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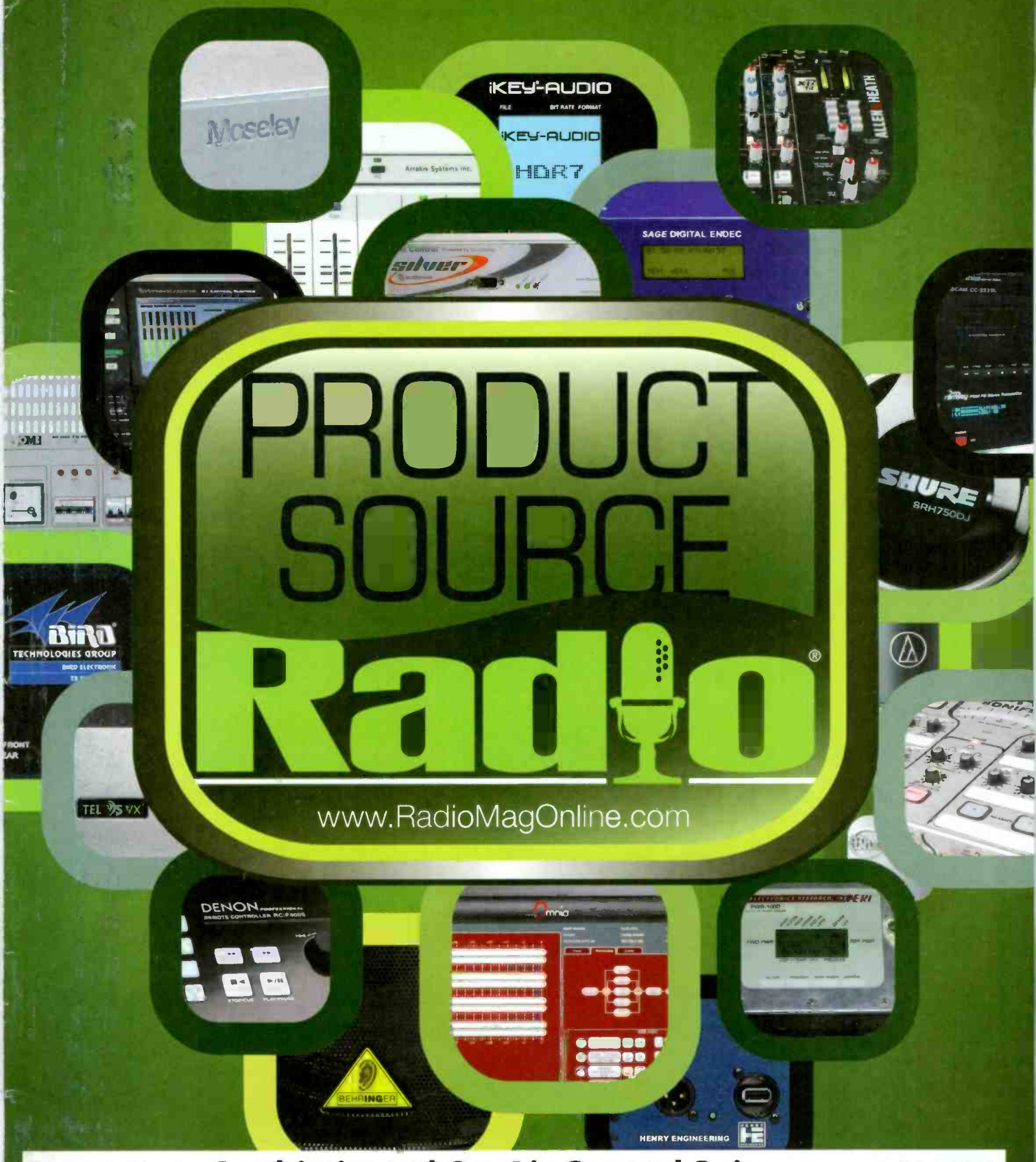

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In Chile, it was business as usual for the BIO-BIO LA Radio team. They'd been using ACCESS to cover the presidential elections as well as international broadcasts of the Libertadores Cup from Argentina, Brazil and Venezuela. Then tragedy struck in the form of a devastating earthquake. The team was there, with journalist Maria Carrasco reporting live as well as working with the police to help enable communications using a Comrex ACCESS.

