 80dB of common-mode noise reduction from a frequency range of 20Hz to 20kHz. The device

includes Linear Filtering Technology that reduces transverse noise. The system also features a switchable ground isolator and a laboratory-grade digital voltmeter.

> 707-763-1010 www.furmansound.com; info@furmansound.com

IP controller **Fox Electronics**

QoIP: Cue over Internet Protocol is a point-to-point/point-to-multipoint system to transport six DTMF and six relay/GPI commands over IP.



Relay/GPI commands can be tied to DTMF or can be transmitted separately, providing 12 switches for equipment at one or more remote sites. Multiple QoIP transmitters and receivers can be interconnected for the transport of more than 12 switching commands or for transport to multiple sites. The QoIP configures automatically once connected to the network. Special system application software and updates are downloadable from the company website. Features include: transmits refresh packets every second, automatic reboot, refresh on loss of IP link and time stamp.

800-604-0301 www.foxelectronics.net info@foxelectronics.net

Digital audio toolbox Sencore Electronics

DA795: Analyze any stereo digital audio signal and generate low-noise digital test signals, all at up to 24-bit/96kHz sample rate resolution. The unit offers



Program logs can't map out the surprises in your broadcast day. But serving your listeners means getting severe weather bulletins, extra traffic reports, and other breaking news on the air immediately.



lets you insert important, unplanned

content into a network show and still have it end on time.
No More make-goods. No more returning "already in progress."

No loss of content. No listener whiplash!

If you can press two buttons, you can make extra time when you need it. With audio quality so transparent it will amaze you.

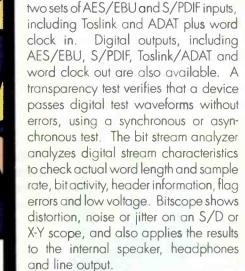


Move the post instead of crashing into it. Audio Time Manager. Because its about time.

25-Seven Systems, Inc. • Boston, MA • 888.257.2578 • www.25-seven.com

Ever wish you could just move the post?

Audio Time Manager



800-SENCORE www.sencore.com



FM/HD Radio mod monitor **Inovonics**



Model 532: The company's first product manufactured under license for Ibiquity's HD Radio digital transmission system, the monitor measures parameters of the analog FM and the digital HD Radio program channels, and includes a display of the occupied spectrum. It measures the injection of FM subcarriers and displays signal strength and multipath effects. Built-in spectrum analysis provides for incoming RF and FM baseband. Its tuning range is 87.9 to 108.1 MHz in 200kHz steps. Other features include a sensitivity of 10dBf for 50dB mono quieting; RS-232 serial, USB and TCP/IP network ports; and power requirements of 95 to 250Vac, 50/60Hz, 50W

800-733-0552

www.inovon.com; info@inovon.com





Audio interface

UA-1EX: This new version of the UA-1 series USB audio interface adds support for ASIO drivers and 24-bit/96kHz audio. The interface continues to feature Core Audio support for Mac OSX and WDM support for Windows 2000/XP, as well as zero-latency direct monitoring. Inputs include RCA pin, input for plug-in powered electret condensertype stereo microphones and S/PDIF optical in. Outputs include RCA pin, 1/8" headphone jack and S/PDIF optical output.

360-594-4273; www.edirol.com; sales@edirol.com

Line-interactive UPS **MGE UPS Systems**

Nova AVR 600 and 1100VA: These UPS systems can be remotely managed through a Web browser or a network management system. Users can access information about the UPS and monitor functions such as power availability, battery capacity and automatic system shutdown using a standard Web browser or network management console. The models incorporate automatic voltage regulation to provide a wide tolerance to power fluctuations, and pro-

tect against power surges to telephone, fax, modem and Internet lines. The units' lineinteractive technology reduces input voltage fluctuations saving battery capacity during brownouts, sags or surges. The units pack enough battery power to keep typical PCs running for 15 minutes to 45 minutes.

800-523-0142 www.mgeups.com; info@mgeups.com

Loudspeaker SLS Loudspeakers



\$1065: This midfield studio monitor uses a 6.5" midrange cone transducer and dual neodymium magnet 10" woofers. The system offers a flat frequency response of 35Hz to 30kHz (±2dB). Power handling capabilities of 250W RMS and 1,000W peak deliver a maximum SPL of 121dB at one meter. An internal audiophile quality, mid/high passive crossover network is included. The low/mid requires an external active crossover with a recommended fourth order Linkwitz-Riley filter, set at 250Hz for both high-pass and low-pass. The enclosure, with dimensions of 26"H

> 417-883-4549 www.slsloudspeakers.com sales@slsloudspeakers.com

 \times 36"W \times 12"D, is constructed of

1" MDF with the motor board doubled

for rigidity and time alignment of the

Power amplifier TA4000: The amplifier delivers 2,000W per chan-



ratio is greater than 100dB and a THD factor of less than 0.03 percent. The inclusion of both male and female locking XLR connectors on each channel facilitates easy cascading of multiple amplifiers when driving a loudspeaker array. Additional features: binding post and Speakon output connectors, switches for easy selection of parallel, bridged or stereo operation, plus switches for power limiting on/off and ground lift. Channel indicators include LEDs for signal, 50 percent and 80 percent power, clip and limiter. Detented level controls provide easy setting repeatability and it uses a 12- and 16-guage powder-coated steel chassis.

