

Radio O

www.RadioMagOnline.com

2008 PRODUCT SOURCE

A supplement to Radio magazine

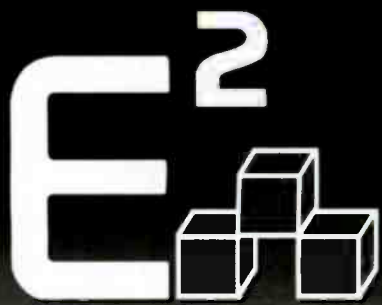
Google Radio Automation
The next giant step forward in automation.



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google.com/radioautomation

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A Penton Media Publication



Ethernet Audio Done Right



MEET THE SQUARE

The Wheatstone E² (E SQUARE) gives you the convenience of Ethernet audio without all the IP hassle. It just *knows*. The built-in Setup Wizard lets you configure an entire system with just your browser and a laptop. Unplug it when you're done and there's no PC between you and system reliability.

SQUAREs are totally scalable: use one as a standalone 8x8 studio or transmitter site router, with browser access from anywhere. Plug two together and have a standalone digital snake. Add a fanfree mix engine and build yourself a studio using analog and digital I/O SQUAREs.

All the power is *in* the SQUARE. Distributed intelligence replicates all configuration data to every unit. Profanity delay and silence detection are done *in* the SQUARE. Even virtual mixing (w/automation protocol) —it's *in* there; all with real front panel meters, 32 character status indicators and SNMP capability.



88D I/O: 8 digital inputs and outputs. You can headphone monitor and meter any of the SQUARE's inputs or outputs in real time. The 32 character display gives you all the information you need about your audio and system configuration. And because you can operate in either 8-channel stereo or 16-channel mono mode, 16 channels of metering are provided.



88E DIGITAL ENGINE: Just plug an E-SERIES control surface or GLASS E computer interface into this engine and get all the mixes, mic and signal processing you need. Fanfree, so it can stay in the studio where it belongs.



88A I/O: 8 analog inputs and outputs. You can bring a new SQUARE up in seconds and of course use the front panel encoder for your X-Y control. Front panel status LEDs give you continuous link, status, and bit rate information as well as confirmation of any GPIO activation.

Because the E² system doesn't rely on a third party GUI, tech support is straightforward (and 24/7). Likewise, system operation doesn't require external PCs for continued full functionality. Best of all, 1 Gigabit protocol eliminates the latency and channel capacity restrictions associated with older technology.



88AD I/O: 4 analog plus 4 digital inputs and outputs—perfect for small studios or standalone routing.

E-SQUARE is Ethernet audio done RIGHT!



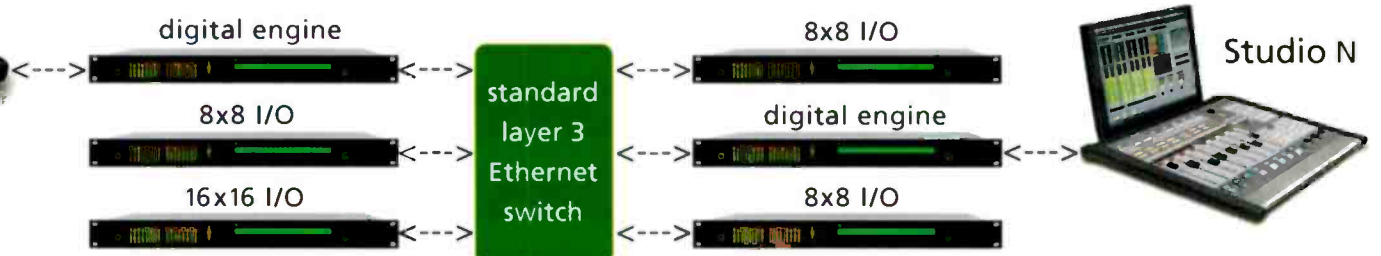
88 I/O CONNECTIONS: E² has both DB-25s for punchblock interface and RJ-45s for point-to-point interface. All SQUAREs have 12 individually configurable opto-isolated logic ports that can be either inputs or outputs.

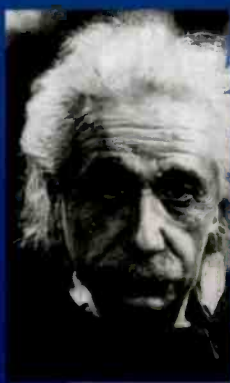
Studio 1

STUDIOS DONE EASY!



E-SERIES control surface





It doesn't take a genius to know that being off the air will cost you...

Space + Time = Staco UPS

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UniStar® P Series

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- Systems are parallelable up to four (4) systems for either redundancy or capacity
- Tower and 19 inch rack configurations

Features:

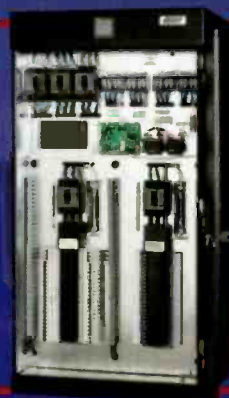
- Simple hardwire i/o connections (6, 8, & 10 kVA units)
- User friendly control panel
- Precision power conditioning
- Smart battery management
- Remote communications and monitoring
- Optional external battery packs for extended runtime



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FIRSTLINE OC

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StacoSine®

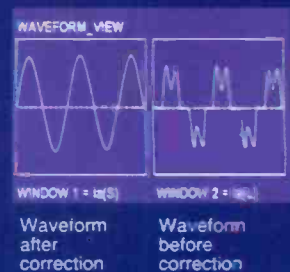
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- 50/60Hz



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- Available in NEMA 3R and NEMA 12 style enclosures (consult factory)



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Power Quality Solutions Tailored To Protect Your Revenue Stream

The 2008 Product Puzzle

Every year the *Radio* magazine *Product Source* is a bit of a puzzle. As you can see from the cover, we've featured a lot of products over the years. The whole process is a big to-do: scouring our database for products we have not run in the magazine, making sure we have a good balance and filling up our special sections. The layout itself is always a giant effort as we try to include as many products as we can. And we do it all for you. We have a seemingly limitless supply of new products at the ready for you. In fact, our twice-a-month *New Products Extra!* newsletter is reaching its seventh month of bringing the latest and greatest right to your inbox! If you're not receiving it, sign up now at RadioMagOnline.com.

Now, it's your turn to tackle a puzzle. As a special feature this year (and probably for years to come) we are running a sweepstakes in conjunction with a fill-in puzzle on our back page. Check out page 38 for full rules and details, but you won't want to miss this opportunity to win a prize from Wireworks valued at \$250. All it takes is a bit of time and some puzzle skills. And a little historical knowledge, but isn't that what the Internet is good for?

Kick back and enjoy this *Product Source*, as it has been a great year for new products! We're so proud to be your source.



Erin Shipp,
Associate editor

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Advancement in Radio Technology



You're Invited!

Sept. 18, 2008, 6 p.m.
Sullivan's Steakhouse
300 Colorado St.
Austin, TX

Sponsored by:



Radio magazine will host a reception for the first-ever ART Awards at the NAB Radio Show and we want to see you there! Find out who won and enjoy some complimentary drinks and appetizers.

1st Annual Radio Excellence Awards

Let's face it, products are useless without a place to implement them. Coming in 2009 we will launch our first-ever Excellence Awards! There are many facility makeovers completed each year and we want to reward those who have shown outstanding thought and ability in a variety of categories. We will include entries in the following categories: station automation, network automation, new studio technology - network, new studio technology - station, new RF technology - station, on location technology, new studio technology - non-traditional broadcast.

As a reader, you will have the opportunity to vote online for the submissions you feel are most impressive. Winners will be revealed in the March issue of *Radio* magazine and awarded at the 2009 NAB Show.

If you would like more information on entering your facility in this contest, please e-mail Associate Editor Erin Shipp at erin.shipps@penton.com.



Radio

THE RADIO TECHNOLOGY LEADER

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Innovators in **BROADCAST TELEPHONY**

Since 1961, Comrex has been manufacturing high quality professional audio products for broadcasters. Our current line of products includes versatile telephone interfaces, talk show systems and audio codecs for remote broadcasting.

AUDIOCODECS



Comrex's exceptionally innovative audio codecs let users send high quality, live, fully bidirectional audio for remote broadcasts over widely available networks such as analog and digital phone lines and even IP. Used for live sports programming, talk shows, voice-overs and backup STL paths, we design our extremely powerful codecs with easy-to-use, intuitive controls and packaging that can be used by both seasoned broadcasters and non-technical people alike. ACCESS, featuring BRIC Technology, has quickly become the industry standard for broadcast quality, real-time Audio over IP. BRIC Traversal Server allows even easier, point-and-click connection without intervention from the "IT guy".

CALLERMANAGEMENT

Comrex STAC telephone talk show system delivers call screening and management of multiple phone callers during talk shows, request programs, contests and complicated IFB setups. STAC can be controlled from anywhere, using a standard Internet browser.



TELEPHONEINTERFACE

Comrex Digital Telephone Hybrids and Couplers offer fully bi-directional interfacing of telephone audio with audio consoles and recording devices. The newest addition, the DH42, is a POTS and VoIP four-line conferencing telephone hybrid, designed to allow callers to be put on-air with separate send and receive paths. It also provides filtering, AGC and control functions.

Put Comrex On The Line.

COMREX

2008 PRODUCT SOURCE

Ethernet audio system

Wheatstone

E Squared: The E² System is designed to interface with Wheatstone's existing line of E-Series control surfaces including the new Evolution 4 control surface. The flexible E² system is comprised of linkable units or squares that communicate with one another via a single CAT-5E/6 cable connected to standard layer 3 Ethernet switches. The E² Digital Engine handles all of the mixes from the E-Series surfaces while housing the DSP power and managing the distribution of PGM, AUX, and mix-minus buses throughout the system. 12 Universal Logic ports are encased in the single rack unit which is equipped with front-panel access to real-time control features such as IP setting, up time, network traffic and logic status. Web/PC software user interfaces provide remote access and control.

252-638-7000

www.wheatstone.com
sales@wheatstone.com

Vinyl sound barrier

Acoustics First

Block Aid: Also known as mass loaded vinyl, Block Aid is used to block unwanted noise and reduces sound transmission without reducing space. 1/8" of vinyl barrier yields STC=27. Constructed of non-reinforced high temperature vinyl with no lead fillers, this material is as heavy as lead, yet easily cuts with a utility knife. Block Aid vinyl sound barrier is tough and durable. Originally designed to block transmission of sound through walls, it is available as a backer for Cloudscape Ceiling Tiles to limit sound flanking over office walls. Block Aid is available in 20', 30' or 60' rolls.

866-841-6696; www.graham-studios.com; rod@graham-studios.com



Studio furniture

Graham Studios

Modulux Premium: Modulux Premium features standard solid oak trim with wider applications and on more surfaces than the Deluxe Modulux. Exotic woods are available at a modest up charge and vertical panels are available in several melamine colors. The furniture features rounded hardwood corners finished with natural oil stain and hand rubbed with solvent-based hard finish sealer. Upgraded features include screw door hatches for quick entry, touch latch versions, vented door panels, cabinet levelers and custom inside corners.

866-841-6696; www.graham-studios.com; rod@graham-studios.com



Audio workflow engine

Minnetonka Audio Software

Audio Tools AWE: Audio Tools AWE is the automated audio workflow engine for editing, format conversion, encoding, plug-in processing and processing through external I/O devices. Processing chains can be auditioned and saved as templates. Hot Folders automatically apply a complete processing workflow to any files placed in them. AWE can process thousands of files off line which saves media organizations time and money, allowing them to be more productive.

612-449-6481; www.minnetonkaaudio.com; info@minnetonkaaudio.com

USB cardioid condenser microphone

MXL Microphones

USB.008: The USB.008 features a large diaphragm that delivers a big, rich sound characteristic of studio and broadcast microphones. Unlike most studio condenser microphones, however, the USB.008 is a USB instrument that connects directly to a computer without the need for external mic preamps.

Now, anyone requiring high quality, professional sound on their computer can record music or dialog by simply connecting to a standard USB port. Featuring support for USB 1.1 and 2.0, this microphone even includes gain adjustment settings via the built-in three-position attenuation switch. The new USB.008 is the perfect microphone for podcasting or adding dialog to presentations and other multimedia projects. It is also the perfect solution capable of opening new possibilities for radio and news broadcasters and for location recording.

800-800-6608; www.mxlms.com
sales@mxlms.com

Transmitter

PTEK

1kW Transmitter: This transmitter is a single box 1kW transmitter with drop-down front panel for easy access to two replaceable 700W modules. The modular version will still be available.

888-889-2958; www.ptekpower.com
sales@ptekpower.com

EAS encoder/decoder

Sage Alerting

Sage Endec-HD: The new version handles analog and digital signals for EAS distribution and adds remote control capabilities for studio-to-transmitter communications. IP connectivity is also added to allow broadcasters to use standard network components for log printing. This eliminates the need to buy thermal paper required for traditional EAS systems with built-in printers. The system uses an internal AES/EBU interface, LAN support, and a Web browser-based interface to support a new generation of EAS users. New hardware features include 10/100 Base-T LAN support, two USB connectors for printers, additional serial ports, future expansion, and four new GPIO inputs for expanded control.

914-872-4069; www.sagealertingsystems.com; info@sagealertingsystems.com



Computer shortcut keys

P.I. Engineering

X-Keys Desktop: Like a speed dialer for a computer, the 20 user-reprogrammable keys and one-button access to shortcuts allows users to easily create macros. Keyboard macros and hot keys offer the shortest path to action, and the X-keys provides a clearly labeled, physical location for these complex or redundant functions so the user doesn't have to think about them. X-keys desktop connects to a USB port, includes Macro Works II or Ikey software and a hardwired 52" cord. Clear keycaps protect legends and allow shortcuts and macros to be found with a glance.

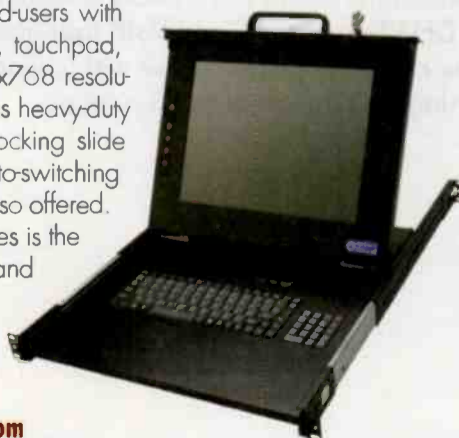
517-655-5523; www.piengineering.com; sales@piengineering.com

RU pullout drawers

Atlas Sound

Rack Accessories: The SD Series, 2RU, 3RU, 4RU and 6RU pullout drawers come equipped with a standard 14" drawer slide and overall depth of 14.75". Each drawer features a recessed design, reversed hanger that keeps contents inside from falling out and an optional key lock. The new model MMK15-RM rackmount keyboard/monitor drawer can also be found among products being unveiled by Atlas. Shipped to end-users with its own built-in 105-character keyboard, touchpad, and flip-up 15" LCD monitor with 1024x768 resolution and anti-glare/tempered glass, it has heavy-duty steel construction and an integral, self-locking slide rail facilitating easy installation. An auto-switching 100Vac/240Vac power supply unit is also offered. Last among the new Atlas rack accessories is the ECS3 rackmount power conditioner and sequencer. Providing comprehensive surge and spike protection, the ECS3 is equipped with nine outlets, seven on the rear panel, and two on the front.

800-876-3333; www.atlssound.com



Solid state transmitter

OMB America

EM 2000: A 2,000W FM transmitter, this product includes 8,300W high-efficiency MOSFET technology amplifying modules, fed by two independent switching power supplies. The amplifying modules work independently thanks to a power combining structure that provides high isolation between them. The unit features a low pass filter at the antenna output, EMI filters at the utility connection and an internal transient suppressor. The LCD display displays the amplifier parameters: supply voltages, eight module currents, direct, reflected and input power, power loss in the internal unbalance load and three temperature sensors.

800-662-4872; www.omb.com
usa@omb.com

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Aphex 230 Master Vox Channel



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JK Audio RemoteMix 4
Portable Broadcast Mixer



JK Audio Blue Pack
Wireless Headphone Amplifier



Lectrosorics SMA Bodypacks



Marantz PMD620
Digital Audio Recorder



Sound Devices 722
Digital Audio Recorder



Dynamax MXE Consoles

CALL A SALES PRO TODAY 800-356-5844 OR VISIT FULLCOMPASS.COM

2008 PRODUCT SOURCE

Portable digital audio monitor

ATI Group

DM500: The DM500 is both a digital audio monitor and a D-to-A converter in a portable form factor. This unit features 96kHz digital inputs, a powerful headphone monitor amplifier, a weather-protected carrying case and alternate mounting configurations. It is designed by Day Sequerra in conjunction with ATI engineers. It comes with a battery clip and portable carry case with shoulder strap and weather protection. Other models are available for desktop or rack mounting, and the unit accepts external ac power supplies for 24/7 operation.

800-922-8001; www.atiaudio.com
sales@atiaudio.com



Ramses MSC controller

Pyramix

Pyramix v6.0: Pyramix v6.0 includes Masscore, a new and powerful real-time engine for Pyramix that offers an increased level of processing and channel count. Pyramix Masscore can be configured from just 16 to an astonishing 384 simultaneous live input and output channels (768 I/O) at 48kHz, or at 256 channels through the mix bus into a massive 256 channel mix-buss structure. Retaining an almost infinite number of real-time editing (virtual) tracks and with latencies far lower than any other Windows or Mac based system, Pyramix Masscore offers a level of power, sonic quality and flexibility that outperforms every other DAW on the market. So many tracks and so many channels at 48kHz may not be required by everybody but it is worth noting this also allows



for 192 simultaneous I/O channels at 96kHz, 96 I/O channels at 192kHz. Pyramix is the only system in the world capable of 48 I/O channels in DXD (352.8kHz) and DSD (1-bit 2.8MHz sample rate) for SACD production.