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Broadcast Systems

SKYLLA AUTOMATION SYSTEM

Your automation system is 10 years old and you lay awake at night knowing it will fail any day. You dread the thought of learning a new system, of forcing your Traffic and Music departments to use a different numbering scheme, of having to re-record or re-import all your audio files to conform to a new audio format.

We spent years designing Skylla to replace older digital automation systems. Skylla can use your existing cart numbering system. Skylla can play back .wav, mp2, mp3 and APT-X audio formats. You can even customize Skylla's keyboard mapping to mimic the keystrokes you use on your current system, so users have a shorter learning curve.

Skylla's features come from our most reliable source—you. That's huge. Over the years, our Smartcaster and UDS2 customers contributed hundreds of feature and design ideas. We listened. Skylla is the result.

Skylla is our second automation system.
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Product information you need

We know you're looking for new product information, and the annual Product Source from *Radio* magazine is a great way to learn about the latest offerings. With scores of products in this year's edition, this year's Product Source is a valuable tool you can reference for months to come. Each listing offers a detailed description of the product or service and the company's contact information, and most feature a photo.

All this information is also posted at RadioMagOnline.com, and it's indexed alphabetically, so you can reference it online as well.

Many of the products featured in this year's Product Source debuted at the 2010 NAB Show. We have also included a recap of the *Radio* magazine 2010 Pick Hit award recipients that were announced at the convention and profiled in the June issue. In addition, we have included some special sections of products with a related focus.

There is one change from previous editions of the Product Source: This one is the same size as our regular issue. While the double-sized pages of previous editions set the supplement apart from our regular issue, this traditional size is easier to carry and keep on your shelf for future reference.

This supplement will be distributed at the upcoming Radio Show and the 129th AES convention. We hope to see you at one of these conventions.

Thanks for reading the 2010 Product Source.

Chriss Scherer, editor

Special Section Index

Portable Production 8
Beyond These Walls 12
Station Services 16
Reference Room 24

On-air warning lights

Sandies

Warning lights: Sandies' bright red, back-lit on black letters will keep staff informed. Dimensions are: 5"H x 10"W x 2-1/2" D. These warning lights are 110V and use two 7W bulbs. The text on the lens reads On Air. They are available in 12- and 24Vdc as well as custom text/foreign language by special order. Sandies also has a three-sided on air light that measures 5"H, 3 1/8"W, 2 3/8"D.

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

Control surface console

Wheatstone

2010 PICK HIT

E-1: The compact E-1 control surface console and associated ip88cb Console Audio Blade provide all the networked control, mixing and I/O needed for small to mid-sized studios. It features an integrated LCD monitor for metering and control, a streamlined user interface with password-protected access to the complex functions via LCD display and touchpad, and four main mix buses as well as control room and studio monitor outputs with selectable sources from the audio network. Complex mix-minus setups are made simple thanks to per-channel mix-minus outputs with selectable reference mix and talkback interrupt. Auto switching between off-line mix and online mix-minus is available per channel. The E-1 also features 99 show presets and a programmable per-channel A-B source/select switch, which emulates traditional broadcast consoles.

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

CONNECTING STUFF IS ALL ABOUT THE GOZINTAS AND COMEZOUTAS

MULTIPORT IS ALL ABOUT CONNECTING STUFF TO YOUR STUDIO

Getting all your external gear into and out of your studio is never easy. You're always looking for an adapter or cable of some kind and, even when you find it, you're then on the hunt for level or impedance matching gizmos.

MultiPort™, from Henry Enginrering, takes care of all that by facilitating interface between a studio and external audio equipment. Providing convenient access to a studio's analog and digital audio inputs and outputs, it allows connection to both professional and consumer gear. MultiPort's active circuitry performs all level, impedance, and topology conversion necessary for correct interface.

2010 PICK HIT Radio

You can put MultiPort wherever it's convenient. Mount it in your cabinetry, or use the included rack adaptors to mount it in your rack. Once you've got MultiPort, you'll wonder how you ever limped along without it!