> 800-403-4484 www.tcsaudio.com; info@tcsaudio.com

USB-to-XLR codec plus mic, limiter Henry Engineering



USB Match Plus: The USB Match Plus is a deluxe version of the USB Matchbox. It adds a peak-reading level meter to monitor

recording and play-

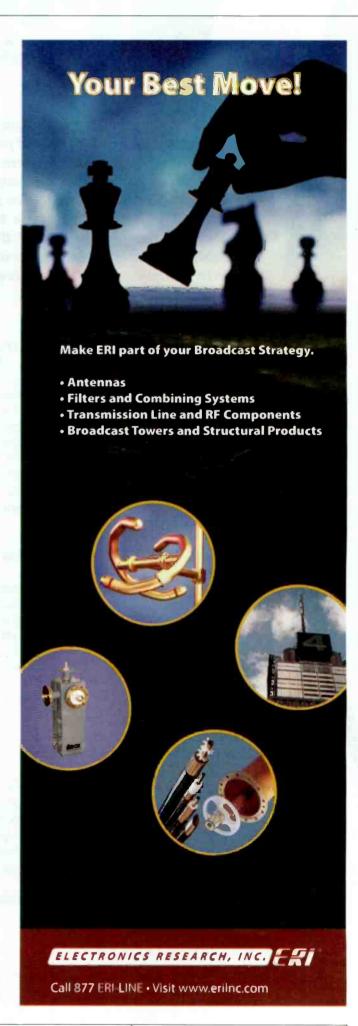
back levels. There is also a reference-grade headphone amplifier for critical aural monitoring. The level meter and headphone output can be switched to monitor the input or the output signal

626-355-3656 www.henryeng.com; info@henryeng.com

Recorder controller Sadie

LRX2: Based on the LRX this controller includes additional DSP power and control surface enhancements. Users can record 48 discrete inputs at 48kHz/24-bit (or 32 tracks at 96kHz/24-bit) from a variety of dedicated input "slither" cards. In addition to the standard 16 channel ADC/DAC and AES/EBU digital I/O cards, a switchable 16 channel mic/line card is available with 48V phantom power and selectable gain steps. Its hardware comprises a small assignable mixer with eight motorized faders including pre-fade listen and dedicated record enable buttons; a complete editorial interface with fully weighted jog wheel and ergonomic editing buttons; locator memories; transport controls; and a headphone monitor output. The controller uses a standard PC Laptop with a USB 2.0 interface.

615-327-1140; www.sadie.com; sales@sadie.com





radio appliances offered to the public never found popular acceptance with consumers. Do you remember the Kerbango radio? It appears that the Kerbango was a unit that was ahead of its time. There are now many devices that can play IP audio streams through a wired or wireless connection. Most of these are aimed at the tabletop radio user and provide controls that emulate traditional radio receiver operation. Here are a few that we found.

EZ-stream SMCWMR-AG: Designed to distribute audio, pictures and streaming video without wires, this device allows users to view multimedia files on networked PCs and listen to Internet radio via a broadband connection. Supporting all the current and emerging wireless standards (802.11 a/b/g), the receiver is seamless to integrate into a wireless network and can access MP3 music, pictures and video without downloading files to a centralized server PC. Connect the receiver to the TV or stereo system via a standard audio/video cable, and load the EZ Installation Wizard for the Med

cable, and load the EZ Installation Wizard for the Media Server Software on each wireless networked PC.

800-762-4968; www.smc.com

Network music player

Soundbridge M500: This device plays digital music files by connecting a stereo or powered speakers to the computer's digital music library. Users can listen to a variety of Internet radio stations without turning on the computer. WMA, MP3, AAC, AIFF and WAV music



formats are supported. It's network-ready with wired Ethernet or Wi-fi. Apple Rendezvous, Itunes, Windows Media Connect, Windows Media Player 10 and Windows Media DRM 10 support make the music player compatible. The LCD 40-character, two-line display shows two lines of text. The unit is 10" wide.

888-600-7658; www.rokulabs.com; customerservice@rokulabs.com

Audio player Terratec



Noxon 2: Listen to an unlimited variety of Internet radio stations from countries around the world or access a MP3 archive from a computer using a wireless network or Ethernet network. Operate this portable jukebox using a remote control or its built-in keyboard. An additional USB 2.0 port provides music diversity: Use it to connect your portable MP3 player, memory sticks or a portable USB 2.0 hard drive containing play lists. Play MP3 and WMA9 audio formats at up to 320kb/s using the UPNP software provided. WEP and WPA encryption support provides secure data transfer from the sender to the receiver.