207-773-2424

www.independentaudio.com
info@independentaudio.com

MUSICAM USA

The World Leader in IP Codecs

Suprema

IP DUAL AUDIO CODEC



- Includes LAN, ISDN U & S/T, and X.21 interfaces standard
- Auto backup to ISDN from IP or X.21
- Built-in Web Browser for control and monitor from remote locations
- Comes fully loaded with every available algorithm included

- Based on Suprema: Includes many of the same features
- 4-channel input mixer with line/mic levels and phantom power
- Lightweight & rugged design

RoadWarrior

PORTABLE IP & ISDN CODEC



Compact subwoofer

Adam Professional Audio

Sub 7: The Sub 7, a new compact subwoofer designed to complement the A5. Despite its small footprint, it is capable of extending the frequency reproduction of the A5 down to 30Hz. Multiple inputs (both XLR and RCA) and controls that allow the system to be fine-tuned to any listening environment make the Sub 7 the ideal partner for the A5. A wireless remote control for adjusting the volume and crossover frequency from the listening position is also provided.

818-991-3800; www.adam-audio.com
usa@adam-audio.com

RF components listings

RF Parts

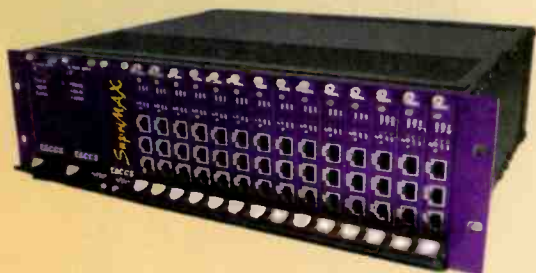


Online catalog: A worldwide distributor for 34 years, RF Parts has released an expansion of its online catalog at www.rfparts.com. The newly expanded catalog provides an easy and efficient listing of product information, product applications and product ordering with the company's secure ordering system. The catalog lists a complete line of power tubes for broadcast, industrial and communications, including Eimac, Amperex, Taylor, Svetlana, RFP and Econco brands along with a full range of sockets through 20kW. In addition, the company stocks a large inventory of popular and hard-to-find RF transistors and power modules from Motorola, Toshiba, MA/COM, Mitsubishi and Microsemi. High-voltage doorknob capacitors and rectifiers are also stocked.

800-737-2787; www.rfparts.com
rpf@rfparts.com

SupriMAX

UP TO 14 IP AUDIO CODECS IN A 3U RACK



- ISDN/X.21 modules available for automatic back-up
- Each module is hot-swappable
- Redundant Power Supplies
- Fully loaded with every available algorithm included
- No additional components or options are required to meet your needs



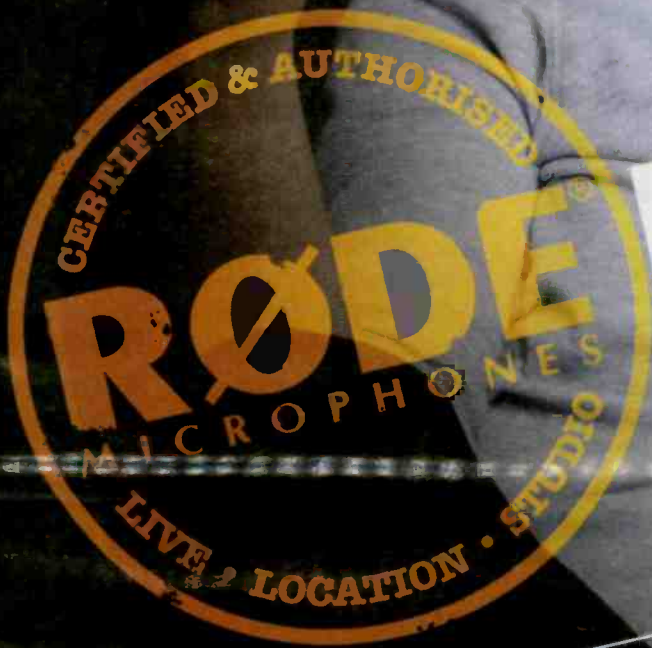
SupriMAX-1U

UP TO 4 IP AUDIO CODECS IN A 1U RACK



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 732-739-1818 fax
 email: sales@musicamusa.com
 web: www.musicamusa.com

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Internal pop filter

High output dynamic capsule

Internal shock mounting

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Robust, all metal construction

Balanced, low impedance output

Broadcast Quality Dynamic Microphone

The RØDE Procaster is a professional broadcast quality dynamic microphone, specifically designed to offer no-compromise performance for voice applications in the broadcast environment.

Featuring a tight polar pattern and tailored-for-voice frequency response, the Procaster is perfect for every application where a great sounding, rugged microphone with superior ambient noise rejection is demanded.

And like all other RØDE mics it has an industry leading 10 year warranty.

Ask your local RØDE dealer for more information on the Procaster or visit www.rodemic.com/procaster

Available now at Broadcast Depot



2008 PRODUCT SOURCE

All-in-one FM transmitter Ecreso/Audemat

Next FM/Digiplexer246: The Digiplexer246/Next FM is the first all-in-one FM transmitter that includes digital audio processors, a stereo encoder plus additional innovative features such as an RDS encoder, embedded audio backup, I/O remote control and TCP/IP connectivity. Ecreso's engineers have partnered with the Sound4 audio gurus to incorporate a high quality audio processor that is based on a powerful DSP hardware platform. The Digiplexer246/Next FM operates at a sampling frequency of 192kHz for the main audio processing and 1.5MHz for the final limiter.

305-249 3110
www.ecreso.com
infos@ecreso.com

Modular console Sandies

MX18EW: The MX Series of on-air audio consoles ranges in size from 6-18 channels in frame sizes of 24" and 36". The MX18EW is a modular console allowing easy service and maintenance. VCAs are used for audio level control which eliminates routing of audio throughout the console. This feature greatly improves the resistance to RF interference. All versions have two stereo inputs per channel and four separate output busses (two stereo-two mono) as well as a cue bus. Constructed of plated steel and covered with reverse screened Lexan, the MX18EW is built for years of 24/7 operation.

215-547-2570; www.sandiesusa.com; service@sandiesusa.com



MEAT & POTATOES WITH SOME PRETTY COOL BELLS AND WHISTLES.



Finally, a super compact ultra-portable broadcast mixer that's perfect for any job you want to throw at it. It's loaded with the staples big professional radio consoles have to ensure your shows come off without a hitch. And unlike the big boys, it's got a bell and whistle or two that make it the essential centerpiece part of any ad hoc studio.

Intuitive and easy to use, with large color-coded controls and bright LED meters, it gives you superb audio quality with ten mic and line-level inputs across six mixing channels for real versatility. And you can seamlessly add a guest announcer with their own headphone mix with our optional Multiphones MiniPod (bell).

With its built in DA/AD audio codec via a USB port (whistle), simply connect the SixMix to any USB-compatible computer and you're on the air. Use your favorite software to serve up tunes or any recorded program material through the SixMix. Push your program back to your computer

for recording or streaming. Need to send a separate feed to another PC or server? There's even a dedicated S/PDIF port to handle it.

Factor in its cue speaker and automatic monitor muting, mix-minus output, comprehensive headphone and monitor systems, plus a wealth of output options and it's clear to see that SixMix will transform your laptop or desktop computer into a full-fledged professional broadcast studio.

SixMix. You're on the air.



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Radio automation Paravel Systems

Rivendell 1.0: Every Rivendell workstation comes with the complete Rivendell software package pre-installed. You never have to purchase expensive add-on software to interface with your traffic or music scheduling software, for voice tracking, etc. Every function is available on every Rivendell workstation in your system. The software package includes RD Airplay, RD Library, RD Catch, RD Log Manager, RD Log Edit, RD Cast Manager, RD Login and RD Admin. The workstation features interfacing directly with traffic and music scheduling software, immunity to PC viruses, time scaling of playback without pitch change, and seamless integration with Axia and dozens of third-party switchers and routers.

877-44-PARAVEL

www.paravelsystems.com
info@paravelsystems.com

Grounding wire Nott Ltd.



Copperweld: Standard Copperweld wire is not annealed, making it very springy. However, their ground wire is annealed and handles just like pure copper wire. It can also be silver soldered like pure copper. Tests indicate erosion may occur at the ends of buried wires, but will go no more than two wire diameters into the metal. In the case of #10 wire, this is less than 1/4". RF current travels only on the outer surface of a wire due to skin effect, so most of the current will be flowing in the copper skin. Bending it into a sharp radius does not cause the copper skin to crack. Wrap it as tightly as needed, then silver-solder it.

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2008 PRODUCT SOURCE

Licensed RF STL Radio Systems

IP-Connect/IPC 100: IP-Connect offers broadcasters new options for Ethernet based, bi-directional, multichannel audio and broadband data connectivity for mission-critical transmission applications. Its data link is the first in a new series of programmable, scalable and spectrally efficient 11, 18 and 23GHz band radios. These units are fully configurable due to their single-chip ASIC modem featuring integrated FEC with selectable coding rates allowing transport data rates from 8 to 32 T1s, 2xDS3, 50 to 250Mb/s Ethernet, or up to 2xSTM1 + 2xT1. Mixed data rates and formats can also be supported allowing the IPC-100 to act as a transparent data pipe for any network facility. Due to the IPC-100's frequency and bandwidth agility it offers licensed applications for program audio last-mile studio-to-transmitter links in the 18GHz band.

Hardware configuration is implemented on the IDU/ODU design. Deployment of the IP-Connect IPC-100 is made via a single-run coax connection from the indoor unit to the outdoor unit/microwave antenna.

856-467-8000; www.radiosystems.com
sales@radiosystems.com



Microwave frequency searching tool V-Soft Communications

Microwave Pro: Microwave Pro uses the FCC's ULS database to identify usable microwave frequencies and examine paths over terrain elevation plots while acknowledging interference to and from other microwave links. The program uses terrain-based analysis in conjunction with methodology found in TIA-EIA Telecommunications System Bulletin TSB10-F. When supplied with the parameters for a proposed path, Microwave Pro can quickly load all stations that have a potential interference relationship and calculate Carrier to Interference (C/I) ratios. A list of contact information for paths within the keyhole radius from the proposed path can be generated to be used in the prior notification process. Microwave-Pro also has a built-in link budget system analysis tool that can be used to generate complete link budget report. The wizard-based interface allows the user to enter path information, transmitter power, antenna gains, and other system gains and losses. The program will calculate the EIRP, path loss, fade margin and provide a minimum recommended fade margin.

800-743-3684; www.v-soft.com
info@v-soft.com

Transmitters Bext



XL Series: The XL 2000 and XL 3500 can supply, respectively, up to 2000W and up to 3500W in a rack-mountable, ultra-compact enclosure just four rack spaces high (7"). Among their features: Direct/remote frequency programmability; fast access to all functions and readings via menu display; proportional auto-foldback for excessive VSWR; adjustable power output with soft-start; automatic power control at pre-set level; optional AES-EBU digital audio input; built-in low pass/harmonic filter; 70 percent energy efficiency overall; remote controllability by traditional analog contacts and PC or modem connection via RS 232, with Web browser access coming soon.

619-239-8462; www.bext.com
sales@bext.com

HD Radio receiver, translator Fanfare Electronics

FP-TRO: Because of the licensing involved with HD Radio, complete demodulation and remodulation of a digital signal can be cost prohibitive. The FP-TRO maintains the signal in the RF domain and converts it to the new frequency, which eliminates the cost of licensing the HD Radio technology used in the translator. The signal is then retransmitted using a Crown Broadcast amplifier.

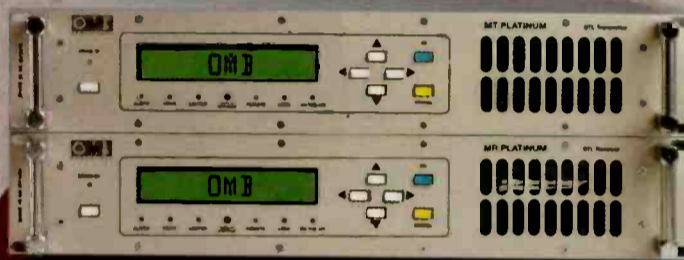
716-683-5451; www.fanfarefm.com
custserv@fanfarefm.com

FM TRANSMITTERS



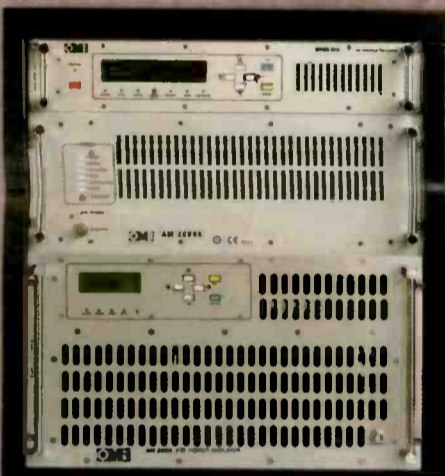
BROADCAST

All transmitter powers with the best quality price ratio



MT/MR PLATINUM

> 1GHz is a high-performance Studio-to-Transmitter Link. It is made up of the 5W MT transmitter externally synthesized in 10MHz sub-bands with a step of 100KHz, and the MR double conversion receiver, that is externally synthesized, too. The MT is microprocessor controlled, and includes LCD display for the visualization of the most relevant transmitter parameters (frequency (6-digit), forward and reflected power, modulation level), balanced Mono, Stereo (MPX). The MR receiver has the same visualization system as the transmitter. It includes balanced Mono and Stereo (MPX) outputs. Furthermore, the MT/MR Platinum STL includes a jumper in order to get a proper operation with digital signals.



EM 2000

is a 2000W FM transmitter made up of the EM 25 DIG exciter (or EM 20/30 exciter) and the AM 2000 FM amplifier. AM 2000 includes eight 300W high-efficiency MOSFET technology amplifying modules, fed by 2 independent switching power supplies, which are made to withstand the working conditions. The amplifying modules work independently thanks to a power combining structure that provides high isolation between them.

EM 10000

is a 10000W FM transmitter made up of the EM 250 COMPACT DIG exciter and three control units which combine the power of six AM 2000 FM amplifiers. AM 2000 includes eight 300W high-efficiency MOSFET technology amplifying modules, fed by 2 independent switching power supplies, which are made to withstand the working conditions. The amplifying modules work independently thanks to a power combining structure that provides high isolation between them.



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2008 PRODUCT SOURCE

Vector impedance analyzer

Array Solutions

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972-203-2008; www.arrayolutions.com
info@arrayolutions.com



Multiple IP audio codec

Musicam USA



Suprimax-1U: Suprimax-1U is a multi-IP codec in 1RU, which can house up to four IP audio modules. These IP audio modules are based on Suprima, so it offers the possibility to extend the number of audio signals over IP provided by Suprima. It supports all the main features of Suprima when working over IP, and inherits all the key features from the development of Suprima, such as widest range of audio compression modes, stability, flexibility and ease of use. Its most important features are based on Suprima: IP multicast and unicast audio streaming transmission/reception. The Ethernet port is used for audio and control. The unit can be controlled from a Web browser and/or CCS management software application, which lets the user manage not only each module of multiple Suprimax at the same time from a single application, but also other CCS/Musicam codecs (Suprima, Prima LC, Suprima, Road Warrior, and Team Mate).

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413-585-9820; www.myersinfosys.com
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Baffles, panels and ceiling tiles

Pinta Acoustic/Sonex

Sonex Clean:

These products are designed for environments that require noise control with durable, washable and cleanable materials. The baffles, panels and ceiling tiles are fully encapsulated in FR taffeta vinyl for efficient cleaning and long, durable life. They offer excellent sound absorption to reduce reverberation or echo. The Sonex Clean line is made from Pinta Acoustic's Willtec melamine foam core, which is ASTM E84 Class 1 fire-rated. Products are available in 17 standard colors. The baffles and panels are 24"x48"x2" and the ceiling tiles are available in 24"x24"x2" or 24"x48"x2".

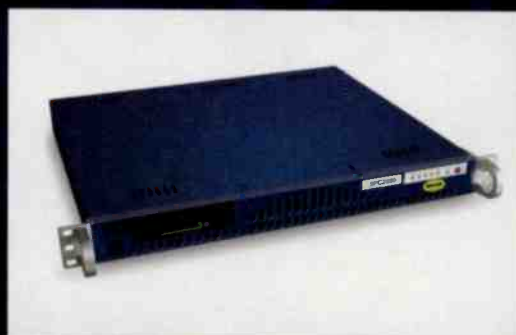
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Marcus Xenakis,
Director of Engineering and IT,
Clear Channel Radio in Philadelphia



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800-950-0750

2008 PRODUCT SOURCE

IN-STU power measurement Bird Technologies Group

Transmitter Power Monitor: Bird Electronics' Transmitter Power Monitor's DB-9 output provides a linear dc voltage output from 0 to 4V allowing for a wide variety of interface options. Its in-line calibration capability allows for greater accuracy in a single application (with an accurate power reference) and the integrated non-directional coupler allows for spectral analysis of the signal in minimal space requirements. The TPM features coupling ports and accurate power measurement combined in the same unit. The TPM can be calibrated in-line and on site. This characteristic helps minimize downtime and optimize on-air time. In addition, a simplified interface allows for a high level of customization and integration.



866-695-4569
www.bird-technologies.com
sales@bird-technologies.com

UPS Superior Electric

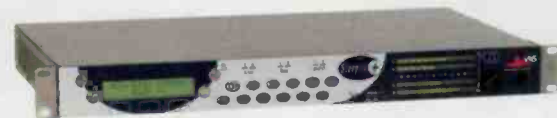
Stabiline SLF: More than 20 UPS statuses and conditions can be displayed. The system produces a true sine wave output voltage waveform. All models are microprocessor controlled and feature a two-stage automatic voltage regulation capability. All models have surge suppression and EMI/RFI filtering circuitry to prevent damaging power line transients and noise from reaching your equipment. RF 11 telephone jacks are provided on the UPS rear panel for fax/modem use. A RS-232 port is also provided. Other features include 120Vac, 50/60Hz operation, and 500VA, 700VA and 1kVA models.