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800-300-0733
www.mooretronix.com
rrmoorejr@aol.com

5kW transmitter

OMB America

EM 5000: This 5kW FM transmitter made up of the EM 100DIG exciter and a control unit combines the power of two 2.5kW FM amplifiers. Each AM 2500 power amp includes eight 350W high-efficiency MOSFET modules fed by two independent switching power supplies. The amplifier modules work independently. Smart temperature protection, VSWR protection and an audio automatic gain control to reduce the gain in case of excessive drive power protect the transmitter's operation. Remote control is available via analog telemetry, RS-232 and contact closures.

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

Talkshow system

Broadcast Bionics

PhoneBOX VX: Broadcast Bionics is now a software development partner for next-generation Telos phone systems. PhoneBOX VX is a scalable, SIP-based talkshow system that integrates directly with Telos VX systems to manage and integrate callers, e-mails, SMS and control of ISDN and IP codecs into a single converged system. This gives talent comprehensive control of interactive audience participation such as listener polls and competitions. It integrates with Axia networks and consoles.

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

iPhone IP audio codec application

Tieline Technology

2010 PICK HIT

Report-IT Live: This application allows reporters and announcers to send live broadcast-quality IP audio wirelessly from any remote location to a Tieline IP codec in the studio. Report-IT Live can broadcast live and record the broadcast on the iPhone at the same time, so a copy of the live report can be kept. Record an interview or report offline and then go live on the air later. Users can also report live and play grabs from any recorded interview while on the air. Audio files can be forwarded in real time to a Tieline codec in the studio for recording or uploaded via FTP to a news server with no codec required in the studio. Tieline has designed and built the Report-IT Live hardware dock (sold separately).

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

Advanced Wattchman monitor/alarm

Coaxial Dynamics

81094: The Model 81094 is the first in a series of Internet/intranet-accessible Advanced Wattchman wattmeter/alarm systems that will monitor forward and reflected power in two transmission lines with only one controller. The front-panel display shows power on both systems simultaneously. Operating conditions may also be displayed on a PC from any location on the Internet/intranet. The Model 81094 is designed to work with a series of specialized line sections from $^{7}/_{8}$" to $6^{1}/_{8}$" and standard Coaxial Dynamics elements for analog or digital applications. Elements are available from 1W to 100kW and from 2MHz to 2.3GHz.

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

Compact digital audio console

AEQ

Forum: Forum's control surface is available with 4, 8 or 12 faders. Its audio engine is an integral part of the control surface, including analog audio I/O, digital (AES-SPDIF) audio I/O, microphone inputs (mic/line + phantom selection) and MADI multi-channel connectivity. Forum is capable of routing up to 64x64 audio I/O channels (analog, digital or mic), plus 64x64 in MADI. It uses advanced DSP technologies.

800-728-0536; www.aeqbroadcast.com
sales@aeqbroadcast.com

Multiformat audio interface panel

Henry Engineering

MultiPort: MultiPort is a utility interconnect panel that facilitates interface between a studio and external audio equipment. It provides convenient access to a studio's analog and digital audio inputs and outputs with professional and consumer connections. MultiPort's active circuitry performs all level, impedance and topology conversion necessary for correct interface. It connects to any studio via its analog and digital inputs and outputs. The analog I/O interfaces to any line- or mic-level audio source and input. The digital I/O is similar, connecting to any AES/EBU signal source and console input.

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

2010 PICK HIT

Workstation

Argosy Console

Aura: With a new approach to design, materials and craftsmanship, Aura has redefined and raised the expectations for personal workstations. The original 260 or larger 520 used with multidisplay arrangements create the ultimate environment for any screen-based activity.

800-315-0878; www.argosyconsole.com
nancy@argosyconsole.com

EAS encoder/decoder

Sage Alerting

Digital Endec: The Digital Endec incorporates the latest developments in DSP and other digital techniques. It uses an Internet connection to allow remote, secure activation, system monitoring and uploading of software releases and redundancy. Its network-centric design allows logging, printouts and control and automation interface via a network or Internet connection. It now has text-to-speech capabilities and will be fully compliant with the FEMA-specified CAP 1.1 standard.