> +49 2157 8179-918 en.terratec.net presse@terratec.de

Wi-fi radio C. Crane

Acoustic Energy: Receive Internet radio stations from around the globe. Radio stations are added to this device by using the add-a-station tool. The unit connects via a wireless broadband Internet connection. A stand-alone system, there is no software to load and no set-up operation. The radio automatically uploads available stations and lists them alphabetically by country and category. The system supports Real Media, MP3 and WMA compatible formats.

800-522-8863; www.ccrane.com; ccraneco@aol.com

Wireless receiver Slim Devices

Squeezebox: Store music on a PC and access any song from anywhere with this equipment. The receiver features a high fidelity 24-bit Burr-Brown DAC. Digital optical, coax and analog connectors can plug into stereo or amplified speakers. The system supports MP3, WMA, FLAC, AAC, WAV and Ogg Vorbis with upgradable firmware. Access several music services like Pandora.com. The receiver features advanced lossless compression technologies and dual internal antennas.

h this equip-

650-210-9400; www.slimdevices.com; comments@slimdevices.com

2006 PRODUCT SOURCE



Eight channel remote control system

WVRC-8: The system comes equipped with a browser-based

function program scheduler and alarm logger, while the user

may select from four e-mail recipients or different sounds to

play when an out-of-tolerance alarm is generated. The unit

offers eight high-resolution telemetry channels, while each of the eight optically isolated status channels may be configured for five to 25Vdc wet or dry input monitoring. The eight control

channels are equipped with independent SPST 1A relays for

the rcise/on and lower/off functions. Other features include

stereo silence sensor audio and balanced caller/send telco

audio; a jack for external fail power supply; 1/8" TRS jack

for an optional external temperature sensor; a front-panel mic

for remote aural monitoring; and a front/rear-panel RJ-11

877-250-5575; www.broadcasttools.com bti@broadcasttools.com

telephone jack for user voice response recording.

Broadcast Tools



Microphone, monitor arms Yellowtec

Yellowtec Mika: Its internal linkage and coil spring construction supports heavy microphones up to 4.5lbs. The unit remains virtually silent during position adjustments. The mic arm ships as just one part of an open and modular system. The multifunctional MSS pole forms the backbone of the system. It can be used as an extension for the mic arm and as a support for multiple flat panel monitor mounts at the same time

+49 2173 967 336 www.yellowtec.com; info@thummahr.de

Production music library Blue Fuse Music

Blue Fuse Music Library: Blue Fuse Music Library's 37 CDs and more than 1,200 unique song titles are broken down into five focused libraries.

866-252-7788 www.bluefusemusic.com info@bluefusemusic.com

Commercial weather system RadioTraffic.com

Unattendedweather.com: Providing local weather 24/7, users choose from four announcers to keep listeners informed. Forecasts with two voices, or announcers changing in shifts, are also available. All weather includes an up-to-the-minute temperature and forecast. The user decides whether the weathercasts are short, medium or long; users can have different lengths in the same hour. Choose whether details like wird speed, direction, humidity or recent rain are included. For several stations, each mentions its own call letters, slogans and sponsors. Each can air its own voice for the weather, even in the same shift.

866-500-0500; www.radiotraffic.com





Digital recording mic HHB

Flashmic DRM85: The Flashmic combines a Sennheiser omni-directional condenser capsule with 1GB of flash recording memory to create a portable recording device with no cables and connectors. WAV linear or MPEG 1 Layer 2 encoded files can then be transferred at 90x real-time via USB. A date/time stamp is

stored along with the file, with the internal real-time clock set and synchronized automatically by the host computer. The mic is powered for more than six hours by a pair of standard AA batteries. Customizable parameters

include audio mode (six settings with a maximum record time of more than 18 hours), automatic gain control on/off, record level, pre-record buffer (zero to 10 seconds) and high-pass filter on/off. Operating at 16-bit/48kHz, the recordings can be played back under independent level control on headphones connected via a socket on the base of the unit.

860-434-9190 www.hhbusa.com sales@hhbusa.com



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Contact SCMS at any of its offices to discuss your needs 1-800-438-6040 Bob, Ernie, Matt or Mike HQ in Pineville, NC



2006 PRODUCT SOURCE

Sounds cards

Digigram

VX222HR, VX222HR-mic, PCX22HR, PCX924HR,

PCX924HR-mic: These cards offer the same benefits as the multichannel HR Series of PCX and VX sound cards including low latency WDM Direct Sound, ASIO and Wave drivers, as well as support for Digigram's SDK through one driver. Other functions include 24-bit/192kHz A/D-D/A and sample rate conversion. The PCX924HR-mic

and VX222HR-mic also feature AES42 support for recording AES42 digital microphones, along with one professional grade analog mic preamp.

703-875-9100; www.digigram.com; input@digigram.com

RF directional wattmeter Coaxial Dynamics

81030: Measure RF power in 50Ω coaxial cables and transmission lines, and accept plug-in elements in the range of 0.1 to 10,000W and from 2MHz to 2,300MHz with this wattmeter. Complete with a built-in line section, its Quick Match connectors for 50Ω cables and transmission lines offer speed and reliability. Connect the wattmeter between the power source and the antenna or dummy load, plug in the appropriate element and set the range switch on the front panel. Select the forward or reflected direction and read the power on the advanced LCD display.