800-787-3532; www.superiorelectric.com; info@superiorelectric.com

Stereo codec AETA Audio Systems

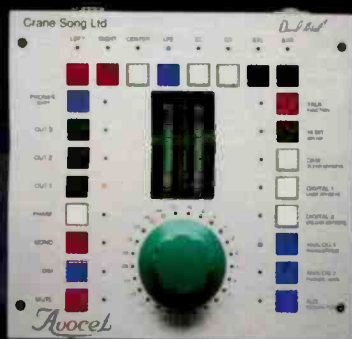
Scoop 4+: Scoop 4+ is a stereo studio codec for high quality audio transmission. It features contribution links via IP connections, public or private networks, Inmarsat BGAN service, ISDN lines, distribution of audio programs from studio to transmitters, using leased lines or IP connections and live broadcasts from OB vans. Scoop 4+ has a compact 1 RU design, is silent with low consumption, is compatible with SIP phones, has dual mono codec mode available for two independent links over leased lines or ISDN, full remote control supervision, 5AS for easy connections over ISDN, auxiliary data channel and relay transmission, optional voice coordination channel and a new low power platform on a Linux architecture. The SIP protocol is a standard developed for VoIP applications and supported by telecommunications companies and many professional associations. SIP solves problems of compatibility and interoperation.



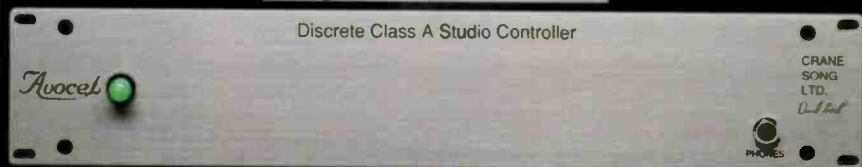
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EAS receiver Dayton Industrial Corp

AFC3: The company's line of receivers is designed for professional or EAS monitoring. Three receivers for NOAA, AM, FM or public service band are housed in a 1RU case. 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. The receiver uses a 12V power source.

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

Dynamic vocal microphone Avlex

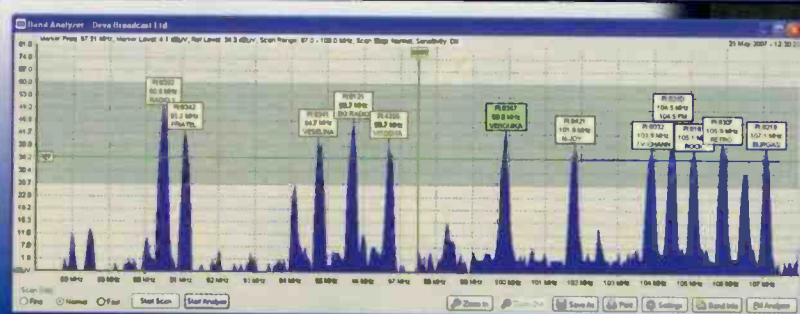
Superlux D108A: This microphone features a super cardioid capsule residing in an all-metal, shock resistant housing with a foam mesh grille. The microphone's modular capsule exhibits excellent off-axis rejection and high gain before feedback. Featuring exceptionally flat frequency response, the new Superlux D108A provides extremely smooth, natural output quality. With a frequency response of 50Hz to 16kHz, the new D108A has a broad frequency range to ensure natural sounding, pristine audio quality. To ensure against unintended movement of the on/off switch, the D108A offers a built in locking plate.

877-447-9216; www.avlex.com
sales@avlex.com



DEVA BROADCAST

Contact us at:
www.devabroadcast.com
sales@devabroadcast.com



Band Scanner Pro

This is a tool to evaluate FM broadcast band congestion and to log station identification parameters. The "Band Scanner Pro" can measure RF level, MPX deviation, Left & Right Audio levels, RDS and Pilot injection levels. The system is powered by the USB port of any Windows PC. Supplied free of charge Windows software sweeps the FM band, logging every carrier and generating a spectrum display of carrier level vs. frequency. It then analyzes each carrier and creates a station list. Its interface is like a portable radio: it may be tuned manually through the receiver screen or by double-clicking a point on the spectrum plot or an entry on the station list. Spectrum plots may be saved as jpg or bmp files. The RDS data error level is graphed in a separate window on the receiver screen. The program can be monitored with headphones plugged into a standard 1/8" jack.

USB FM-Scanning Receiver Modulation and RDS Analyzer



Useful items to simplify remotes



Microphone stand promotionals Impact PBS

Impact Towers: Impact PBS has developed a product to go where the conventional microphone flag will not. The microphone stand! Now any microphone stand can become a promotional tool. Six times taller than a mic flag, the Impact Tower is 16" x 3" of full-color promotional space on all four sides. Impact PBS can help customers decide which size and shape works best with their logo. E-mail proofs of art, showing size and shape, are provided to determine which looks best. Radio stations can now take their logo and website to any live event they sponsor. They also work for in-studio live performances.

877-642-3524; www.impactpbs.com; micflags@impactpbs.com

Stereo line mixer Alesis

Multimix 8 Line: Multimix 8 Line is an eight-channel, line-level mixer featuring eight stereo channels with a mic/line input on channel one, and stereo effects send and return. When a mono signal is present on any input or stereo send, the left signal is automatically summed to mono for mono and stereo compatibility. Two Multimix 8 Line mixers can be connected with TRS cables, and share the same mix bus for 16 stereo input channels. An effects bus is provided so connected reverbs, compressors or other effects chains can be shared between two linked mixers. Signal clip and overload LEDs for each input and a five-stage LED level indicator at the main output are provided for visual monitoring.



800-5-ALESIS; www.alesis.com; info@alesis.com

Case-securing foam Specialized Products

Custom Foam Inserts: SPC custom builds secure tool or equipment inserts for an exact fit. Tools and test equipment are carefully measured and specified for precise die-cut mounting in the foam inserts. Customers can choose from soft polyurethane and denser, polyethylene foam. Options include cross-linked polyethylene, anti-static and military-grade foam with a choice of density and thickness. SPC can help in selecting foam type. A test sample is provided to ensure expectations are met. Upon approval, SPC processes the order - usually within two weeks with a 25-piece minimum.

800-866-5353; www.specialized.net

POTS codecs AEQ



Phoenix Studio, Phoenix Mobile: Phoenix Studio is an IP audiocoder, in a single 1RU case, with stereo analog and digital inputs and outputs, and universal power supply. Phoenix Mobile is an IP audiocoder for portable use, including a digital mixer with four analog inputs, internal LI-ION battery, protective cover and 12Vdc power supply/charger. Both units have two slots for inserting optional communication modules: POTS, ISDN, X21, V35 and GSM. In addition to the main program and return, they can simultaneously provide a backup channel utilizing the optional communication modules. They have been designed to ensure interoperability with both present and future AEQ and third-party equipment. Therefore they are equipped with a great variety of encoding formats and can be upgraded to other formats as the market matures.

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2008 PRODUCT SOURCE

Stand-alone metadata appliance

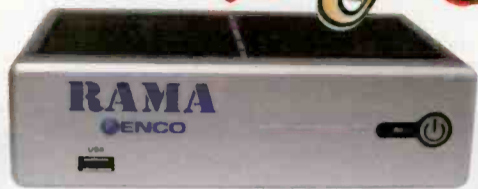
Enco Systems

RAMA: RAMA meets metadata distribution needs in a small box. The completely solid-state disk-less hardware is noise-free and measures 7"x2"x4 1/2". Configuration and control are done through an easy-to-use browser interface. With two network connections it bridges the gap between the outside world and an automation network.

Padapuli is at the heart of RAMA and allows users to create and distribute now playing information along with compelling messagecasting content by sending real-time text data to an RBDS encoder, HD Radio Importers, a website and other destinations – up to 10 total. RAMA is the first metadata delivery appliance for radio stations and networks, distributing network PAD/PSD data to affiliates on a real-time

or store and forward basis. RAMA is also a remotely administered metadata tool allowing configuration of local stations' data feeds from any location.

800-362-6797; www.enco.com; sales@enco.com



RF terminators

Altronic Research

Omegaline 6606 and 6612: These convection-cooled resistor loads are designed to handle 6kW to 20kW. The terminators can accommodate frequencies from dc to 110MHz, and are specifically configured to handle both analog and IBOC digital FM needs. Requiring no ac power, the 6600 series presents 50Ω dummy loads to transmitters through either a 3 1/8" EIA flanged or unflanged connection. The rugged, precision-designed configuration of the 6600 series provides reliability, serviceability, safety, convenience and economy, well-suited for today's modern RF application. The terminators are useful for IBOC applications, ac power is not required and silver contacts on special film resistors eliminate resistor failure.

800-482-5623; www.altronic.com
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Multi-mode audio processor

Vorsis

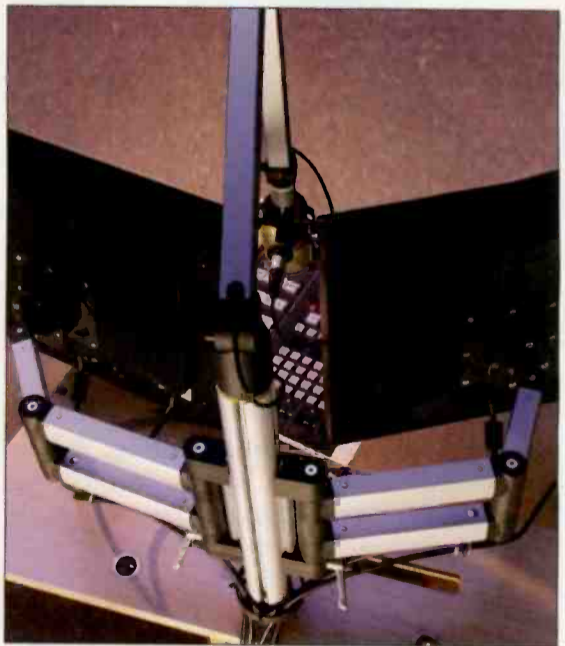


VP8: The VP8 is a multi-mode audio processor with six built-in processing modes: FM, AM, MPEG3, HE-AAC, HDC and VoIP. In these modes, special processing algorithms designed by Vorsis condition the audio appropriately for the selected transport medium. Audio is first preprocessed by a phase-linear four band AGC, then by an eight-band limiter and final limiter or clipper. The eight-band and final limiter operation is different in each of the operating modes due to special conditioning algorithms embedded within it that have been tailored for the particular needs of the operating mode. Changing modes is as simple as selecting a new mode from within the Windows-based graphical user interface; no reboot is required.

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

Microphone, monitor arms

Yellowtec



Mika: Its elaborate internal linkage and coil spring construction supports heavy microphones up to 4.5 lbs. It remains virtually silent during position adjustments. The arms come ready to go, internally wired. The mic arm comes as just one part of an open and modular system. The multifunctional MSS pole forms the backbone of the system solution. 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.

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"I wholeheartedly recommend Omnirax to everyone."

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Digital audio recorder **Nagra**

Nagra VI: The successor to the Nagra-D/DII multi-track digital recorders, the hardware of the Nagra VI is software dependent. It is available in gray, blue and red,

allowing owners of two or more recorders to easily identify a particular unit. The Nagra VI is supplied with two plastic handles that serve not only to protect the front of the unit from accidental damage, but can also be moved to their lower position and serve to tilt the recorder for a better viewing angle, and easier access to the functions when working on a table-top or sound cart. A carrying case and shoulder strap are also available. The Nagra VI is delivered with a removable battery box containing a lithium-ion battery pack, a mains power supply and is equipped with a 120GB internal hard disk.

615-726-5191; www.nagraaudio.com; mail@nagra.com

Compact flash recorder **Marantz**



PMD580: The PMD580 adds network connectivity to the PMD Series of recorders. Via its Ethernet port, it can be positioned as a network device, allowing users to set menu parameters, schedule recording events, and transfer and archive audio files, all by using a Web-based GUI interface from any PC or Mac in the network. Network accessibility allows users of solid-state digital recording devices the ability to archive audio files effortlessly even at designated times, and it makes managing multiple units a breeze. The PMD580 also has an internal clock for scheduling recording events.

630-741-0330; www.d-mpro.com; info@d-mpro.com

Recording bundles **Tascam**



Track Packs: The Track Pack T1 combines the US-122L audio interface with a dynamic microphone, headphones and Cubase LE4 recording software. The Track Pack T2 matches the US-144 interface with Tascam's new TM-78 condenser microphone. The Field Pack pairs Tascam's DR-1 portable recorder with the TM-ST1 stereo microphone.

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

Ipod mixer and recorder **Belkin**



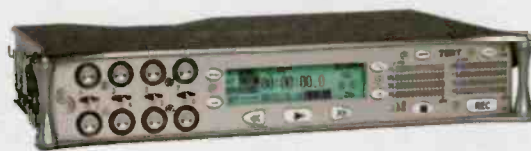
Tune Studio: Belkin's Tune Studio for Ipod is the first four-channel audio mixer that record directly to an Ipod. This mixer allows the input of up to four different instruments or audio sources, and records the audio at 44kHz quality onto an Ipod for instant playback.

310-898-1100; www.belkin.com
sales@belkin.com

Portable recorder **Sound Devices**

788T: Designed specifically for multi-track on-location productions, the eightTrack 788T features a significant expansion of input and output capability – eight full-featured microphone inputs and eight tracks of recording. The eight inputs, together with a thoroughly revised digital architecture, provide unprecedented recording flexibility. In a stainless-steel and aluminum chassis weighing less than four pounds, the 788T accommodates individual controls and connectors for each input, plus numerous additional I/O and data connections. To accommodate the larger data storage requirements of multi-track recordings, the 788T comes with a 160GB 2.5" internal SATA hard disk drive. This on-board storage provides up to 30 hours of eight-track, uncompressed 24-bit audio recording of industry-standard Broadcast WAV files. To transfer recorded audio, the 788T features high-speed access to both the internal hard drive and connected Compact Flash medium.

608-524-0625; www.sounddevices.com; info@sounddevices.com



Portable mixer **Axel Technology**



Oxygen 2: Oxygen 2 is a professional portable mixer for reporting and remotes. It can easily fit into a briefcase together with its wires, headphones and microphones. All controls are grouped on the front panel, to make it easier to operate. Oxygen 2 features two balanced switchable mic/line inputs and one built-in telephone hybrid with automatic line compensation.

+39 51 736555
www.axeltechnology.com
info@axeltechnology.com

Audio recorder **Edirol**

R-09 HR: With a wider dynamic range, higher bit and sample rates than other recorders, the R-09HR supports up to 24-bit/96kHz linear PCM recording. I.A.R.C. is a newly developed, dedicated analog circuit optimized for recording with the R-09HR's onboard A/D converter. Electrolytic capacitors provide stable, reliable power with an independent power source for the analog circuitry, and another power source for the digital circuit board, thus eliminating dc interference between components in the R-09HR. The I.A.R.C. also contributes to high quality,



low noise MP3 recording. When recording, there's no extra equipment to buy or cables to connect. A stereo microphone is built into the unit, complete with a dedicated analog input control, mono/stereo selector, low-cut filter, limiter/AGC and a gain boost. The onboard electret condenser microphone elements are very compact, ultra-sensitive, and placed to capture three-dimensional sound naturally and accurately.

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

Portable hard drives **Avastor**

SDX: The SDX comes with a mandate for quality features that will enhance performance. For example, each SDX drive has an external three-amp grounded dc power supply that auto senses 90-240V that makes for worldwide compatibility with an IEC power cord. Also every SDX has an ultra-quiet cooling fan for maximum heat dissipation and power and activity lights.

To ensure maximum connectivity, performance and durability, the SDX drives are available in an anodized aluminum design. The power adapter uses extra heavy gauge wire as well as a heavy duty connector with oversized pins for 5Vdc and 12Vdc.

770-800-9714; www.avastor.com; sales@avastor.com



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Web: <http://www.acousticsfirst.com>

HD-Radio tuner adapter

Audio Science

ASI8914: The ASI8914 is a universal, full-length PCI card that contains four HD-Radio/AM/FM tuners and is designed for use in HD Radio broadcast monitoring and auditing. Each tuner may be set to an independent analog or HD 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 32-bit PCI bus master interface. An F connector feeds RF signal from an external antenna to all tuners on the ASI8914. Each tuner may also be fed from an external antenna input. An HD50 connector makes available the mono or stereo line level audio of each tuner output. Recording formats include PCM, MPEG-1 layer2 and MP3. Each tuner can also decode and stream the HD Radio Program Associated Data data and RDS/RDBS data for analog FM. HD Radio multicast is supported, allowing the audio and PAD stream to be switched between the Main Program Service and Secondary Program Services under software control.

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



Analog, digital translator Armstrong Transmitter



TRX-HD series: Designed to transition a translator station from analog-only broadcasting to digital, the TRX-HD receives an FM station's entire signal payload over the air, including its HD Radio digital component. The signal content is transferred to the TRX-HD transmit side for retransmission on the translator frequency. The TRX-HD10 provides 10W in the hybrid digital mode, the TRX-HD50 provides 50W hybrid digital, and the TRX-HD100 is a 100W hybrid digital translator. Higher hybrid power levels are achieved by adding an Armstrong solid-state amplifier.

315-673-1269

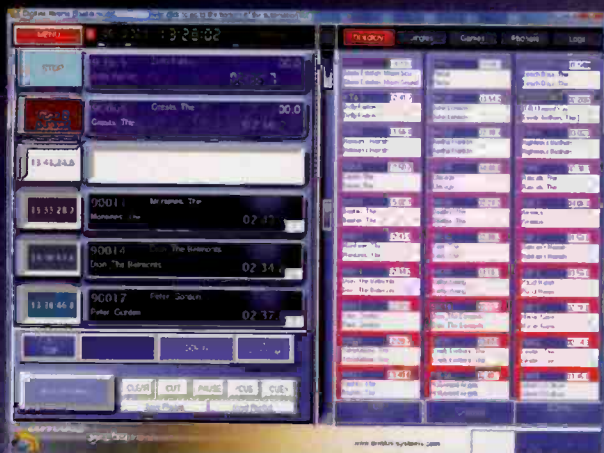
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Web development and maintenance

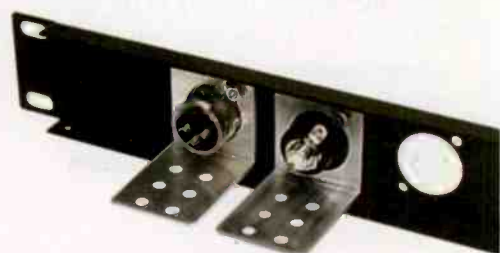
Liquid Compass

Web radio broadcaster packages: Liquid Compass' sites are designed to be intuitive for users, to build and enhance a station's brand on the Web through a visually appealing site, and most importantly, to be used as a digital sales tool. Usability, functionality, layout, advertising appeal and overall seamless updateableness by its team are all top priorities. The top level of this service includes: custom designed website; powerful content management system built specifically for the radio industry; banner management and scheduling tool; choice of banner placement on site; flash header; Web hosting and support; event calendar; VIP/loyal listener club; photo gallery; listener poll; updateable playlist page; media pages that include video, audio and on-demand; breaking news ticker and site blog/DJ blog pages.