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

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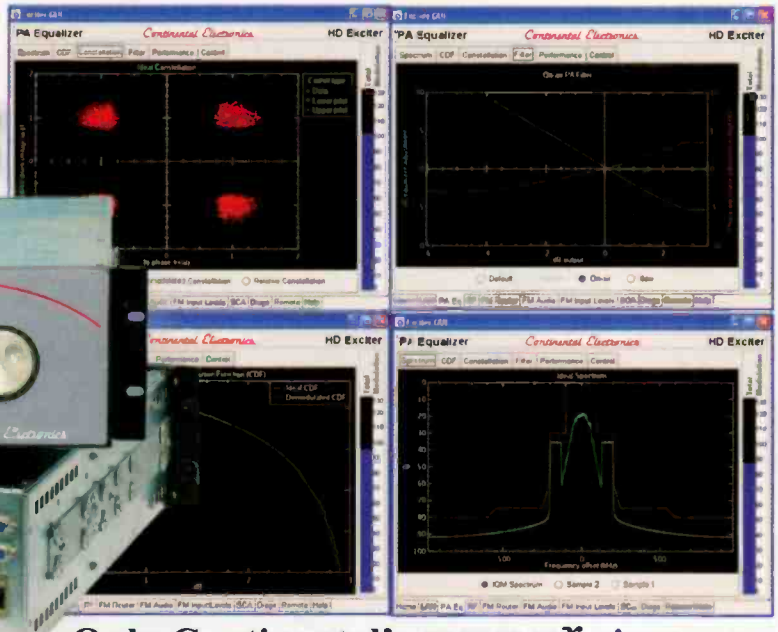

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PORTABLE PRODUCTION

Handy gadgets for production on the go

Handheld video recorder

Samson Technologies

Zoom Q3: The Q3 records stereo sound with two condenser microphones, which allow users to capture HD audio with their movies. The Q3 will record for up to two hours in true stereo and 640x480 resolution refreshed at 30 frames per second. The Q3 features a brilliant 2.4-inch 320x240 resolution LCD that displays audio level meters, a battery indicator and time elapsed. The Q3 accepts up to a 32GB SDHC card to deliver up to 16 hours of movie making capacity. Users can easily upload videos to a computer with the flexible USB cable.

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

Automation mobile application

Enco Systems

iDAD: This companion mobile application for the Enco DAD and Presenter audio automation studio systems has an initial release targeted at the iPhone and the iPad. It will feature the ability for news reporters and announcers to record, trim and tail, label and then send audio from the mobile device directly to their DAD or Presenter automation systems for timely playback. iDAD will also feature a remote control function that will allow control of the DAD or Presenter system from the mobile device using a simple array of buttons representing various user-definable functions.

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

Wireless intercom system

Anchor Audio

ProLink: ProLink is a digital wireless intercom system that transmits in a range of 250' through walls and glass and can operate up to 15 hours using three AA rechargeable or alkaline batteries. Each belt pack can communicate in push-to-talk mode, which is always receiving but only transmits when the PTT button is pushed, or "always on" mode, which provides completely hands-free communication. A four-user system consists of one master belt pack and three remote belt packs. When the team needs to work in two separate groups, the ProLink can be expanded to a seven-user system that includes two master belt packs and five remote belt packs.

310-784-2300; www.anchoraudio.com

Commentator unit

Sonifex

CM-CU21: The CM-CU21 is a portable commentator with two fully featured commentator positions and a third guest location that can alternatively be used as a line-level input. Each of the commentator positions has an individual output, with two additional outputs providing a mix of all active commentary channels. Two talkback output channels, with a built-in limiter, are available to each of the two main commentators, and they can be linked to provide simultaneous operation. Each position includes a wide input gain range and switchable phantom power. There are four transformer-balanced return audio inputs which, along with the commentator inputs, are routed to the headphone monitor controls.