800-COAXIAL; www.coaxial.com; sales@coaxial.com

Portable recorder

PAW 120: The PAW 120 will replace the DR 100. The recorder features a built-in speaker, aluminum case and a dual-color LED display. The unit operates on two AA batteries. The recorder appears as a USB removable external device for Windows and Macs. It records and edits linear PCM and MPEG compressed audio, supports the BWF file format, and stores audio to an internal 512MB flash memory. It features a built-in microphone and accepts a mono or stereo external microphone while providing phantom power. An AGC and voice-activated recording can be switched on or off.

954-581-7999

www.aeqbroadcast.com; sales@aeqbroadcast.com

Dual engine processor **TC Electronic**



M350: A dual engine rack processor, this unit combines 15 reverbs with 15 multi-purpose effects

including delay, modulation and compression. High density 24-bit processing and A/D-D/A conversion delivers full transparency. The auto-sensing 24-bit S/PDIF input ensures input connection in any setup. The processor features a preset display and provides MIDI in/out, MIDI clock tempo sync, pedal control of tap tempo and global bypass. It provides five direct access parameters for handling parameter changes. The adaptive built-in power supply secures seamless operation at any main voltage without wall-warts.

818-665-4900; www.tcelectronic.com; info@tcelectronic.com

Condenser mic **Beyerdynamic**



MC840: The 840 is a compact, large diaphragm studio-class microphone. features a gold vaporized double diaphragm and five selectable polar patterns: omnidirectional, wide cardioid, cardioid, hypercardioid and figure eight. Based on the MC 740 condenser mic, the 840's capsule is equipped with a low-noise preamplifier and an impedance transformer without transducer.

800-293-4463 www.beyerdynamic.com salesUSA@beyerdynamic.com

Talkshow system Telos Systems

Nx12: The Nx12 provides support for POTS and ISDN and Livewire audio-over-IP technology. The system is a self-contained, 12-line product that includes four hybrids. Available with analog or AES inputs/outputs, the system mixes callers down to two separate analog or AES feeds when the built-in outputs are used. Four hybrids remain present. Each hybrid incorporates its own Omnia AGC and noise gate employing DSP algorithms. The system includes echo cancellation for VoIP and cell phone callers. With two program-on-hold inputs and two analog or AES outputs, the system handles the telephone requirements for two stations simultaneously.

216-241-7225

www.telos-systems.com; telos-info@telos-systems.com

Time shifter 25-Seven

Audio Time Manager: This audio processor allows stations to pause a network feed, insert content, then return where the program left off, and seamlessly catch up

to real-time. Time compression rates can be adjusted on the fly, or



the unit can be used to time shift programs by up to an hour. Remote control is available. Linear audio is processed at 44.1 or 48kHz.

888-257-2578; www.25-seven.com; info@25-seven.com

Mic boom riser RAM Broadcast Systems



800-779-7575 www.ramsyscom.com sales@ramsyscom.com

Antenna Jampro Antennas

JMPC-HD: The medium power version of the FM Penetrator antenna, the Penetrator HD, available with and without de-icers or radomes, has been designed for HD Radio. Rated at 10kW maximum input, each bay consists of a Penetrator-style radiating element with a $1^5/8$ " shunt feed line. Each antenna is factory tuned to any frequency in the FM band II (87.5MHz to 108MHz) range on a tower structure that simulates the customer's actual tower. The true circular polarization of the antenna offers performance for HD Radio, stereo and SCA operation. Typical VSWR is 1.1:1 ±200kHz.

916-383-1177 www.jampro.com jampro@jampro.com

Digital transmitter Nautel

XR50: As the fourth generation of Nautel's 50kW AM transmitter, this modular HD Radio/DRM digital transmitter offers power modules that are hot-pluggable and can be removed and replaced without an interruption in transmission. For greater redundancy, the transmitter comes with a standby DDS exciter section including a modulation encoder with automatic change over. It requires no manual tuning or adjustment, even with antenna mismatch corresponding to 1.5:1 VSWR at 50kW with 100 percent modulation.

207-947-8200; www.nautel.com; info@nautel.com

Digital radio console Studer North America



On-Air 3000 Net: An option to the On-Air 3000, this console migrates the desk from a stand-alone operation to an open and networked part in the overall infrastructure of a broadcast center. By interconnecting several Studer S-Cores, the local and decentralized audio resources can be shared by the other S-Cores in

the network. The user can control the mic gain in the other S-Core remotely and if the fader is opened the loudspeakers in the remote location will be dimmed or cut and the red light will illuminate. All interconnected audio sources are visible in the input routing page in the GUI and can be patched to faders in the same way as local sources. Routings can be stored and recalled with snapshots.