303-839-9400

www.liquidcompass.net
info@liquidcompass.net

XLR tie bar Markertek



Markerbar: Clever cable tie bar is threaded to accept standard connector mounting screws (counter sunk or pan head), creating a safe and secure way to support an incoming cable to a connector. More secure than a common lacing bar, it takes up no more room than the width of the connector. IT installs instantly to panels and wall plates with the same screws or rivets commonly used now. It is compatible with connectors from Neutrik, Switchcraft, Connectronics and Canare.

800-522-2025; www.markertek.com
sales@markertek.com

When the work is outside the studio



Compact LED flashlight **Ledtronics**

Microflash LED: The Microflash LED is more powerful than most LED flashlights on the market today. It has a 1W, 80-lumen LED chip that emits more than 4,300 end foot-candles of bright Cool White light that is powerful enough and lasts long enough to light your way. Other LED light colors

are available for qualified customers. Microflash LED operates on three standard, replaceable alkaline batteries. Since LEDs are 80 to 90 percent more energy-efficient than incandescent lamps, the unit operates 20 to 30 times longer than the comparable incandescent flashlight, providing up to 96 hours or four days of continuous illumination at a diminishing light output rate. It retains 50 percent of its light output after one hour of continuous use. The exterior is made of anodized aluminum to resist corrosion, impact and scratching. Microflash LED has a unique focusable lens with a narrow- and wide-beam lens design that allows continuous varying of the light beam width from, for example, a concentrated tiny book size at 10 feet from a wall to lighting the whole wall, floor to ceiling.

800-579-4875; www.ledtronics.com
webmaster@ledtronics.com

Access portal **Telular**



SX7: This unit provides a fixed connection to the 3G cellular network. The SX7 utilizes CDMA and GSM networks and is available through several cellular carriers like AT&T and Sprint. The SX7 can power phones up to five REN through just one phone jack.

800-229-2326; www.telular.com

Wi-fi analyzer **Metageek**

Wi-Spy 2.4x: Chanalyzer software turns Wi-Spy data into interactive graphs that make analyzing, troubleshooting and optimizing your wireless networks a breeze. Chanalyzer 3.1 is included with Wi-Spy 2.4x at no additional cost. Plugged into a computer, the Wi-Spy 2.4x will track all the radio activity from Wi-fi, Cordless Phones, Microwaves, Zigbee, Radio, Bluetooth, and many more 2.4GHz devices. Seeing these devices will help you locate and identify possible interference to optimize your WLAN.

888-489-1596; metageek.net
sales@metageek.net



Universal USB Dongle **Pace Anti-Piracy**

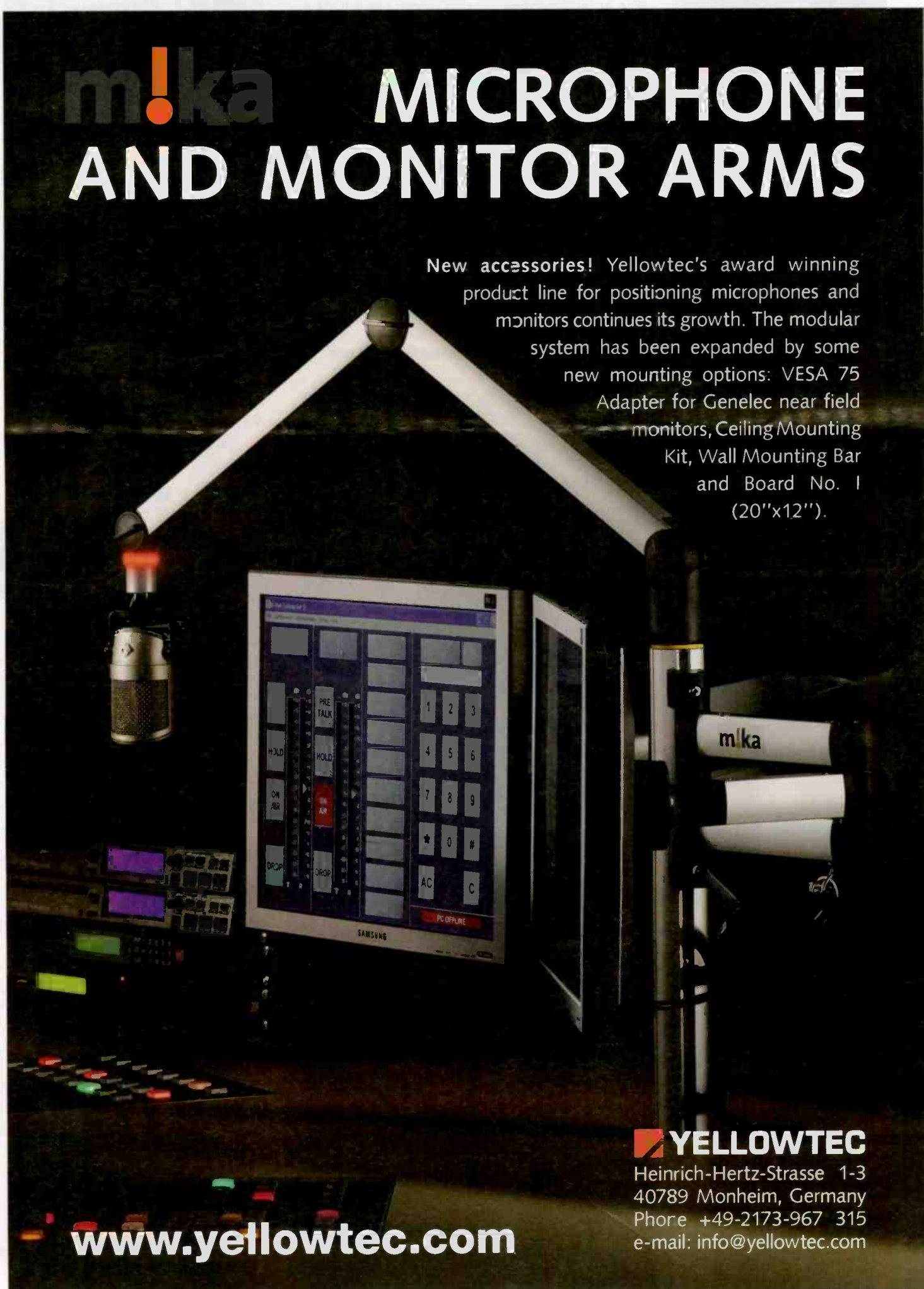
Ilok: The Ilok is a proprietary USB hardware dongle that holds licenses for software protected by Pace Anti-Piracy's Interlok. Store Mac and Windows Ilok-enabled software licenses on a single Ilok: It's cross-platform. Authorize your software anywhere it is installed. From home, to work, to remote location; your licenses are with you, not your computer. Your licenses are on the safe, secure Ilok, so there is no need to contact software developers for a new authorization due to a system problem caused by a machine upgrade, disk maintenance, hardware failure or software update. Identify and manage your Iloks and licenses with your ilok.com account. View the contents of your Iloks, take delivery of new licenses, and move licenses between Iloks and accounts.

408.979.9774; www.paceap.com/index.html; info@paceap.com



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www.yellowtec.com

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40789 Monheim, Germany
Phone +49-2173-967 315
e-mail: info@yellowtec.com

FM transmitter

Nautel

NV40: The NV40 offers the highest single-cabinet power output of any FM transmitter available with a maximum analog power output of 44kW. For the first time, an HD Radio ready solid-state FM transmitter has been introduced that challenges the cost efficiency of tube-type HD Radio transmitters. It offers three modes of operation:

Digital, hybrid and analog. The NV40 has an integral digital exciter that supports adaptive pre-correction, and offers a plug-in upgrade to the HD Radio Engine.

Nautel designed the product to occupy a footprint as much as 60 percent less than comparable solid-state and tube transmitters, provides advanced instrumentation and management tools, and optionally offers Nautel's new HD Power Boost technology for more IBOC power. The NV40's maximum power outputs are 44kW in analog mode, 32kW in hybrid mode and 12kW in digital mode.

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

Trafficking software

Wideorbit

WO Traffic v4.6: Wide Orbit's core software product, WO Traffic, manages more than \$11 billion in advertising revenue. The most significant enhancements in version 4.6 include support of industry standards such as SMPTE's BXF and TVB's Eport, dramatic improvements for multi-channel operations, new groundbreaking functionality for users in the cable and cable interconnect industry, enhanced capabilities needed for international businesses, and overall greater user flexibility and efficiency.

415-675-6700; www.wideorbit.com; mzinsmeister@wideorbit.com

Tower lighting service

Strobe Tech



Tower Lighting: Strobe Tech has been repairing, maintaining and installing structural lighting since 1988. The company has extensive experience with all makes and models of obstruction lighting. Its focus lies not only with the technical aspects, but also with the safety of its employees. All of its technicians are RF and fall-safety trained. Strobe Tech services all makes and models of structural lighting. The company can install any type of system, using any manufacturer of lighting, on any structure, and is OSHA compliant.

931-648-8414; www.strobetech.com
field.service@strobetech.co

TDM plug-in

Crane Song Ltd.



Phoenix: This TDM Plug-In for Pro Tools emulates the unique properties of a magnetic tape machine. The process not only incorporates the nonlinear saturation characteristics created by magnetic the tape, but also includes the interrelation of an analog tape recorder's record/reproduce electronics and equalization curves. Five TDM plug-ins emulate tape characteristics, each one incorporating a color change button allowing three choices to modify the process. A level control determines the amount of the process integrated into the audio signal.

715-398-3627; www.cranesong.com
staff@cranesong.com

Automation system

Google

Google Radio Automation: Google Radio Automation is a third-generation radio automation system featuring SS32 and Maestro in a single product. The database tier is built around the SQL database. The open interface allows other systems to easily exchange data with Google Radio Automation, control it or be controlled by it. Widgets can be added, moved or removed from the screen at-will, allowing each user the ability to personalize their interface based on their individual needs and preferences. Google Radio Automation lets you add custom widgets to the automation system. Custom widgets can be used to tightly integrate other pieces of broadcasting equipment or other computer programs with the automation system.

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Continental Electronics

802EX: This new next generation exciter is a on-box HD Radio product incorporating embedded exporter and exciter technology. The 802EX is based on future-focused digital technology that advances performance beyond other FM digital exciters, makes HD Radio much simpler to install and configure, and enhances the FM/HD experience through the innovative application of soft updates and firmware plug-ins. Standard in all 802EX exciters are: Continental's fully-adaptive, real-time, forward precorrection, allowing changes in transmitter or RF system performance to be automatically sensed and corrected; software-selectable HD Radio power levels of -20dB, -10dB or any power level in between; Hi-res color LCD screen for maximum clarity and accuracy; built-in stereo generator; built-in audio delay (up to 16.4 seconds); synchronization, using GPS 10MHz signal; multiple AES3 digital audio inputs; AES3 audio output; standard composite input and two baseband SCA inputs.

800-733-5011; www.contelec.com; sales@contelec.com

Average reading wattmeter

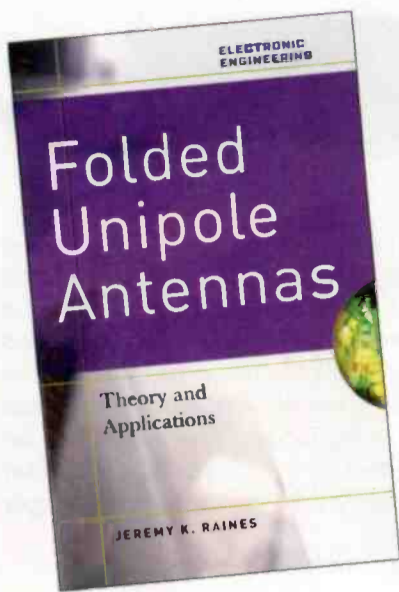
Coaxial Dynamics

81030: The 81030 incorporates a large LCD display, a state-of-the-art microcontroller that computes forward or reflected RF power and presents the reading in either Watts or dBm scale. The digital display allows the quickest and most accurate way to read RF Power from up to several feet away. No more confusing crossed needles or tiny print on small meter faces, which can be read inaccurately if viewed from an angle or distance. The Model 81030 is able to accurately measure RF power from 100mW to 10kW over a frequency range of 2MHz to 2.3GHz using standard 7/8" elements.

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



Selections for your bookshelf reference



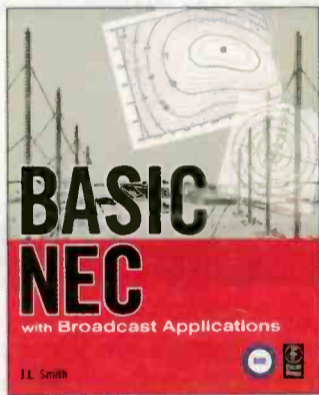
Antenna resource
McGraw-Hill Companies
Folded Unipole Antennas: Folded Unipole Antennas: Theory and Applications is the first comprehensive sourcebook on the design and uses of folded unipole antenna technology, featuring never-before-published mathematical equations and configurations. Written by Jeremy K. Raines, an internationally recognized antenna expert, this unique one-stop reference offers readers a detailed account of the physics underlying the remarkably compact, broadband and versatile folded unipole antenna, as well as mathematical models suitable for design and analysis.

Electronics resource
Elsevier/Focal Press

Electrical and Electronic Principles and Technology, 3rd Ed.: This instructional book introduces electrical principles and technology through examples rather than theory – enabling readers to develop a sound understanding of the principles needed by technicians in fields such as electrical engineering, electronics and telecommunications. No previous background in engineering is assumed, making this an ideal text for vocational courses and introductory courses for undergraduates.

Numerical Electromagnetics Code book
Elsevier/Focal Press

Basic NEC with Broadcast Applications: Basic NEC with Broadcast Applications addresses computer modeling of MF directional broadcast antennas and illustrates the assets and liabilities of the Numerical Electromagnetic Code (NEC). The book's how-to approach reveals the fundamentals of NEC operation, teaches broadcast applications and shows the reader how to use NEC-2 to: model non-radiating networks, verify calculations, detune unused towers, design top-loaded and skirted antennas, minimize coding by moving and duplicating structures, and much more! Complete with CD, the book is an invaluable toolkit with software necessary for the design and analysis of broadcast antenna arrays.

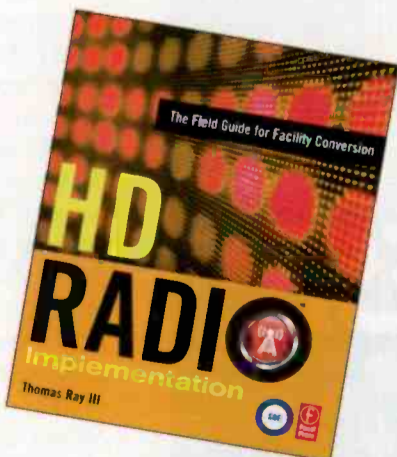


Step-by-step guide
National Association of Broadcasters

Broadcast Towers: The NAB's first eBook, Broadcast Towers: A Step-by-Step Guide to Making Money on Vertical Real Estate, shows how broadcasters can cash in on wireless communications, one of the nation's fastest growing industries. Written in plain English by two prominent communications lawyers, the book provides never-before compiled information on the business, technical and legal aspects of tower ownership and the leasing process. Broadcast Towers provides practical marketing advice, technical pointers and legal insights on how broadcasters can turn their towers into profit-centers and comply with Federal, State and local laws governing matters such as safety, historic preservation and the environment.

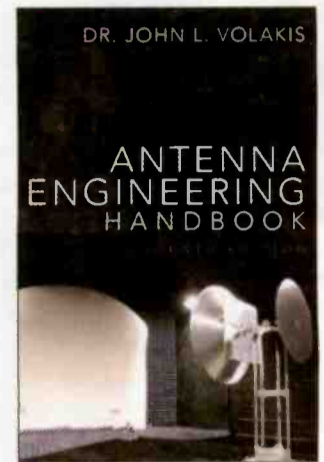
Digital radio installation resource
Elsevier/Focal Press

HD Radio Implementation: Published in cooperation with the Society of Broadcast Engineers, this book offers a hands-on approach to HD Radio implementation. It covers the elements of the radio station signal chain that need to be upgraded or modified to better accommodate the needs of the transmission system.



RF propagation design
McGraw-Hill Companies

Antenna Engineering Handbook, Fourth Edition: Edited by John L. Volakis, one of the world's leading authorities in antenna engineering, this trusted resource covers all the classic antenna types plus many new types and designs used in communications systems, satellites, radars and emerging applications from WLAN to automotive systems to biomedical to smart antennas. Readers will also find expert discussion of topics critical to successful antenna design and engineering, such as measurement techniques and computational methods, a materials guide, wave propagation basics, microwave circuits and matching techniques, as well as diversity and MIMO propagation models, frequency selective surfaces and metamaterials.



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consistent subjective loudness without resorting to excessive dynamics compression that can lead to listener fatigue.

Operation of the 264 is entirely program controlled, and user adjustments have been restricted to a bare minimum for quick, set-and-forget installation. Operating entirely within the analog domain, the 264 utilizes colorless Class-D (PWM) technology for stable and transparent operation.

The 264 also provides alarm tally outputs to signal a 'dead air' or out-of-limits condition for each of the four channels.



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2008 PRODUCT SOURCE

Panel mounts BTX

Max Blox: BTX's solderless connectors, the patent pending Max Blox EZ Termination System feature rugged all-new design allowing installers to terminate an HD15 or a DB-9 with just a screwdriver, and mount it in a panel, plate or Max Blox hood in a fraction of the time it would take to solder, saving both time and money. When used in conjunction with the Max Blox hood, these connectors simply slide, snap and lock into the hood without the use of tools. Optimized for use in any A/V application where VGA or RS-232 controls are used, the HD15 and DB-9 connectors are manufactured by BTX with genuine Phoenix Contact terminal blocks. The system accommodates wire diameters, from 0.120" to 0.500".