+44 1933 650 700; www.sonifex.co.uk
sales@sonifex.co.uk

Portable digital field recorder

iKey-Audio

HDR7: The HDR7 is a portable digital recorder with a full-color LCD screen that can be taken anywhere. It features two high-quality condenser microphones configured in an X/Y pattern, records to an SD or SDHC card and also allows direct transfer of recorded audio via USB 2.0 to a computer or recording software for editing and mixing. The HDR7 offers the choice to record as an MP3 or AAC from 64kb/s to 320kb/s as well as a WAV or AIFF up to 96kHz/24-bit. An ac adaptor, USB cable, 1GB SD memory card and four AA batteries are included with this unit.

732-346-0061; www.ikey-audio.com; sales@gci-technologies.com

Speaker systems

Behringer

NEO Series: Power and reduced weight come together in the 1200W NEO Series speaker systems. Combined with Class-D amplifier technology and a switch-mode power supply, the NEO Series delivers top-quality sonic performance and an even greater weight-efficient design. The series offers two 12" models, the 41lb B912NEO and B812NEO, as well as the 51lb 15" B815NEO. All models feature an integrated mixer with a noise gate and 2-band EQ, two mic/line inputs (XLR and 1/4" TRS) with individual volume controls and peak LEDs. A 1.75" titanium diaphragm neodymium compression driver is provided for high-frequency reproduction.

877-672-0816; www.behringer.com; support@behringer.de

Audio processor
Omnia Audio

Omnia.11: Omnia.11 yields a redesigned firmware platform, GUI and adjustments to every algorithm in the system. It was created to provide a solution to distorted audio processing, while still delivering the loud signal required to be competitive. The Density Detector enables the system to properly handle hyper-compressed content, as it keeps Omnia.11 operating on-target. Its ultra-low IMD multiband limiter system, coupled with smart gain reduction algorithms, enables the limiters to sound transparent and natural. All AGC and limiting algorithms employ an auto-acceleration/deceleration mechanism, which tunes out perceptible inter-modulation distortion. Omnia.11 integrates a laboratory-grade stereo generator with dual MPX outputs, 19kHz reference output for external RDS/RBDS systems and >80dB pilot protection – with or without composite clipping functions activated.

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

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

All-in-one FM analog monitor
Belar

FM Solution: The FM Solution provides a complete solution for the analog portions of the FM signal. The unit combines the features and functions of an RF amplifier, FM demod, stereo demod, RDS decoder, SCA decoder and FFT spectrum analyzer. Using state-of-the-art DSP techniques, all the unit's processing takes place in the digital domain. This results in FM analog performance that was previously not possible. Features: frequency agile RF input, AM and sync AM noise measurements, variable BW digital IF filtering, FM demodulation with 100dB 75µs [microsecond] SNR, variable BW composite filtering, stereo demodulation with 100dB L/R separation, full metering of analog peak and RMS values, RDS injection/phase and full data decoding, two SCA decoders, RJ-45 Ethernet interface with remote PC software.

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

The new PCAU-SUITE T1 Codec/ Studio-to Transmitter-Link does it all - and protects against Hackers, Malicious viruses, Power outages and Uncompressed HD bit error corruption. Even automatic and instant switching to analog links if digital links fail.

All with a new hybrid IP-T1 "Best of Both Worlds" architecture to leverage studio IP with the Armored T1 PCAU-SUITE for real world resiliency, security and quality. That fact is, T1s cost less today, so you can have it all. Secure HD, FM and AM with Enhanced apt-X™ 24-bit clarity, Ethernet-over-T1, RS232 and telemetry.

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FM modulation monitor
Deva Broadcast

DB3000: The DB3000 FM Modulation Analyzer is a fully DSP-based digital FM demodulator and modulation analyzer. The RF (IF) and MPX signal is digitized as soon as it enters the device, and all signal processing is then made through calculations. This gives the equipment measurement reproducibility over time. Its processing power enables all measurements to be refreshed simultaneously and synchronously, allowing detailed readings of all the multiplex FM signal components. Read main signal parameters at a glance with high-resolution bar graph displays. A built-in oscilloscope representing the observed signal change over time enables you to visualize the most important signals participating in the process of demodulating and stereo decoding. Spectrum analysis is available on the input signal and MPX power measurement supports measurement data history.