818-920-3212; www.studer.ch; sales@studer.ch

Weather receiver **Dayton Industrial**



AF630: A NOAA weather receiver housed in a 1 3/4" rack panel mount chassis, this receiver offers a front panel leatur-

ing a built-in monitor speaker with volume control. There are two 10-segment LED indicators: one for the modulation level indication and the other to indicate received signal level. The receiver features tone detector circuitry for the alarm circuit with front panel indicator, test and reset controls. Rear panel outputs are Line (RCA), SPKR (RCA), Relay (DIN) and balanced output (DIN). Input power is derived from a 12Vdc wall mount converter. The receiver is phase lock loop controlled with the frequency of operation selected using an internal three-position DIP switch. A continuous receiver line audio output is provided. The speaker output audio is controlled automatically by a tone detector circuit that monitors the receiver audio for the presence of a 1,050Hz tone signal.

941-351-4454; www.daytonindustrial.com; sales@daytonindustrial.com

Safety system Will-Burt



D-TEC II: The built-in anti-collision system automatically stops mast extension, providing added protection from overhead hazards for the operator and equipment. The unit is equipped with the Emergency Bypass System, providing a safe means of bypassing the D-TEC II in the rare event a malfunction or false trip occurs preventing mast extension. System safety features include dual threshold ac alert, E-Field (current) and H-Field (magnetic); ac current and ac voltage sensing; audible alerts; and expanded self-testing features. The system offers an ac voltage detection range starting at 110Vac/60Hz.

330-682-7015 www.willburt.com mastlite@willburt.com

Acoustic foam Acoustics First Cutting Wedge:

This polyurethane foam absorber can create seamless surfaces to reduce unwanted reflections. Available in two versions, the 2000 series

panels can be nested to increase the thickness of the surface. The Classic series features a flat back. Both are available in charcoal, brown, beige, blue, burgundy and hunter green. Panels can be ordered as 1 x 1' squares or 2' x 4' panels.

888-765-2900; www.acousticsfirst.com info@acousticsfirst.com

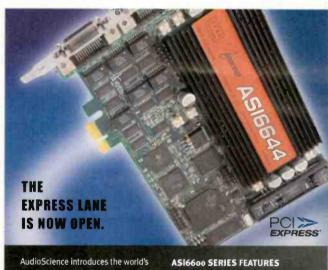




Arc Plus: Automatic functions are built in, and backward compatibility with the Arc-16 provides flexible roll-out options. The system is a nextgeneration transmitter remote control system for full-time, multi-site or dial-up operation. Taking advantage of the scalability of IP, the unit connects an unlimited number of sites, each with as many as 256 channels of metering, status and command. Access the entire system from the front panel of any unit, take control using a Web-browser or PC software or dial into the system over the phone. Advance facility management operation incrementally and protect the station's hardware investment.

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Announcer's Consoles for Live Events

Whether used in radio, television, production, or stadium announce applications, the Model 200-series of announcer's consoles provide uniformly excellent performance. With five models to choose from, everything on your "wish list" can easily be handled. And while each unit provides a unique mix of features, all share a common core: great audio quality, a simple user interface, and reliable operation.

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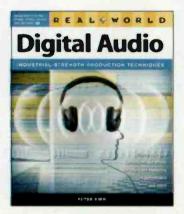
in Booth 1406

Selections for your bookshelf reference Station Consolidation: A Technical Planning

The IBOC Handbook by David Maxson and Don Lockett Publisher: Focal Press, 2007

Broadcast engineers seeking to design transmission systems that are cost-efficient will benefit from this detailed explanation of the various system design options and capabilities. System calculations are presented in a manner that

is useful to those who need them, while retaining a clear narrative for those who seek a general understanding of how the technology works. The book also presents a summary of the history of the technology and the standard, and provides forward-looking information on emerging technologies and applications.



Real World Digital Audio by Peter Kirn

Publisher: Peachpit Press, November 2005

Useful for the musician or the engineer, the novice or the adept, this book covers subjects from setting your computer up to record audio, to tracking, to using synthesis software, to mastering, to printing scores, to taking it all into a live setting. It provides the information in a step-by-step, linear manner making it palatable for even the most non-technologically savvy, while

managing to avoid trudging solely in beginner territory. Included with this book is an instructional DVD of trial software, corresponding tutorials and ready-to-use sound banks and demo loops.

Webdeveloper.com Guide to Streaming Multimedia

by José Alvear **Publisher:** John Wiley & Sons, 1998

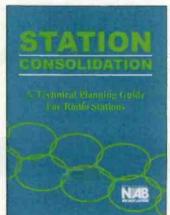
A hands-on guide to delivering live audio and video to a website, this book explains how to add streaming multimedia to make a site more interactive. It describes how streaming works, weighs the advantages and disadvantages of different streaming technologies, and helps readers choose and implement the right strategy and hardware/software for their sites. Demo copies of Real Player and other popular multimedia plug-in programs that enable readers to practice editing



and converting files are provided. A gallery of best-in-class multimedia samples

is provided.

taken when planning and implementing a station consolidation project. You need to determine the FCC-defined size of the market in which the consolidation will take place, as well as the eligibility of the owner to own all o the stations in the planned consolidation. This book will also help readers determine how the physical plants of the consolidation stations might be combined to improve their operating efficiency. The book provides guidelines for completing each of these steps.