800-666-0996; www.btx.com; info@bi-tronics.com



Low-power group delay equalizer ERI-Electronics Research

Model CF103: The Model CF103 Low Power Group Delay Equalizer provides group delay pre-correction for FM transmitters at low level, usually between the FM transmitter's exciter and intermediate power amplifier. The pre-correction applied offsets excess group delay variation and asymmetry that is unavoidable in FM combiner systems that include closely spaced frequencies, of 1.0MHz or less. The CF103 has a power rating of 150W and provides up to one microsecond of correction across a single FM broadcast channel. ERI also has available group delay equalizers that operate at high power, which offer greater correction range and are located directly before each individual station's combining module. This means that the proper correction is applied regardless of whether the main or auxiliary transmitter is online and it is not affected by transmitter supply voltage variations or changes in output amplifier tuning.

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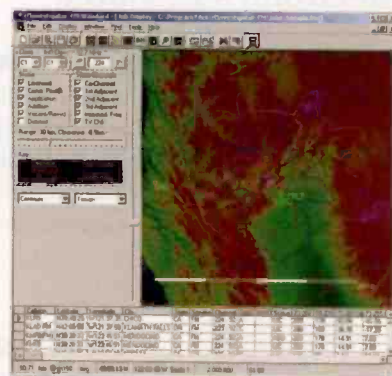
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BROADCAST BIOHICS

Field strength program RF Software

RF Investigator v3: The most obvious change in this version of the software is a new button on the tool bar. This button selects AM or FM studies from the same program without the need for additional software. Multiple monitor support allows the user to move the various windows as he likes to more efficiently display the data and control functions. Maps are resizable to a rectangle. The entire map display can be easily copied and pasted into another application, such as a word processor or graphics editor.

352-336-7223; www.rfsoftware.com; alex@rfsoftware.com



Studio intercom interface Studio Technologies



specialized audio system interfacing applications can also be supported. It provides two independent full-featured two-channel interfaces. Each interface contains two hybrid circuits that include automatic nulling capability. The analog circuitry, under software control, provides excellent audio quality and high return-loss. They are capable of supplying dc power, allowing direct operation of devices such as user belt packs. Configuration settings allow the two- and four-wire interface circuitry to be compatible with a range of nominal signal levels. Audio level meters provide user confirmation of system performance during setup and operation. Applications for the Model 46 include television sports and special event broadcasting, theme park and theater installations, corporate events, and industrial testing environments. Standard audio connectors are used for all input and output signals.

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

Model 46: The Model 46 is designed to interface two-wire full-duplex party-line intercom circuits with four-wire audio circuits associated with matrix intercom systems. Other

Linear/PCM audio option APT

Worldnet Oslo Module: The Worldnet Oslo is now available with a linear audio module offering uncompressed audio quality over both IP and T1 links. The Linear/PCM audio option is in addition to the existing MPEG L2 option and the pro-grade, low delay Enhanced Apt-x coding utilized in hundreds of STLs and studio links throughout the country. Also, APT's codecs now fully support SIP and SDP protocols. SIP ensures interoperability between audio codecs from different manufacturers and enables the negotiation of traffic across firewalls and external networks. With SIP and SDP on all the Worldnet Oslo audio multiplexers, APT's product range is now fully compliant to the N/ACIP standard set out by the European Broadcast Union.

800-955-APTIX; www.aptx.com
info@aptx.com



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918-261-8187; www.sierramultimedia.com; ray@sierramultimedia.com

Cardioid condenser mic

Mojave Audio

MA-201fet: The MA-201fet is an ideal choice for recording vocals, dialog work of all types, acoustic instruments such as guitar, piano and wind instruments, as well as choral work. Additionally,

this new microphone is a great choice for kick drum, bass amps, drum overheads, capturing drum room sounds, and orchestral recording. It provides warm, full-bodied reproductions of vocals and instruments without the shrillness and high frequency artifacts so often encountered with modern condenser microphones.

The microphone's warm FET circuitry and Jensen transformer combine to deliver low noise and high quality performance. As a solid state, large diaphragm condenser microphone with a cardioid polar pattern and a 3µm thick, 1" (diameter) gold sputtered capsule, the new MA-201fet is a truly versatile recording instrument.

818-847-0222

www.mojaveaudio.com

LP to digital recording system

Audio-Technica



AT-LP2D-USB: The AT-LP2D-USB includes a turntable and phono cartridge, PC- and Mac-compatible software, a USB cable that connects the turntable directly to a computer and other accessories. The turntable, designed to deliver high-quality sound, features fully automatic operation and a 33-1/3 and 45RPM speed selector to play vinyl formats from LP albums to 12" and 7" singles. The supplied USB cable enables plug-and-play connection to a desktop or laptop computer. Its built-in switchable, phono preamp, RCA output and adapter cables allow connection to a wide variety of music and home entertainment systems, and to A/V receivers without a dedicated phono input.

330-686-2600

www.audio-technica.com
sales@atus.com

Wireless mic systems

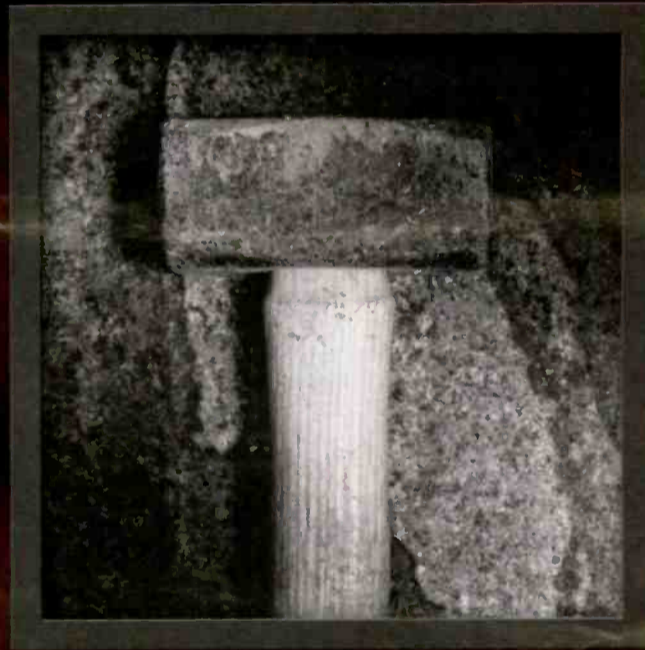
Samson Technologies

Airline Synth: Samson's new Air Line Synth true diversity system is a frequency selectable system that can operate on any of 320 frequencies over U and E bands with up to 11 simultaneous channels. It features automatic scanning and infrared programming, balanced and unbalanced outputs as well as front or rear mountable antennae. The Air Line Synth AR300 Receiver can be rack-mounted with up to four receivers in a rack space. And, its LED front panel displays AF/RF levels, frequency, audio output level and channel mix setting for easy production configuration on the fly. Samson's new system also features an innovative set of miniature transmitters.

631-784-2200; www.samsontech.com; info@samsontech.com



Omnia 6EXi is:



AND EVERYTHING IN BETWEEN

In addition, with Omnia 6EXi's optimized parallel processing path, your HD-1 will also sound exceptional!



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2008 PRODUCT SOURCE

Audio delay system 25-Seven Systems

Program Delay Manager: 25-Seven Systems' Program Delay Manager (PDM) is available in both IP audio and standard digital/analog I/O configurations.

PDM offers full protection against unwanted broadcast content while providing excellent audio performance and 25-Seven's unique PD Alert system. PD Alert enables the program director and/or other key personnel to receive e-mail notification that program material was blocked from airing, including an audio file containing the content deleted by Program Delay Manager. PD Alert eliminates second-guessing about what was and was not aired during the incident.



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



USB FM-scanning receiver modulation/RDS analyzer Deva Broadcast

Band Scanner Pro: Used to evaluate FM broadcast band congestion and log station identification parameters, the Band Scanner Pro can measure RF level, MPX deviation, left and right audio levels, RDS and Pilot injection levels. The system is powered by the USB port of any Windows PC. Windows software sweeps the receiver across the FM band, logging every carrier and generating a spectrum display of carrier level versus frequency. It then analyzes each carrier and creates a station list. Stations with an RDS presence are further refined to show all the radio data groups being transmitted. Its interface is like a portable radio: It may be tuned manually through the receiver screen or by double-clicking a point on the spectrum plot or an entry on the station list. Spectrum plots may be saved as JPG or BMP files. The RDS data error level is graphed in a separate window on the receiver screen. The program can be monitored with headphones plugged into a standard 1/8" jack.



+359 56 820027; www.devabroadcast.com; sales@devabroadcast.com

Digital exciter Broadcast Electronics



FXi60/250esp: The FXi60/250esp exciter is the BE's latest FM exciter with direct-to-channel FM carrier generation. It includes features such as digital adaptive correction, dual RF outputs for redundancy, Ethernet IP control and more. Broadcast Electronics' new exciter, available in 60W and 250W versions, will come standard in its FMi T and FMi HD Radio transmitter lines and as an upgrade option for its FM T, C and S Series transmitters. New features and functions of the FXi 60/250esp exciter include: New ESP digital adaptive correction provides for greater efficiency and overall best RF output mask compliance. ESP corrects any linear and nonlinear distortions for the transmission system, providing adaptive correction for FM + HD and HD Radio, and corrects for group delay in a multi-station, combined antenna application. Dual RF outputs – one exciter can drive two transmitters, a separate HD Radio transmitter and an FM transmitter or a backup and main transmitter. Plus, the new FXi 60/250esp offers dual AES/EBU inputs with True Silence Sense for primary and backup audio inputs.

217-224-9600; www.bdcast.com
bdcast@bdcast.com

Internet production systems Barnabas Road Media

Per Performance Reporting System: BRM's Per Performance Reporting System (PPRS) was developed in-house by its software development team headed by Paul Gathard, the president and founder of Barnabas Road Media. PPRS collects the data from a radio station's automation system, integrates the output of the streaming media server files and produces a ready-to-file official report that is signed and submitted by station/network managers. The report is ready to submit to Sound Exchange as a station remits its royalty payments. PPRS makes per-play reporting simple, fast and reliably easy to use.

877-656-7200; www.barnabasroad.com

AES audio switcher Titus Technological Laboratories

3-DRX: This AES digital audio device integrates both a two-input AES-3 switcher and a 24-bit stereo ADC into one package making a perfect emergency 3x1 automatic switcher, as well as easy EAS integration. The 3-DRX is a digital audio repeater and crosspoint switcher. It has three inputs and one output. The first two inputs are digital audio inputs; they can be AES-3 balanced, XLR or AES-3ID BNC. They can also be either terminating or bridging inputs allowing sampling of an existing serial digital audio data channel. The third input to the 3-DRX is a stereo analog audio input. The serial digital output conforms to both AES-3 and AES-3ID standards. The 3-DRX will automatically switch to the secondary digital input if the primary digital source fails. A tertiary stereo analog source will automatically be switched to if the two stereo digital streams fail or have a loss of audio on the digital data stream.

860-633-5472; tituslabs.com



designed to withstand use and abuse in harsh environments. The Amphenol assemblies are factory terminated by Gepco and feature precision machine-polished contacts which offer UPC quality to achieve -55dB return loss specifications. This process helps to attain excellent optical clarity and alignment, reducing back reflection and minimizing insertion loss. For further transmission assurance, all assemblies are 100 percent tested and verified for consistent performance and feature premium quality connectors and components.

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

Cable assembly Gepco International

Amphenol TAC-4, TAC-12: Gepco has added Amphenol TAC-4 four-channel and TAC-12 twelve-channel hermaphroditic connectors to its line-up. The TAC-4 and TAC-12 hermaphroditic connectors are industry standard, multi-channel formats de-

Real-time Web page launches

Cynocast.com

DJ Cynocaster: DJ CynoCaster, is designed to work with both terrestrial and Internet radio stations. DJ CynoCaster's Launch List allows radio stations to deliver any of type of digital media in real-time to listeners. DJs can instantly provide polls, poll results, song lyrics, traffic maps, news articles, blogs, weather maps and sports scores on the listener's computer. A single mouse click can launch any URL on the Web. Any radio station format can benefit from using the technology, especially Talk Radio.

303-464-8865; www.cynocast.com

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SIERRA MULTIMEDIA, INC.
www.sierramultimedia.com
(479) 876-7250



Transmitter Crown Broadcast

FM600E, FM600R, FM600T: The FM600 is available in three configurations: The FM600E is a basic exciter with composite input only. The FM600T is a good choice for the lower power broadcaster, with its built-in audio processor and stereo generator. The 20 percent upgrade in power over the company's previous FM500 allows the end user to accommodate date line loss without upgrading to the next higher power Crown unit. The FM600R is the translator option with built-in receiver. With low loss circuit boards and copper heat spreaders in the RF chain, the unit functions with less heat and improved life span. A robust power supply with switching voltage and power regulators for ac or dc operation allow the FM600 to be used anywhere power can be generated.

800-262-8919; www.crownbroadcast.com; fmsales@irec1.com

EAS monitor Cascade Technology Corporation



IPM-1 EAS Watch: EAS Watch continuously monitors the actual transmitted signal from broadcast stations. The system detects Emergency Alerts and conveys the data collected via Internet to a high definition TV Situation Display located in a state or regional Emergency Management Center. When an alert is initiated, the audio from the alert is decoded by the on-site server. Through access to a relational database and decoding of the EAS FIPS codes the relevant stations are shown on a state or regional map. If the station successfully broadcasts the EAS, its icon turns green; if not, the icon turns red after a user-adjustable time interval has elapsed. The system also performs a technical analysis of the signal in order to confirm it meets the FCC regulations relating to bit rate, tone frequencies, pauses and audio levels. If the signal does not conform, a warning is provided. A full report on the technical deficiencies can be printed. EAS Watch also addresses spurious EAS transmissions. Currently there is no way for authorities to know that a station has accidentally sent out an EAS. With EAS Watch, any spurious EAS will result in generation of a new regional map on the Situation Display that will also allow tracking of any propagation of the EAS through other broadcasters.

360-988-0459
www.easwatch.com
info@easwatch.com

Long pull ventilation system Middle Atlantic Products



Duct Cool: Although Middle Atlantic Products originally designed the Duct Cool Series ventilation system for the residential installation market, potential customers quickly noticed that it solves a tricky cooling problem in broadcast applications as well. Smaller broadcast facilities may not have dedicated rooms, be cramped for space, and be in the process of converting to digital equipment that generates more heat than its analog counterpart. Duct Cool efficiently removes heat from the equipment without adding noise at the equipment location. In situations where the equipment is close to or in the same room as the operators or on-air talent, it can be cooled quietly and effectively. The Duct Cool vent system fan can also be mounted remotely (12' to 25' away is the recommended distance) without significant loss of performance. A temperature probe and thermostatic control save energy by only running the system when needed. The two primary components of the system are a powerful mixed-flow fan assembly and 25' of either 4" or 6" ID insulated flexible ducting depending on the model.

973-839-1011; www.middleatlantic.com
sales@middleatlantic.com

Shotgun microphone Rode

NTG-3: Using a technology known as RF-bias, the Rode NTG-3 is almost



completely resistant to moisture. In addition to its robust properties the NTG-3 combines very low weight (163g), a durable anti-glare finish and incredibly low handling and self-noise. When not in use, the NTG-3 can be stored away in the included weather resistant aluminum storage cylinder, providing additional protection when travelling and storing the microphone.

877-328-7465; www.rodemic.com; usasupport@rodemic.com

Studio automation system Broadcast Software International

Op-X: Op-X was built from the ground up and has been designed for both intuitive operator interface and ease of maintenance for the IT or engineering professional. The system has been in fulltime operation at more than 30 stations nationwide for the past 18 months, as product features have been enhanced and real-life testing has proven successful. The system features clock-builder and time-bending functions, as well as a satellite interface.

888-BSI-USA1; www.bsiusa.com; info@bsiusa.com

Combo line Shively Labs



2700 Series: Shively Labs offers its new 2700 Series comb-line, band pass filter offering 4-pole response in a 3-pole package. The 5kW balanced combiner shown in the photograph uses these filters, and the compact hybrids will fit within the tightest of spaces. Higher power versions of these filters will provide balanced combiner modules rated at 10kW+ with only a slight increase in footprint.

888-SHIVELY; www.shively.com
sales@shively.com

Console Audioarts Engineering

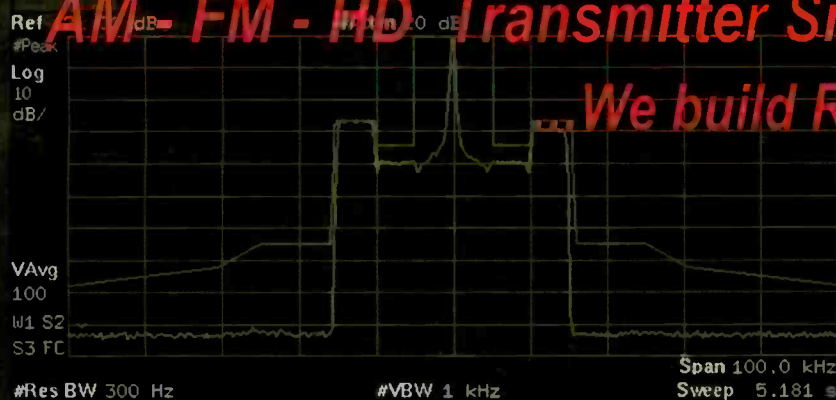


W-12: The W-12 Console targets small- to mid-market radio stations and offers high-end features such as: three stereo main busses, 12 A/B dual source stereo line inputs (analog or digital), two microphone preamps, uncompressed 24-bit operation (44.1 or 48kHz), switched VU meters, built-in cue speaker with level control and headphone jack with built-in amp.