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

Radio automation system
Wide Orbit

WO Automation for Radio 2.0: WO Automation for Radio 2.0 features Leader and Follower functionality, which allows two or more radio stations to share common programming like music but break apart for independent commercial breaks or longer segments. All stations can be run from one computer, separate computers or computers in different time zones delivering flexibility and scalability for broadcasters running multiple stations from a single location. Leader and Follower also simplifies and automates the programming of different commercials on terrestrial and Web streams so there is no need for additional costly software or services. WO Automation for Radio 2.0 also brings seamless integration with WO Traffic.

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

Low-power FM transmitters
Nautel

2010 PICK HIT

VS Series: The VS Series of low-power FM transmitters – using only 2, 3 or 4RU including the exciter – brings Nautel performance to broadcasters operating on 300, 1000 or 2500W. In addition to the products' rugged engineering, the Nautel VS Series incorporates IP audio I/O, Axia Livewire support, Shoutcast and RTP support, and Nautel's Advanced User Interface (AUI). The transmitters can be configured for analog, HD Radio or DRM operation.

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

AES/EBU digital audio DA
ATI Group

DDA-416/WC106: The Model DDA-416/WC106 is an integrated package containing four 1x4 AES/EBU digital audio distribution amplifiers and one 1x6 clock distribution amplifier. Operation of the unit is simple and straightforward, and it is housed in a rugged 2RU enclosure. All audio connections are made directly to the unit's built-in XLR and BNC connectors, and no special breakout cables are required. Signal routing is provided via rear-panel DIP switches.

856-626-3480; www.atiaudio.com
sales@atiaudio.com

Tower manufacturer/installer
Sabre Towers

Towers: Sabre designs, manufactures and installs towers to meet broadcast specifications. The company provides guyed towers in sizes ranging from a 12" face tubular lightweight tower to an 84" face solid round knock down tower. Sabre offers everything from custom FM support sections to turnkey AM installations.

800-369-6690
www.sabretowersandpoles.com
broadcastsales@sabrecom.com

Studio furniture
Graham Studios

Modulux Premium: Modulus Premium features standard solid oak trim with wider applications and on more surfaces than the Deluxe Modulux. Exotic woods are available at a modest price increase, 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 secler. 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

Headphones
Shure

SRH750DJ: The SRH750DJ professional DJ headphones deliver outstanding audio performance, comfort and durability. Custom 50mm drivers tuned to deliver high-output bass with extended highs offer maximized power handling. Comfortable, padded ear cups swivel 90 degrees and allow total control of placement on one ear when mixing. Replaceable cable and ear pads ensure a lifetime of use.

800-25-SHURE; www.shure.com; sales@shure.com

Vector Power Enhancement
Broadcast Electronics

VPE: As a way to improve transmitter efficiency and provide increased output for elevated HD Radio sideband power levels, VPE combines a crest factor reduction scheme and real-time distortion pre-correction to yield up to 7 percent greater transmitter efficiency and 30 percent higher output power. This allows BE HD Radio transmitters to achieve optimum linear performance, thereby reducing hardware cost, heat loss and overall cost of HD Radio adoption at higher injection levels. VPE also uses digital adaptive pre-distortion circuitry to pre-correct non-linear distortion in the RF transmission signal path.

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

Android app
Comrex

Access Reporter Codec: The Access Reporter Codec (ARC) is a simple utility that allows select Android-based mobile phones to make wideband audio calls to Comrex Access and Bric-Link codecs. Once installed on an approved phone, the app displays the familiar Access interface and outgoing call directory. ARC makes an IP call over the phone's 3G or Wi-Fi channel to the selected Access or Bric-Link codec in the studio using a high-quality wideband, full-duplex audio channel between the two devices. ARC is free. Access and Bric-Link customers with a Comrex-approved Android phone can download the application and connect via the phone's 3G or Wi-Fi to their Access or Bric-Link codec.