Hands-On Guide To Webcasting

Hands-on Guide to Webcasting

by Steve Mack and Dan Rayburn

Publisher: Focal Press, **November 2005**

Industry experts address the fastest-growing application for streaming media - broadcasting live audio and video on the Internet. This book provides an end-to-end technical overview of the webcasting process. The book offers instructions for audio and video production, encoding and authoring, to delivery and business issues. The book provides instructions and advice unique to the technical and business challenges of

webcasting, as well as detailed data on pricing and what you should pay when outsourcing webcasting services. It is organized in the order in which a webcast is executed, and divided into sections that correspond to the different components of a webcast. Case studies explore webcasting in corporate, educational, institutional and consumer environments.

Encyclopedia of Radio

by Christopher H. Sterling

Publisher: Fitzroy Dearborn, 2003

Produced in association with the Museum of Broadcast Communications in Chicago, the three-volume Encyclopedia of Radio covers the full spectrum of this nearly century-old medium. International in scope, it spans the history of radio in major countries and regions throughout the world, tracing radio's role in the development of journalism, advertising, entertainment, propaganda and popular music. More than 600 alphabetically arranged entries cover programs and people, networks and organizations, regulation and policies, audience research and radio's evolving technology through the years. Entries include production credits for programs, biographical details for individuals and suggestions for further reading. Illustrations provide visual context to the often-unseen world of radio, and a comprehensive index makes the book a useful research tool

2006 PRODUCT SOURCE



IP audio codec software Musicam USA



Audiostar: This PC software works via LAN, WAN, DSL, ADSL and the Internet. The system features an auto-detect algorithm built in, so when a user sends or receives content over an IP connection, the system can recognize the coding algorithm used in the transmission and

automatically change the settings to match. A compact USB hardware key is required to run the software unrestricted. The software can be used on any computer equippec with a 10/100 LAN interface and a Direct Sound compatible sound card. It supports stancard algorithms MPEG 1 and Layer 2, MPEG 2 and Layer 3 and G.722. It also supports MPEG 2 and 4 AAC, MPEG 4 AAC low delay and uncompressed PCM linear audio.

732-739-5600; www.musicamusa.com; sales@musicamusa.com

Announcer's console Studio Technologies

Model 212: Adding to the features of the Model 210, the Model 212 announcer's console features a flat frequency response from 20Hz to 18kHz from mic in to main out, 0.025percent THD+N, a S/N ratio of 71dB and a common mode rejection ratio of 68dB at 60Hz. It features an XLR mic input, AES3-ID I/O and a 1/4" TRS headphone jack. It is powered by 24Vdc through a coaxial power jack. Two spare connector locations accept a variety of Neutrik NC*D-L-1 connectors.

A/D-D/A converters are 24-bit with a 100dB dynamic range. Its internal sampling rate is 48kHz and its external sampling rate is 32kHz to 96kHz

847-676-9177; www.studio-tech.com; stisales@studio-tech.com

Automation systems Arrakis

Digilink Extreme: This system uses Digilink-Bridge hardware. Users plug a current Windows PC into the Bridge and it creates a digital audio workstation. The system features three built-in routing switchers, satellite and control logic, silence sensor, dual sound cards and balanced analog audio I/O. With dual sound cards built into the Bridge, a sound card is not required in the PC itself

970-461-0730; www.arrakis-systems.com sales@arrakis-systems.com

Network audio decoder

Barix Technology



110Vac or 240Vac power. The unit can also run on 12Vdc for remote or emergency operation and is appropriate for use as an exciter for higher

power broadcast stations. Features include an 8x oversampled stereo generator with analog filters. The power amplifier is over-temperature and VSWR protected. A five-button user interface provides access to all operating parameters and adjustments. The two-line vacuum florescent display provides verification of all parameters. The PX1's microprocessor continuously monitors and makes subtle adjustments to various circuit parameters based on frequency, temperature, power, audio level and deviation. The system is housed in a 19"x2U case.

Data collection system

Market Area Monitor: Designed for HD Radio, analog

and Internet broadcasts, this data collection system offers

adio broadcasters a set of resources for local, regional and

national HD Radio confidence monitoring and competitive

analysis. The MAM system offers diagnostic measure-

ments for any HD Radio station (AM or FM), whether an ndependent operation or part of a national multi-station group Using 1RU of space, the MAM receiver records a

snapshot of any station's HD Radio output including audio

5/N ratio, level and time alignment as well as audio pro-

gram samples, along with cataloging that station's full HD

Radio data payload. The system also provides monitoring,

cataloging and sampling of legacy analog AM and FM

856-719-9900; www.daysequerra.com

info@daysequerra.com

radio and Internet-streaming broadcasts.

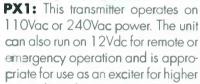
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ZX: Based on Harris' Z-Series of transmitters, the ZX low-power fransmitter is available in 500W, 1,000W and 2,000W power levels for analog broadcasting. Upgrades to HD Radio are achieved when driven by the Flexstar HDX-FM exciter as a hybrid analog/digital system or in digital-only mode.