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

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www.sierramultimedia.com
(479) 876-7250

2008 PRODUCT SOURCE

Remote power controller Burk Technology



Plus-X AC-8: The Plus-X AC-8 provides independent management of equipment connected to 120V outlets, allowing remote rebooting of servers, PCs and other IT equipment. This saves wasted drive time when equipment needs a power cycle. Broadcasters can also remotely manage HVAC, lighting and other appliances. The product connects directly to the Burk ARC Plus remote control via Ethernet, or to any remote control (including the GSC3000 and ARC-16) using general-purpose inputs. A built-in Web server allows for stand-alone remote connectivity.

800-255-8090; www.burk.com; sales@burk.com



other appliances. The product connects directly to the Burk ARC Plus remote control via Ethernet, or to any remote control (including the GSC3000 and ARC-16) using general-purpose inputs. A built-in Web server allows for stand-alone remote connectivity.

Illuminated pushbutton switches

NKK Switches

GB Series: The GB Series' fully illuminated clear polyamide plunger is designed for high visibility and is available with red, green or amber LED illumination. The series' miniature size allows for high-density mounting and their light weight makes them ideal for handheld devices. Featuring a completely sealed body construction to prevent contact contamination, the GB Series of switches also allow for better use of time in repair and cleaning. The insert-molded terminals lock out flux, solvents and other contaminants, guaranteeing a long mechanical and electrical life of 50,000 operations minimum. NKK has also incorporated its award-winning STC contact mechanism into these switches, which provides them with a smooth, positive detent mechanism, increased contact stability and unparalleled logic-level reliability.



480-991-0942; www.nkkswitches.com; sales@nkkswitches.com

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E-mail: altronic@mtnhome.com
Web Site: <http://www.altronic.com>



RPU transmitter

RVR

Electronica URPT: The RVR URPT is a wide-band, high-power, RPU transmitter designed for reliable high-quality remote broadcast links and TSL applications. URPT, which takes advantage of synthesizer and RF power amplifier technology found in RVR's popular STL transmitters, features front panel controls and an LCD display allowing for frequency-agile tuning from 210 to 350MHz, 430 to 480MHz, or 915 to 965MHz. The LCD display also indicates high VSWR, forward/reverse power, PA current, power supply voltage and audio compression. It is a lightweight and portable, yet powerful and full-featured, remote broadcast transmitter that can operate on available ac power, rechargeable battery packs or solar power panels.

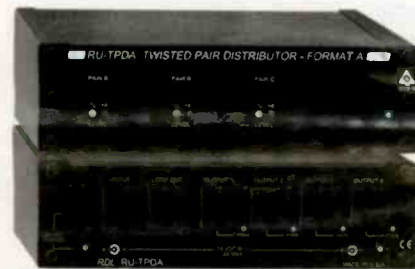
305-471-9091; www.rvrusa.com; www.rvrusa.com

Twisted pair products

RDL (Radio Design Labs)

Format-A: Format-A twisted pair products send, receive and distribute audio via CAT5 cable. Modules are available for mounting in walls, cabinets and racks. Sending and receiving modules are equipped with connectors and terminal blocks for standard -10dBV unbalanced and +4dBu balanced line levels, and standard microphone levels. Format-A uses one pair for power and three pairs for signals. Sending and receiving modules each use one pair, two pairs or all three pairs for audio signals. Single-pair products allow the installer to select which of the three pairs is used to send or receive the signal. Two-pair products are used for stereo audio. Three-pair products send and receive three separate signals, which may comprise three mono signals or microphone plus stereo line signals.

800-281-2683; www.rdlnet.com; sales@rdlnet.com



Rack-mounted PC RAM Systems and Communications

SPC2000: The SPC2000 has been custom manufactured to provide the broadcaster superior performance and reliability in a rack-mounted PC. Its single-rack space height and short 14" depth make it an easy fit in many brands of studio furniture. Features of the SPC2000 include: mini 1RU chassis; ultra-quiet operation; front-panel DVD/CD record/playback drive; front-panel flash card drive; two front-panel USB ports; one rear-panel USB port; Intel core 2 duo 1.8GHz processor; Seagate 80GB 7200RPM hard drive; 1GB RAM; Intel gigabyte Ethernet; Onboard XGI Volari Z7 graphics; Windows XP OS included; Digigram linear stereo sound card (optional) and three-year system warranty included.

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



Audio router, interface Broadcast Bionics

Phone Box Solo: This system is purely software driven, using SIP, VoIP or ISDN technology to digitally route calls to air via a standard windows PC and soundcard. The interface features call recording, editing and playback, advanced visual talk back, database logging, caller ID and black listing. Users can have as many as eight lines for a single hybrid studio system, with options to add call screening, remote control and extra hybrids.

+44 1444 473999; www.phonebox.com; info@phonebox.com

Dynamic noise suppressor Cedar



DNS3000: The DNS3000 is the latest generation of Cedar's Dialogue Noise Suppression technology, combining the tactile control service of the original DNS1000 with the Pro Tools integration of the DNS2000, plus much more. Additional features include on-board scenes with a simple and intuitive recall system, automation to timecode, flying faders and sample rates up to 96kHz. As before, the hardware provides the processing power and audio I/O, and near-zero latency continues to ensure that there is no loss of lip-sync.

www.cedar-audio.com
info@cedar-audio.com

RECEIVERS

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Email: sales@DaytonIndustrial.com WebSite: www.DaytonIndustrial.com

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RDS decoder

Via Radio

RD10: The RD10 RDS decoder is available in both serial and USB versions and can be used for basic RDS monitoring. The RD10 features both RF and MPX inputs, is small and will work with 3V to 12V, so it can go virtually anywhere. The serial version can additionally be used to prevent translator hijacking. A set of dry relay contacts can be programmed to mute a translator if the source signal is not carrying the correct RDS PI code for a configurable amount of time.

321-242-0001; viaradio.com; info@viaradio.com



Radio console family

Arrakis

ARC-10: The ARC-10 series of radio consoles are general purpose consoles that meet the needs for most on-air radio and radio production studio applications. Channels One and Two are high-performance mic channels for on-air talent with a guest. Channel 10 is an advanced telephone interface to an external hybrid for live callers or an off-line contest call. Seven stereo line input channels easily handle the other audio sources, such as CD players, found in most studios. Channel nine can even be optionally configured with a Windows PC USB interface for use with live on-air, automation and production software. With LED-lighted switches, long life faders and electronic switching of all audio signal paths, the ARC-10 is a rugged, reliable and versatile console for professional Radio studio applications.

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



Single-phase UPS

Staco Energy Products



Unistar P: This single-phase online uninterruptible power supply features protection over a wide input voltage range. This true double-conversion UPS is available in 6, 8 and 10kVac models, to protect from outages and irregularities in incoming line voltages from 160 to 280Vac at 45-65Hz. Up to four Unistar P modules can be installed in parallel for redundancy or additional capacity. A constant, clean, steady sine wave protects downstream equipment even without going to battery mode. Each Unistar P features high-overload handling, without transfer to the bypass, and protection against short circuit and over-temperature conditions.

937-253-1191

www.stacoenergy.com
sales@stacoenergy.com

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800-300-0733

www.mooretronix.com
rrmoorejr@aol.com

Exporter

Harris



HDE-200: The Harris HDE-200 exporter supports the delivery of multiple HD Radio program streams over a single, dedicated IP connection. The development of the new exporter is driven by the need to fortify the E2X (exporter-to-exciter) protocol in the HD Radio transmission chain while minimizing implementation costs for the radio station. The Harris Pacific Design Center has embedded new software code from Ibtiquity Digital into a fully functional hardware component with no moving parts, which enables increased reliability. At only 1RU, the HDE-200 offers a drastically reduced footprint with more features and options than its predecessor. The exporter supports TCP over IP transport of the E2X protocol, as well as HD Protocol (HDP). The HDE-200 exporter also includes remote and front-panel metering and monitoring features and an internal GPS module, as well as options for profanity delay, diversity delay and an Arbitron People Meter.

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

Transmitter reseller

Transcom Corp

Pre-owned transmitters: This company provides used AM and FM transmitters and is a manufacturer representative for new antenna, cable, STL equipment and audio equipment.

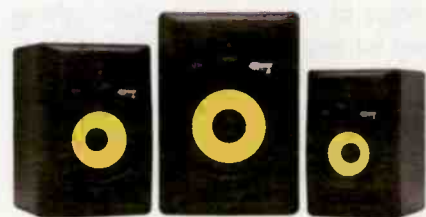
800-441-8454; www.trcorp.com
transcom@amfmtv.com

Router control software

Axia Audio

Pathfinder Pro: An enterprise-class version of Axia's popular Pathfinder PC software, Pathfinder Pro retains all the graphical features and route-building tools users have praised, while adding powerful virtual mixer control, serial data routing, and built-in server clustering capabilities designed specifically for mission-critical, 24/7 broadcast operations. Pathfinder Pro lets broadcasters easily create sophisticated audio routing applications—from simple point-to-point routes to complex, multi-point scene changes that can reconfigure an entire facility at the click of a mouse, automatically at specified times, or in response to pre-programmed events. Upon installation, it automatically scans the network, gathering information about audio sources and destinations. Administrators can then point and click to send audio from one place to another, creating single route points, or Snapshots that change multiple routes, all lockable to prevent inadvertent changes.

216-241-7225; www.axiaaudio.com; inquiry@axiaaudio.com



Monitor series

KRK Systems

Rokit Generation 2: The second generation Rokit incorporates several technologies from the VXT and E8B

lines, including radically radi-used edges along the front of the cabinet. The new Rokits replace the current Rokit 5", 6" and 8" models. The Rokit G2's curved front baffle was engineered to minimize diffraction of high-frequencies, resulting in a sweet spot that is significantly larger than products with square or lightly rounded baffles. The baffle also houses a molded front-facing bass port that minimizes low-frequency phase distortion and unwanted frequency emphasis typical of rear-facing bass ports. The end result is a harmonious yet accurate blend of low and high-frequency components that result in a more accurate speaker. Additionally, the Rokit G2's voicing has been slightly enhanced to provide even better mix clarity and precision.

954-316-1580; krksys.com; orders@krksys.com

SMALL(ER) WONDER



The new AudioScience AS18921 tuner adapter packs 8 radio tuners into a single 6.6" PCI card. That's half the space (and half the power) of older analog tuner cards. Keep tabs on up to 8 AM or FM channels simultaneously, including RDS/RDBS info, all from a single antenna input. Monitor or record in PCM and MPEG-1 layer2 and MPEG-1 Layer 3 (MP3). Eight not enough? Install up to 8 cards in one system. Windows XP/Vista and Linux drivers available. To find out more about our small wonder, call +1-302-324-5333 or go to www.audioscience.com.

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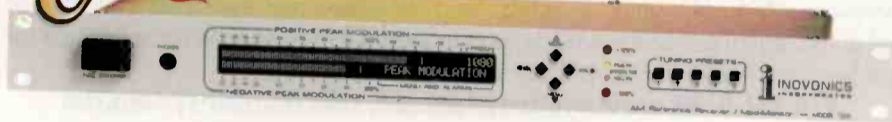
NAGRA

2008 PRODUCT SOURCE

AM reference receiver and modulation monitor

Inovonics

Model 525: The 525 is a frequency-agile, wideband AM-broadcast receiver that utilizes a highly linear phase-locked detector to provide off-air measurements of AM carrier modulation. An important feature is the ability to resolve the amplitude-modulation component of the station's carrier during IBOC hybrid digital broadcast operation. Positive and negative carrier modulation is shown simultaneously on a high-resolution LCD display, which can be switched to provide a read-out of received signal strength and asynchronous noise. Measurement response is flat to 10kHz. This allows the user to preview the sonic compromises imposed by pre-transmission audio filtering and to simulate the response of consumer radios.



800-733-0552; www.inovon.com; info@inovon.com

Professional FM radio products

International Datacasting

Expanded Profile: The latest developments in the family of professional radio network products from Profile including IP-controlled FM radio demodulators, stereo encoders and RDS encoders, as well as solutions for CATV radio distribution and FM emergency warning systems. The updated family of satellite products includes a new DVB-S compliant receiver for ETI distribution in DAB/DAB+/DMB networks, MPEG4HE-AAC Audio satellite receivers and 7/15 channel MPEG4HE-AAC audio encoder and multiplexer rack system.

613-596-4120; www.datacast.com

Master clock time code generator

ESE

ES-160U: This crystal-based master clock/time code generator employs a temperature compensated crystal oscillator (TCXO), which provides the ES-160U with an accuracy of one second per month. Six 0.56" yellow LEDs display real-time while the unit simultaneously generates several types of time code. The ES-160U features ESE, SMPTE/EBU and ASCII time code outputs; one PPS (pulse-per-second) output; 12- or 24-hour display; automatic Daylight Saving Time correction; battery backup; external time sync input; and a 1RU enclosure.

310-322-2136; www.es-web.com; ESE@ese-web.com

Integration

[in-ti-grey'-shuhn] - noun

1. an act or instance of combining into an integral whole.

It should have been our middle name,
but it wouldn't tell the whole story.

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Fax: 814-239-8402

www.LightnerElectronics.com



Stereo Profanity Delay

Sonifex

RB-PD2: The Redbox RB-PD2 is a stereo audio profanity delay used for live broadcast programs to prevent unwanted or obscene material from being transmitted. It features both analog and digital I/O and an automatic audio stretch algorithm that allows between two and 55 seconds of delay to be built up live on-air while maintaining the correct pitch. When the program is complete, the audio stretch algorithm seamlessly reduces the delay to zero. The delay can also be acquired while playing a preselected audio file on a Compact Flash memory card, and because playback from a Compact Flash card can be triggered remotely, the RB-PD2 can also be used at

207-773-2424; www.independentaudio.com; info@independentaudio.com



LED medium intensity dual lighting system

Unimar

UNI-E: The Unimar LED-based Medium Intensity Dual Lighting System is designed to provide aviation obstruction lighting for structures up to 500' in height. This complete LED system is the only ETL certified system which exceeds FAA specifications. Use of

the UNI-E system provides 24 hours of aviation obstruction lighting protection and eliminates the need for costly painting of the structure. This high-tech alternative to Xenon strobe and incandescent products will dramatically reduce operating and maintenance costs. UNI-E features a rugged and high-quality design of a totally solid state system.

800-739-9169; www.unimar.com; unimar@unimar.com

Wireless module

Tieline Technology



3G: Tieline codecs use fit-for-purpose 3G wireless modules that utilize QoS Performance Engine technology to withstand significant packet loss over IP and 3GIP connections. Sporting features such as Forward Error Correction (FEC) and automated jitter buffering, the codecs deliver continuous high quality audio over wireless networks with low delay. Tieline's 3G software automatically configures a codec for any of 188 networks currently supported in 55 countries and all codecs are SIP compatible. Tieline's loss-tolerant Music Plus algorithm provides up to 20kHz stereo audio quality over 3G networks with only 20ms coding delay.

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

Digital logging software

OMT Technologies

Imedialogger v3: Imedialogger v3 includes a number of client-driven features in addition to enhancements made to further improve overall usability and performance. Some of the key features of Imedialogger v3 are: The ability to pause recordings while mic skimming; adjustable delay feature for skimming off air in a digital air chain; a user pre-set maximum for record durations when starting on closure and ending on time; cart chunk metadata encoding of recorded files for universal compatibility with external audio sources; ID3 metadata tagging of recorded files for consumer applications; the ability to export an XML file with recordings.

888-665-0501; www.omt.net; omt@omt.net

Stereo mic preamp

Applied Research & Technology

Voice Channel: Built to provide the idea all-in-one input for analog or digital recording, the ART Voice Channel is a true second-generation discrete Class-A microphone preamp capable of providing clean, quiet gain while maintaining transparency. An integrated, fully variable powerful dynamics processor subtly controls transients and noise of the most demanding sources while the Voice Channel's semi-parametric EQ offers wide tune-ability. The EQ can be patched before or after the dynamics processor while separate insertion jacks allow quiet in-line connectivity to external signal processing gear immediately after the mic preamp, before the EQ and dynamics processor in the signal path.

585-436-2720; www.artproaudio.com



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Coaxial Dynamics

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Fax: 440-243-1101 web: www.coaxial.com

Remote control system Davicom/Comlab Telecommunications



Micro MAC: Micro MAC is designed to handle the remote-control and monitoring needs of small repeater or booster sites. I/O capability includes eight metering, eight status and eight relays, and communications is achieved over dial-up or IP networks. The Micro MAC operates with the same Graphical User Interface as other MAC products, so personnel can easily control all sites, from the smallest to the largest, with a unit from the Davicom MAC family. The Micro MAC is just as intelligent as other MAC units with extensive condition-driven and event-driven programming capabilities. It boasts the industry's widest choice of communication means, including: voice/DTMF, PC, fax, e-mail, pager, text messaging, SNMP and Web browser. It also allows easy access via a Blackberry or smart phones.

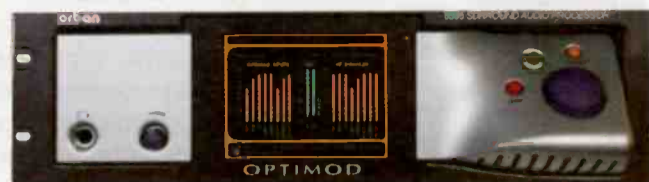
418-682-3380; www.davicom.com; info@davicom.com

Digital surround audio processor Orban

Optimod8585:

Starting with the technology of Orban's Optimod 6300 two-channel processor for digital transmission media, the 8585 incorporates multichannel processing that reflects the latest psychoacoustic research into loudness perception. The 8585 features Optimod-quality two- and five-band audio processing for surround sound broadcasting, netcasting and mastering. Thanks to versatile compression ratio controls and a mastering-quality look-ahead peak limiter, the 8585 is ideal for mastering audio in broadcast productions. The 8585 is built on Orban's flagship hardware platform. This features a GUI displayed on a quarter-VGA active matrix color LCD, making it easy to do all setup and adjustment from the 8585's front panel. A new third-generation CBS Loudness Controller helps retain audiences by controlling both subjective loudness and annoyance. The multichannel and 2.0 processors can operate with separate audio processing parameters like release times.