800-622-0022

www.broadcast.harris.com; broadcast@harris.com

Broadcast studio Efron Computerized Studios



Studio in a Box: This prefabricated studio fits into a 12' x 12' footprint. The ergonomic design is optimized for single-person operation. The system includes a computer, Saw Studio Lite software DAW, mixing console, 360 Systems Instant Replay, three CD players, a dual cassette deck, a Mini Disc recorder, a DAT recorder, a tuner, an ISDN codec, a six-line telephone system, four Sennheiser mics, four headsets, custom-built furniture and four executive chairs

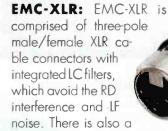
702-349-6212 www.radiofacility.com

Mixing console **Audioarts Engineering**

D-75N: The D-75N digital audio mixing console can be modified with the Net-75 panel. Four output buses along with eight digital inputs and outputs are provided within each panel. Six faders provide access to thousands of analog and digital system resources. Input modules are equipped with eight character LED displays, rotary source selectors and take buttons.

252-638-7000; www.wheatstone.com; sales@wheatstone.com

Cable connector Neutrik



360° shield contact on the female connector that ensures the best possible shielding and chassis contact. This connector can solve problems such as ground loops, RF interference and Pin 1 problems.

732-901-9488 www.neutrik.com; info@neutrikusa.com

Test signal generator **DK Technologies**

PT8612 HD-SD: The test signal generator is a new option for the PT5300 HD-SD Varitime Sync Generator, which offers a test pattern to check Lip-Sync. The test pattern is based on the EBU Tech 3305 standard and extended to all common HD formats. The HD formats include 1,080 and 720 lines progressive and interlaced as well as frame rates of 24, 25, 29.97, 30, 50, 59.94 and 60Hz. The generator outputs four independent test signals in 270 and 1,485Mb/sec SDI formats with individual formats and timing. Besides the Lip-Sync test pattern, which contains moving elements to detect frozen pictures, the generator board also includes common test signals such as color bars, monitor test signals, PLUGE and SDI check field. The test signals may be superimposed with text for identification and contain embedded audio signal.

+45 4485 0255 www.dk-technologies.com; info@dk-technologies.com

Cable management Delta 9



Ultimate Cord Organizer Clip:

This clip allows the user to audit, isolate, sort and track cords, cables and wires. Each locking slot has a letter of the alphabet next to it. The product will separate, organize and track more than 19 cables and wires.

530-333-2014; www.deltanine.com info@deltanine.com

Phone plug adapter **Pomona Electronics**



1285: This 1/4" phone plug adapter with binding posts converts standard two-conductor phone jacks to double binding posts. Cross holes fit a double banana plug, which can be stacked vertically or horizontally. Wires, spade lugs and pin tip plugs can be attached by means of the insulated knurl thumb knob.

> 800-490-2361 www.pomonaelectronics.com info@pomonatest.com

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10 KW	2001	Henry 10,000D-95
20 KW	1990	BE FM20B
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20 KW	1989	FMQ 20,0000B
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5 KW	1974	Continental 315F
5 KW	1982	Harris MW5A
5 KW	1987	Harris MW5B
10 KW	1985	Continental 316F
10 KW	1982	Harris MW10A
50 KW	1985	Continental 317 C2

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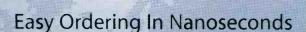
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- auto restore!
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- ✓ Perfect for LPFM and Translators, as well as stand-alone exciters

restore on VSWR and temperature errors! No more down time, AND no more trips to the tower site! Plus the PX50 is FCC Certified under parts 2, 73, & 74 (ID: PF3PX50) and Industry Canada approved (IC: 4318A-PX50) so you will never have to worry about nor

compliance! Get on the air QUICK...and STAY on the air, with the PX50!



bottom line? To stay on-the-air!

The PX50 was designed with

of all parameters, with auto

matic power reduction and

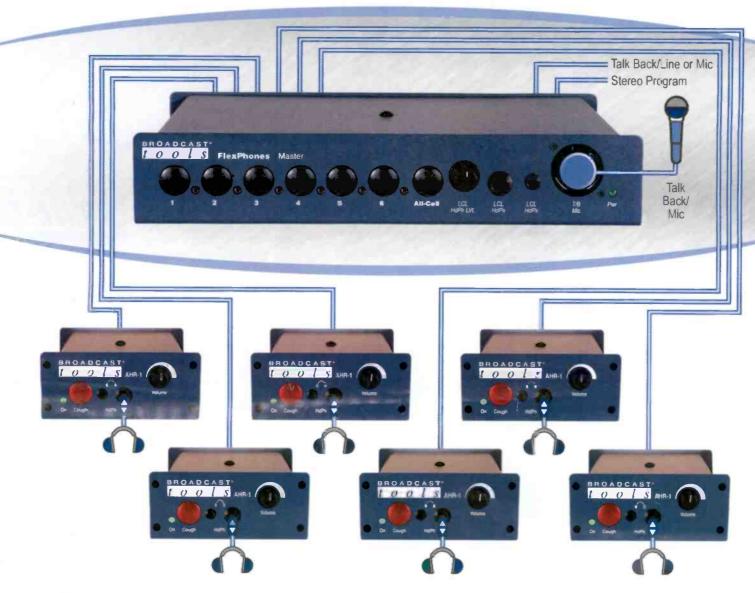
that in mind! Auto monitoring

28



Independent Talkback

A Headphone System with Selectable Talkback for Each User



FlexPhones Master

The FlexPhones Master is a professional Broadcast/Studio six channel distributed headphone system with independent talkback capabilities. Each of the six channels provides stereo program monitoring and selective talkback with interconnection via CAT5 cable to multiple Active Headphone Remotes (AHR-1) and/or Monitor Selector Interface (MSI). Multiple masters may be cascaded to form larger systems.