480-403-8300; www.orban.com; sales@orban.com



Audio analyzer Sencore Electronics

SP495 Sound Pro-EX: The SP495 Sound Pro-Extreme is an update to the SP495 Sound Pro. Improvements include a 1/30 octave FFT analyzer, doubling the ETG resolution, an early decay time (EDT) measurement, noise criterion curves overlay on the RTA, improved speech intelligibility STIPA with memory to store test results, improved multi-band decay test performance with memory to store test results, the addition of noise criteria computation per-band, 140V and 200V computation to the impedance meter and LEQ measurements to the TDA. New functions include the auto home theater (Auto HT), auto time delay, macro, card memory logger, and clear memories/macro functions.

800-SENCORE; www.sencore.com; sales@sencore.com

Broadcast supplier Bay Country Broadcast Equipment



Equipment Dealer: This broadcast equipment dealer offers a 15-day return guarantee. In its fifth year of business, the company offers new and used equipment and also rents test equipment. The company's website includes a list of recent used equipment offerings as well.

877-722-1031
www.baycountry.com
info@baycountry.com

Computer recording system Yamaha

Audiogram 3, 6: Packaged as complete computer music solutions, the Audiogram Series bundle together a hardware interface with audio inputs and outputs, software for recording and producing music, and a USB cable for connection to a computer. Recording music from instruments, microphones, CD players or MP3 players is as easy as installing the included music-production application, Cubase AI, on your computer and connecting the audio interface using the USB cable provided. The Audiogram 6 features two XLR combo inputs with preamps and one-knob compression for dialing in the desired sound from microphones and instruments. One of these inputs has switchable phantom power for using high-quality condenser microphones. Two stereo inputs, stereo and headphone outputs, and a USB jack complete the unit's connections. The Audiogram 6 includes separate controls for audio inputs and computer playback for complete control while recording. With a focus on simplicity, the Audiogram 3 features one phantom powered combo input switchable for microphones or instrument recording, a stereo input, a stereo and headphone output as well as a USB jack for connection to the computer.

714-522-9000; www.yamaha.com/proaudio; infostation@yamaha.com



Broadcast codec Telos Systems

Zephyr Iport MPEG Gateway: Using the Livewire protocol for networked audio over Ethernet, this codec connects directly to an Axia IP-audio network. A single CAT6 cable carries eight channels of stereo I/O and remote control. The Iport connects eight channels of stereo audio between two Livewire-equipped sites over an IP link. The Iport can also be used for any application where MPEG encoding and/or decoding are needed for transmission over IP channels. Applications include studio-to-transmitter links, satellite uplinks, Internet streaming, broadcasting to mobile phones and audio distribution systems.

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



Broadcast supplies Full Compass

Equipment Dealer: Since 1977, Full Compass Systems has supported individuals and industries with products and services to fulfill their audio, video and lighting requirements. It offers complete sales, design, repair and rental services. The company represents and sells more than 600 lines of equipment for sound reinforcement, audio/video, recording, acoustical treatment, special effects lighting and video security. Design and installation capabilities range from simple paging and background music systems to applications requiring acoustical analysis and computer-assisted design and simulation. Clients include religious, commercial, musical, theatrical, institutional, governmental and residential users.

800-356-5844; www.fullcompass.com; pricing@fullcompass.com



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Customer Service	860-507-2025, Ext. 70782	Customer Service	1-800-787-3532, Ext. 70782
Product Application	860-507-2025, Ext. 72058	Product Application	1-800-787-3532, Ext. 72058

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www.viaRadio.com
info@viaRadio.com

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2008 PRODUCT SOURCE

Multi-stream networked audio processor

Omnia Audio

Omnia.8X: With algorithms modeled after the Omnia.3net, this processor provides eight discrete three-band stereo audio processors in a single, networked box. Its architecture works ahead of any bit-reduced audio coder to reduce artifacts and improve the sound audio destined for HD Radio, Internet and satellite broadcasting. Use it to process headphone feeds where off-air monitoring is not possible; as multi-band level control for remote codecs or on-air telephone systems; to process and send multiple audio streams from a single studio complex to multiple transmitter sites; or on-demand for in-studio musical performances or commercial production applications. The processor uses the Livewire standard over Ethernet.

216-241-3343; www.omniaaudio.com; info@omniaaudio.com



Remote control

Circuitwerkes

Scion-8: This dial-up, site controller features balanced

audio pass through and eight channels of metering, status and control. It provides five alarms per channel (24 max). Basic eight functions are ready to use right out of the box. Enhancement options are available for greater capabilities but aren't required for initial installation. Cell phone audio interface lets you use the remote control with any auto-answer wireless phone. Six channels of momentary relays and two channels can be momentary or latching. Pre-programmed for English and is easily re-recorded.

352-335-6555; www.circuitwerkes.com
info@circuitwerkes.com

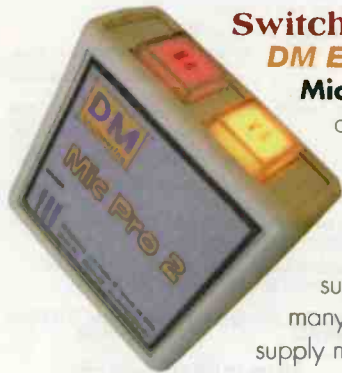


Switching module

DM Engineering

Mic Pro 2: This lighted silent-switching module will upgrade a low cost production mixing board to have the microphone switching features of a professional broadcast console. The on/off buttons enable and disable the mic channel. Microphone channels can now be individually controlled by their own module. The unit is powered by a dc power supply module, the Studio Slave Relay Pack or Superelay. As many as five switching modules can be powered by one power supply module. The unit requires 9-12 Vdc at 45mA input power.

800-249-0487; www.dengineering.com
info@dengineering.com



Personal RF safety monitor

LBA Technology

Safe One: Safe One personal RF safety monitors are an effective and economical means to monitor the strength of electromagnetic fields from mobile phone towers, microwave ovens, radio and television installations, high frequency welders, and other common workplace RF sources between 10 and 10,000MHz. The Personal RF Monitor is essential RF safety equipment in complying with FCC, OSHA and other safe workplace requirements. Safe One personal RF safety monitors give you audio and visual warning when the IEEE and ICNIRP limit is exceeded on your body. It immediately alerts you to high frequency radiation fields that could be a health hazard. Safe One gives an approximate value of RF strength to help you determine how long you can stay in the radiation field.

800-522-4464; www.lbagroup.com
lbagr@lbagroup.com

Dark fiber location service

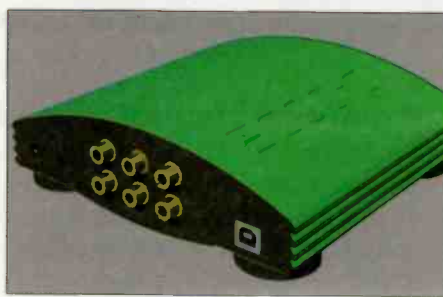
IGI Group

Fibershot: Several months ago, IGI consulting announced a joint venture with Amesbury Consulting to provide a new Dark Fiber Location Service in any city in the U.S. Based on customer feedback, this partnership has developed a new service to meet the demands of its customers called Fibershot. Fibershot is a service that provides for a one-time fee with three views or levels of fiber optic maps – site view, street view, metro view. Fibershot features a powerful new fiber optic network planning tool, GPS map info database of 100-plus carriers in 120-plus metro markets, quick turnaround, is scalable and cost effective. The main purpose of the primary databases that Fibershot draws from is to lease dark and dim fiber to carriers and the enterprise. This ensures that this database is maintained, current and accurate.

800.323.1088; www.igigroup.com

Multi-channel Pro Logic II decoder

Holophone



D-code: Designed for desktop use, the D-code takes the two audio channels, which are encoded using the H4's or Porta-Mic 5.1's encoder from the camera's recording medium or other two channel source, and decodes into six discrete audio channels. The recording device is connected to the D-code through two RCA inputs on the front of the device

for an easy transfer from the camera to the computer. Decoded audio is delivered via six RCA analog outputs or Multi-Channel USB directly to the user's computer. The six discrete audio files can then be edited in any professional editing program such as Apple's Final Cut Pro, Sony Vegas or Adobe Premiere.

416-362-7790; www.holophone.com; info@holophone.com

Downloadable Web sound effects

Blastwave FX

Micro-Waves: Webtones is a multimedia sound effects library consisting of 1,000 fresh and unique buttons, clicks, rollovers and other imaging elements specific to multimedia applications. This collection will provide you with the tools you need to add sonic life to your virtual creations.

www.blastwavefx.com; info@blastwavefx.com



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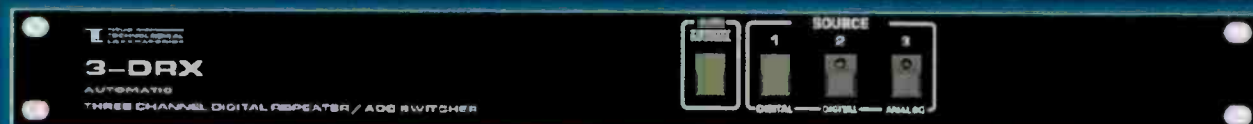
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Turnkey systems

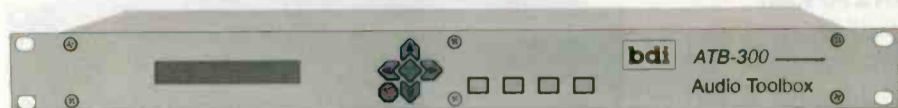
Lightner Electronics

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 easy 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

www.lightnerelectronics.com
info@lightnerelectronics.com

Audio toolbox Broadcast Devices



ATB-300: Designed to cure audio problems automatically, the ATB-300 occupies 1RU and offers front-panel programmable functions. Audio feeds that are unbalanced, over/under driven, phase flipped, channel reversed or in an incorrect mode can be fixed with the touch of a few buttons. The ATB-300 accepts analog and digital inputs to manipulate audio in the analog or digital domain quickly without the need to go off to the console first. It allows switching between any two channels, mixing two or more channels together, turning channels on and off to create a mixer on the fly and switches to programmed sequence of channels upon failure of active channel with look back.

914-737-5032; www.broadcast-devices.com; sales@broadcast-devices.com

H-field antenna Chris Scott & Associates

LP-3: The LP-3 series standard H-field antenna is specifically designed for emission measurement of AM broadcast stations using a spectrum analyzer or other calibrated receiver. The electrostatically shielded loop provides unmatched E-field rejection, greatly reducing electrical noise pickup normally associated with practical measurement environments. The bi-directional null pattern allows greater than 25dB reduction in interference from other carriers as well as attribution of subject emissions. Optimal broadband design permits accurate bandwidth and harmonic measurement.



270-781-5301; www.scott-inc.com; cscott@scott-inc.com

Remote control Sine Systems

Hawk Remote: The Hawk Remote Control takes the Plus Sine to the next level; by upgrading, users can manage multiple sites from a single control point. Channels can be switched on the satellite receiver, the frequency changed on the exciter and audio channels routed. The Hawk Remote also allows monitoring of EAS systems, sending of selected incoming EAS messages as text messages, e-mails or pages, logging of EAS data, displaying EAS messages on message boards, and controlling as many as 10 Sine Systems RFC units. The Hawk Remote was designed by broadcast engineers more than 15 years ago to meet the ever-changing requirements of the broadcast industry. The PC-based approach of The Hawk Remote allows for endless possibilities. Besides being able to remotely monitor and control a facility, The Hawk Remote is an engineer in a box.

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

Customizable online tool Radiofrequency Safety International

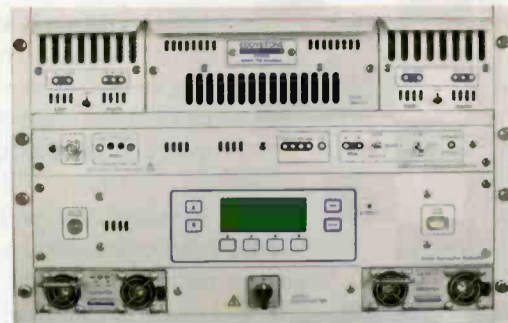
RF Safety Plan: OSHA cites tower climbing with the highest death rate per capita for any occupation in the country. Due to high customer demand, and the ever present need for a complete RF safety program, RSI has developed and is introducing to clients, an answer to this need. The new online RF Safety Plan is a customizable solution that helps organizations achieve OSHA compliance by formulating a company specific RF Safety plan which can be saved or printed for organizational use. This plan will act as the base of an RF safety program. OSHA requires a comprehensive RF program, to include training, and this easy-to-formulate, customized document will provide you with the requirements necessary to achieve the complete program! Once information is inputted, the plan will tell exactly what is needed to achieve a successful RF safety program.

888-830-5648; www.rfcomply.com
info@rfcomply.com

500W FM Transmitter Eddystone Broadcast

S79005: The new S7900 series of FM amplifiers provides the same Eddystone modularity in a more compact package. With the E2021 300W hot-pluggable power amplifier modules, removal of amplifiers can be carried out with minimal reduction in output power and it retains complete compatibility with its predecessor, the S7600 series amplifiers. The design also features single or dual redundant highly efficient hot-pluggable switched mode power supplies. Both PA and SMPSU modules are common to the entire 7900 and 7600 series from 500W to 20kW, resulting in greatly reduced spares holding costs for networks and groups.

+44 1789 768878; www.eddystone-broadcast.com
sales@eddystone-broadcast.com



Eco-friendly acoustic studio foam Auralex Acoustics



Studio Foam: Studio Foam brand products now include soy components, reducing petroleum-based chemical usage by up to 60 percent and lessening dependence on fossil fuels, including foreign crude oil.

This greener formula helps reduce global warming emissions. Studio Foam is manufactured without harmful Chlorofluorocarbons (CFC's), which have been implicated in the depletion of the ozone layer. In making the conversion over to the new Soy-based hybrid formula, these products now boast an improved performance and durability over conventional petroleum-based foams.

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

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2008 PRODUCT SOURCE

USB broadcast console Henry Engineering

Six Mix: Six Mix is a 10-input, 6-channel broadcast console that's about the size of a laptop computer. The most important feature is its integral USB digital audio interface. Connect a USB cable to any PC or laptop, and it's ready to record, edit and play digital audio. This makes Six Mix ideal for use with radio automation, digital production, news editing, webcasting, or as a self-contained emergency studio. Other features include a cue bus with cue speaker, monitor system with mic-on muting, a mix-minus output, and guest headphone facilities with full talkback.



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

FM modulation monitor

Day Sequerra

M2A-FM:

The M2A-FM provides full off-air and direct monitoring capabilities for analog FM, including demodulated audio level, carrier modulation level, pilot and SCA injection level, incidental AM noise and RBDS decoding and display. The unit includes programmable opto-isolated alarms for audio peak, audio program, carrier loss and RBDS data loss. The M2A-FM includes adjustable channel spacing, de-emphasis and operating voltage selection for worldwide operation. It can be equipped with an optional Ethernet remote control package including Day Sequerra's Remote Dashboard, a proprietary PC-based application that includes monitoring, logging, alarms via e-mail and scanning of up to 100 preset stations.

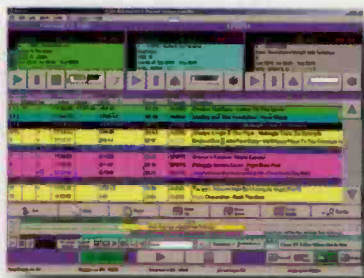


856-719-9900; www.daysequerra.com; info@daysequerra.com

Broadcast Software

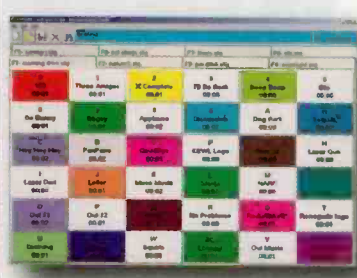
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www.bsiusa.com

Radio Automation



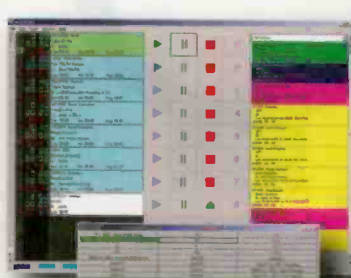
Simian - radio automation and digital play out system

Instant Audio



Stinger - instant access to 288 'rapid fire' audio files

Digital Cart Player



WaveCart - the original on-screen cart machine

Audio Logging



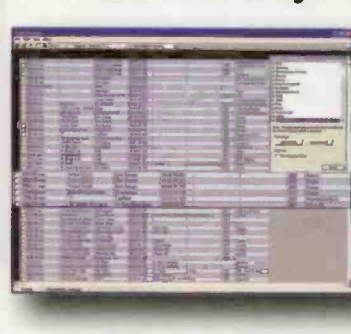
SkimmerPlus - professional audio logging and skimming

Full PC Systems



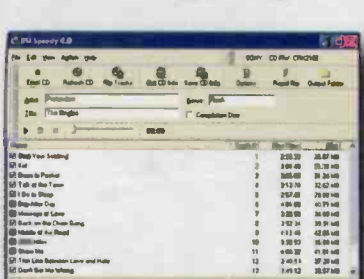
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MusicStore - thousands of ready to play (tagged) songs

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Remote Control



Trigger & Relay Devices - for GPI/O & remote control

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Fax: 541-338-8656
www.bsiusa.com sales@bsiusa.com



Studio furniture Omnirax



Custom Furniture: Omnirax can provide prefabricated, modular, semi-custom and custom furniture designs for any project. The company aims to blend ergonomics, style, function and solid construction. Equipment racks, rack modules and roll-around stands are also available. The company recently completed its first large-scale design for Clear Channel New York. This five-station, 30-studio project included Corian solid-surface countertops that can accommodate a host and up to six guests. Shown above is the WKTU air studio.

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

Digital stereo monitor/ analyzer Belar Electronics Lab



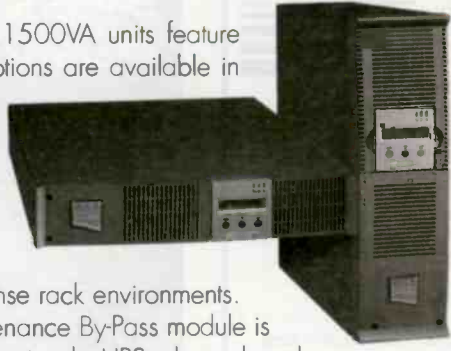
FMHD-1: This unit features RJ-45 10/100BaseT Ethernet and RS-232 computer interfaces. When used with the Wizard for Windows software, the analyzer can be viewed remotely with various PC graphing and logging functions. The unit also provides four user-assignable relay closures to indicate alarm conditions. The monitor provides two filtered analog composite outputs for driving wideband analog FM monitors. Besides an antenna input for monitoring off the air, the monitor features two RF inputs for transmitter site operation. The dual RF inputs allow for monitoring at installations using two transmitters to generate the combined analog HD Radio signal. The monitor decodes the HD Radio signal and analog FM signal simultaneously displaying HD Radio status, data, time alignment and configuration information, as well as audio metering and RF/audio spectrums.