The FlexPhones Master is equipped with inputs for stereo program and talkback audio. Rear panel program and talkback trimmers are provided to pre-se: maximum input levels. The microphone/line level talkback input is available via a rear panel plug-in euroblock connector, while the front panel XLR connector facilitates the use of a user-provided gooseneck microphone or headset. The front panel is equipped with a level control for local headphones with both 1/4" and 1/8" stereo headphone jacks. The six front panel talkback switches allow the user to independently communicate with each AHR-1 listener and can be configured to insert talkback audio into only the left or both ears and dim either or both program channels. Any combination of switches may be pressed, while the "All-Call" interrupts all listeners. The Talkback function can be remotely controlled. Six RJ45 jacks are provided to distribute audio and power via CAT5 cable to the AHR-1's, which conform to the Studio Hub format. Low-Z balanced audio distribution is used to preclude audio degradation with long cable runs,

AHR-1 Active Headphone Remote

The Active Headphone Remote (AHR-1) contains a stereo amplifier designed to work with any combination of high-efficiency heacphones with impedances between 24 and 600 phms. The AHR-1 is equipped with 1/8" and 1/4" headphone jacks, level control, user-configured utility momentary pushbutton and LED indicator. Two rear panel RJ45 jacks are provided for connection via CAT5 cable to the FlexPhones Master. The AHR-1 may be desktop mounted, under counter or with the optional HR-1/MP or HR-1/MP-XLR mounting plates, which may be turret or counter-top mounted.



www.broadcasttools.com

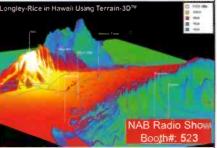
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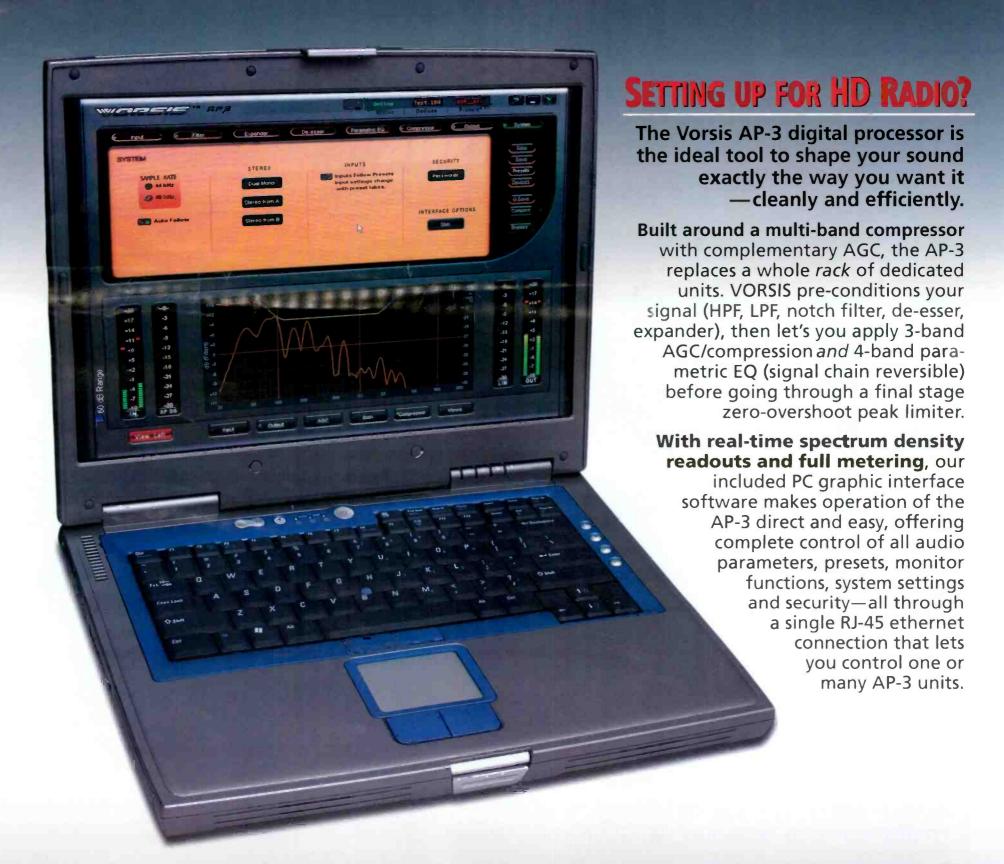
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