610-687-5550; www.belar.com
sales@belar.com

UPS family APC/MGE UPS Systems

Pulsar: The Pulsar 700, 1000, and 1500VA units feature multiple-form factors. Tower and rack options are available in various sizes to accommodate a variety of networking and telecommunication enclosures. All Pulsar models accommodate a multi-position power distribution unit (FlexPDU) that saves space by adding receptacles to the back, side or top of the UPS – freeing up space in dense rack environments. In addition, a universal HotSwap Maintenance By-Pass module is designed to assure power continuity by allowing the UPS to be replaced without interrupting the power supply. During a power outage, the Pulsar can protect connected equipment for up to five hours with optional external battery modules. For increased continuity, the Pulsar's internal battery can be hot-swapped from the front panel while the UPS remains in the rack. In addition, the Pulsar features a wide input voltage tolerance that allows the UPS to accept wide voltage fluctuations. This feature minimizes the frequent transfer to batteries – thus saving battery life. To maximize backup time for critical devices connected to the UPS, Powershare technology enables users to remotely reboot systems and gracefully turn off less critical equipment.

800-788-2208; www.mgeups.com
info@mgeups.com



Microphone Neumann

TLM 67: Like the U 67, the TLM 67 incorporates the K 67 capsule. In addition, the special new circuit design closely reproduces the sound characteristics of the classic U 67, without the use of tubes. The TLM 67 is extremely versatile. Its three switchable directional characteristics (omnidirectional, cardioid and figure-8), selectable 10dB pre-attenuation, and high-pass filter permit detailed adjustments to be made depending upon the specific recording situation. The TLM 67 introduces a novel Neumann dual-color design. The pearl-gray of the microphone body combined with the classic 'Neumann nickel' lends the microphone a touch of distinctive individuality.

860-434-5220; www.neumannusa.com
neumlit@neumannusa.com



Traversal server Comrex

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7+HD	2005	Harris Z16HDC IBOC, solid state
7+HD	2005	Harris Z16HDC IBOC, solid state
10 KW	2001	CCA 10,1000G, single phase
10 KW	1986	Continental 816R-1A
10 KW	2001	Henry 10,000D-95
14+5 KW	2005	BE Fm1405 (IBOC) HD, solid state
25 KW	1989	Continental 816R-3B
30 KW	1988	BE FM30A
35 KW	1986	BE FM35A
50 KW	1982	Harris Combiner w/auto exciter-transmitter switcher

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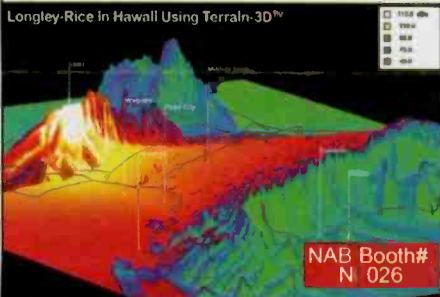
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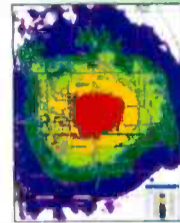
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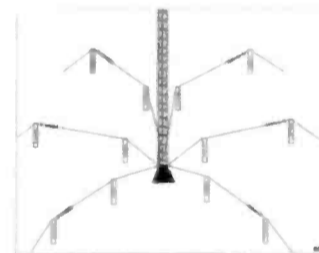


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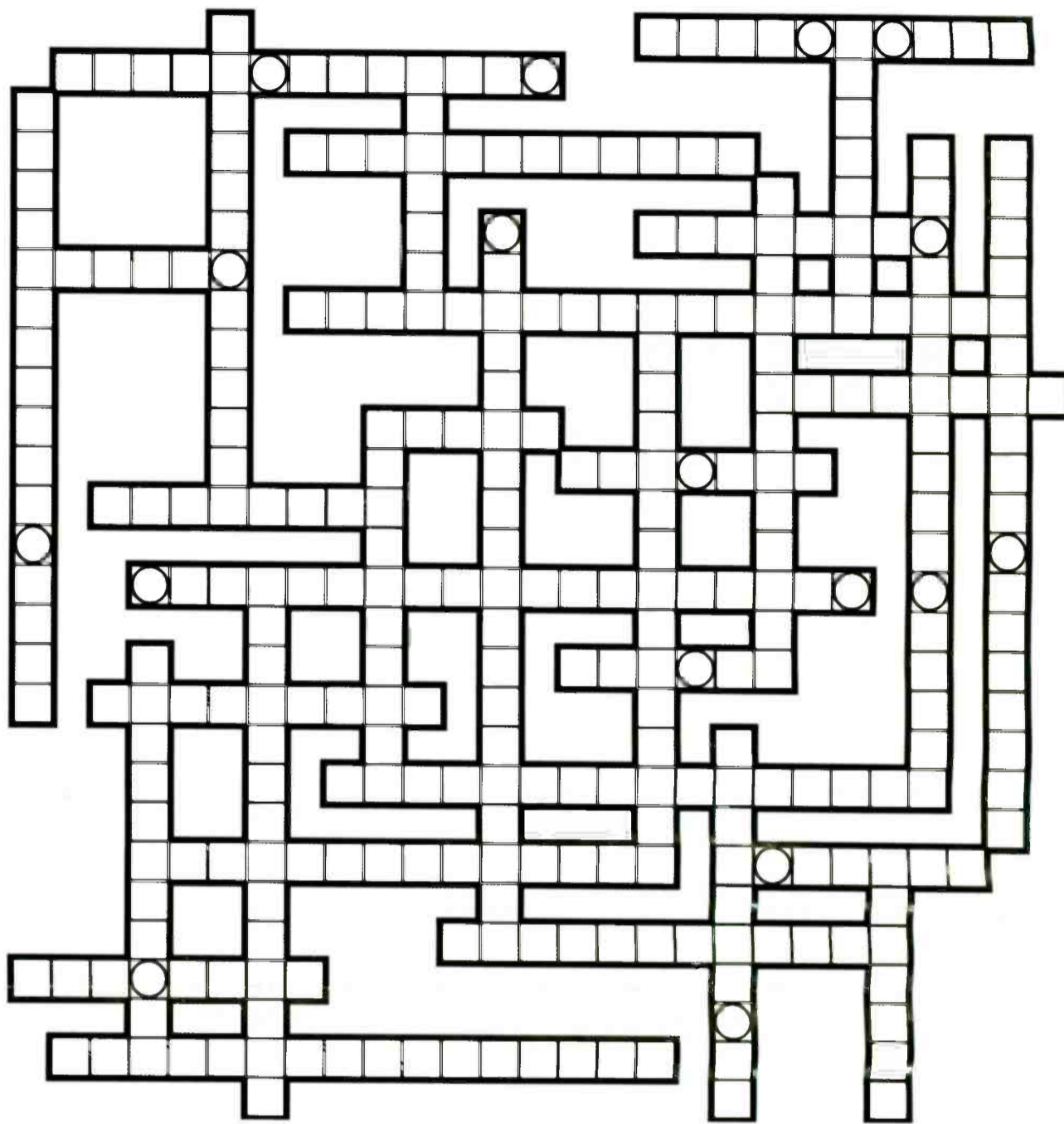
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2008 PRODUCT SOURCE PUZZLE PAGE

Take a break, have some fun and maybe even win a prize!

Everyone needs a break from the everyday routine, so why not flex your techno-speak word skills and try your hand at our puzzle. Submit your final answer by e-mail, mail or in person at the NAB Radio Show and you could be one of two winners to receive a pack of 10 Wireworks WireLUX mic cables. These are perfect for your remote kit, performance studio or maybe even your air studio.

At the 2008 NAB Radio Show, drop your business card with the unscrambled name in the entry box in the Radio magazine booth (424), then come to the ART Awards reception at Sullivan's Steakhouse on the evening of Sept. 18 to see if you won.



5-letter word

Codec

6-letter words

Analog
Exgine

7-letter words

Bit rate
Digital
Encoder
Latency

8-letter words

Baseband
Exporter
Importer
Injector
Isolator

9-letter word

Multipath

10-letter words

Circulator
Host signal
Telematics

11-letter word

Multistream

12-letter words

Interleaving
Multicasting

13-letter words

Block encoding
Lower sideband
Transfer frame

14-letter words

logical channel
Space combining

15-letter word

Spectral mapping

16-letter words

Complex conjugate
Primary sidebands
Protected contour

17-letter word

Tertiary sidebands

18-letter word

Interleaved antenna

19-letter words

Amplitude modulation
Frequency modulation
Reference subcarrier

How to play: Place the words from the word list in the correct location on the grid. Once completed, unscramble the letters in the circled squares on the grid to reveal the name of a famous early 20th Century radio technology inventor. Then submit your entry by Sept. 18 for a chance to win.

ANSWER



Radio magazine Tech Terms SWEEPSTAKES RULES - NO PURCHASE NECESSARY. A PURCHASE DOES NOT IMPROVE YOUR CHANCES OF WINNING.

Eligibility: Radio magazine Tech Terms ("Sweepstakes") open to legal residents of the fifty United States and the District of Columbia, who are 18 or older as of September 1, 2008. Employees of Penton Media Inc., d/b/a Radio magazine ("Sponsors"), their respective parents, subsidiaries, affiliates, advertising and promotion agencies and their family/household members (defined as parents, spouse, children, siblings, grandparents) are not eligible to enter. Void outside the fifty United States and the District of Columbia, and where prohibited, taxed, or restricted by law. All federal, state and/or local rules and regulations apply.

How to Enter: Enter by completing the word fill puzzle and unscrambling the letters from the circles to reveal the name of the radio technology inventor. Then submit that inventor's name and your name, address and phone number for one of the two prize drawings. 1) Prize drawing 1: Send entries by e-mail to radio@RadioMagOnline.com; or by mail to Radio magazine Tech Terms Sweepstakes, 9800 Metcalf, Overland Park, KS 66212. 2) Prize drawing 2: Place your entry in the sweepstakes entry box in the Radio magazine booth (booth 424, but subject to change) at the 2008 NAB Radio Show in Austin, TX.

Multiple entries are not permitted. One entrant per entry. No more than one entry per envelope can be submitted. Sponsors shall not be responsible for lost, late, mutilated, postage-due or misdirected mail. Entries that are printed by machine, mechanically reproduced, tampered with, illegible or incomplete are not eligible.

Drawing: Entries for both drawings must be received by Sept. 18, 2008 at 5 p.m. CT. One correct entry will be drawn for each prize drawing. Prize drawing 1 will be held Sept. 22. Prize drawing 2 will be held at the Radio magazine ART Awards reception at the NAB Radio Show on Sept. 18, 2008 at 6:45 p.m. CT Winner need not be present to win. The drawing will take place under the supervision of Sponsors. Participants agree to be bound by these rules and the decision of the Sponsors, whose decisions are final and binding in all matters relating to the Sweepstakes. Odds of winning depend on the total number of eligible entries received. The winner(s) will be notified by phone or e-mail on or about Sept. 23, 2008.

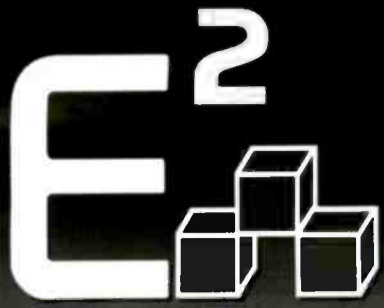
Prizes: Each drawing will award one prize. Prize is a pack of 10 Wireworks WireLUX 25-foot microphone cables. Approximate retail value of each prize: \$250. Total approximate retail value of all prizes combined: \$500. Sponsors make no warranties with regard to the prizes. Prizes are not transferable. No substitutions of prize allowed by winner, but Sponsors reserve the right to substitute a prize of equal or greater value due to prize unavailability. Prizes are not redeemable by winner for cash value.

6. Affidavit of Eligibility/Release: The winner will be required to execute an Affidavit of Eligibility, a Liability Release and where lawful, a Publicity Release within 14 days of prize notification. All taxes and unspecified expenses are solely the responsibility of the winner(s). If the winner cannot be contacted within 14 calendar days of first notification attempt, if prize or prize notification is returned as undeliverable, if winner rejects his/her prize or in the event of noncompliance with these Sweepstakes rules and requirements, such prize will be forfeited and an alternate winner will be selected from all remaining eligible entries. Upon prize forfeiture, no compensation will be given. Limit one prize per person or household.

7. Conditions: All entries and requests become the property of Penton Media Inc., d/b/a Radio magazine and will not be acknowledged or returned. Sponsors will have the right to photograph the winner. Entry constitutes permission to use the winner's name, picture, likeness and city and state of residence for purposes of trade, publicity or promotion for no additional compensation except where prohibited by law. By participating, entrants, winner(s) agree to release and hold harmless Sponsors, and their respective parent companies, subsidiaries, affiliates, advertising and promotions agencies, partners, representatives, agents, successors, assigns, employees, officers and directors, from any and all liability, for loss, harm, damage, injury, cost or expense whatsoever including without limitation, property damage, personal injury and/or death which may occur in connection with, preparation for, travel to, or participation in Sweepstakes, or possession, acceptance and/or use or misuse of prize or participation in any Sweepstakes-related activity and for any claims based on publicity rights, defamation or invasion of privacy and merchandise delivery. Sponsors are not responsible if Sweepstakes cannot take place or if prize cannot be awarded due to travel cancellations, delays or interruptions due to acts of God, acts of war, natural disasters, weather or acts of terrorism. Entrants who do not comply with these Official Rules, or attempt to interfere with this Sweepstakes in any way shall be disqualified. Sponsors reserve the right, in their sole discretion, to cancel, terminate, modify, extend or suspend this Sweepstakes should (in its sole discretion) non-authorized human intervention, fraud or other causes beyond its control corrupt or affect the administration, security, fairness or proper conduct of the Sweepstakes. In such case, Sponsors will select the winner(s) from all eligible entries received prior to and/or after (if appropriate) the action taken by Sponsors.

8. List of Winners: To obtain a list of winners, send a self-addressed, stamped envelope by [Oct. 10, 2008 to: Radio magazine Tech Terms Sweepstakes Winner, 9800 Metcalf, Overland Park, KS 66212.

9. Sponsor(s): The Sponsors of this Sweepstakes are Penton Media, Inc.; 249 West 17th Street; New York, NY 10011.



Ethernet Audio Done Right



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The Wheatstone E² (E SQUARE) gives you the convenience of Ethernet audio without all the IP hassle. It just *knows*. The built-in Setup Wizard lets you configure an entire system with just your browser and a laptop. Unplug it when you're done and there's no PC between you and system reliability.

SQUAREs are totally scalable: use one as a standalone 8x8 studio or transmitter site router, with browser access from anywhere. Plug two together and have a standalone digital snake. Add a fanfree mix engine and build yourself a studio using analog and digital I/O SQUAREs.

All the power is *in* the SQUARE. Distributed intelligence replicates all configuration data to every unit. Profanity delay and silence detection are done *in* the SQUARE. Even virtual mixing (w/automation protocol) — it's *in* there; all with real front panel meters, 32 character status indicators and SNMP capability.



88D I/O: 8 digital inputs and outputs. You can headphone monitor and meter any of the SQUARE's inputs or outputs in real time. The 32 character display gives you all the information you need about your audio and system configuration. And because you can operate in either 8-channel stereo or 16-channel mono mode, 16 channels of metering are provided.



88E DIGITAL ENGINE: Just plug an E-SERIES control surface or GLASS E computer interface into this engine and get all the mixes, mic and signal processing you need. Fanfree, so it can stay in the studio where it belongs.



88A I/O: 8 analog inputs and outputs. You can bring a new SQUARE up in seconds and of course use the front panel encoder for your X-Y control. Front panel status LEDs give you continuous link, status, and bit rate information as well as confirmation of any GPIO activation.

Because the E² system doesn't rely on a third party GUI, tech support is straightforward (and 24/7). Likewise, system operation doesn't require external PCs for continued full functionality. Best of all, 1 Gigabit protocol eliminates the latency and channel capacity restrictions associated with older technology.



88AD I/O: 4 analog plus 4 digital inputs and outputs—perfect for small studios or standalone routing.

E-SQUARE is Ethernet audio done RIGHT!



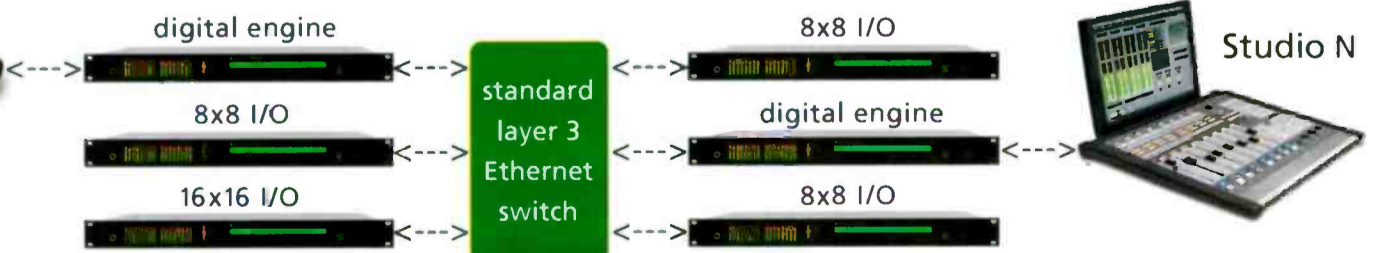
88 I/O CONNECTIONS: E² has both DB-25s for punchblock interface and RJ-45s for point-to-point interface. All SQUAREs have 12 individually configurable opto-isolated logic ports that can be either inputs or outputs.

Studio 1

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E-SERIES control surface



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