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

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RFSPA	Philadelphia	PA	Phil	888-737-4452
RFSGA	Thomasville	GA	Chris	800-476-8943
RFSGA	Murray	KY	Dave	270-767-7644

Lightning protector

L-com Global Connectivity

AL-D4W-DP: The AL-D4W-DP high-performance lightning protector provides protection of DSL and telephone lines from transients or surges. The low-capacitance diode array minimizes degradation of the DSL signal. The high-speed diode array responds to transients that are too fast for gas-tube-based protectors to catch. In addition, the design uses Thyristor diode technology. The unit will protect up to four signal pairs. For more complete protection, two units should be used, one on each end of the line. The compact weather-resistant housing features a lockable hinged cover, and breakaway holes are provided on the rear of the enclosure for mounting. The cable grommet may be adjusted to cable size and is removable.

800-341-5266; www.l-com.com; sales@L-com.com

Web-based site remote control

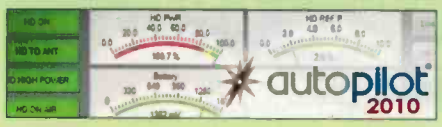
Broadcast Tools

Site Sentinel 4: The Site Sentinel 4 provides a 1/3-rack device for Web-based site remote control. Each analog (metering), status/logic, stereo silence sensor, temperature sensor (probe optional), power failure inputs, along with all relays can be controlled and/or monitored over any IP network. Users can operate the product using a Web browser or Web-enabled mobile device, while e-mail notification may be configured to alert up to four recipients when alarms are detected. It is equipped with four buffered high-resolution 10V metering (analog) channels, while each of the four optically isolated status/logic channels may be configured for 5 to 24Vdc wet or dry (contact closures) status/logic monitoring. The four control channels are equipped with independent SPST one-amp relays and may be latched on, off or pulsed with user configured timing along with user-programmable event action sequences.

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

Remote management

Burk Technology



AutoPilot 2010: Users of the Burk ARC Plus, ARC-16, GSC3000 and VRC2500 systems can now consolidate remote control management in a single software application. Using the AutoPilot 2010, broadcasters benefit through reduction in remote site and IT overhead expenses, reduced operator training and lower engineering expenses. The new software leverages stations' existing investment in remote control equipment while offering contemporary benefits such as IP connectivity, SNMP, macros, e-mail and SMS notification, and advanced alarm reporting.

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

Floodlight

LEDtronics

Wall-Pak: LEDtronics' first series of energy-efficient LED replacements of wall-pak luminaires for wall washing and security lighting, the high-power WWL20-24X2W-XPW-001W floodlight runs on a wide range of voltages, from 100 to 277Vac, consuming only 56W. Easily mountable on walls, ceilings or floors indoors or outdoors, the LEDtronics wide-beam and weatherproof Wall-Pak has a die-cast aluminum housing and a high-impact, heat-resistant polycarbonate lens designed to dissipate heat efficiently and distribute light evenly.

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

Line tensioners

Clamcleats

Line-Lok: To help prevent tripping over guy lines, damaging equipment and personnel, Clamcleats has developed a range of Glow-in-the-dark Line-Lok rope holding cleats to suit ropes from 1mm to 8mm in diameter. Line-Lok cleats are made from a material designed for use between arctic and desert conditions. The unique rope-holding design makes it quick and easy to tension lines. Line-Lok cleats will not shake loose and provide extra stability in extreme conditions compared with traditional guy line tensioners.

+44 1707 330101; www.clamcleat.com

Spectrum analyzer

Bird Technologies Group

SignalHawk SH-36S-RM: With the 2RU rack-mount SH-36S-RM SignalHawk over an Ethernet network, users can remotely analyze the performance of a system and diagnose problems from any computer on the network, whether in the same room or across the state. Features include 66dB dynamic range and -136dBm noise floor, elimination of trips to difficult remote locations, same spectrum analyzer functionality as the handheld unit all from a PC and multiple sites can be monitored from one central location.

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

Audio/EAS monitor

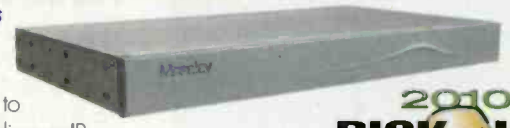
Intrinsic Net

Studio Hawk.8: The Studio Hawk.8 monitors audio and EAS receivers at a studio and communicates problems via e-mail, text messaging and signaling devices. The base system includes Studio Hawk software and hardware to monitor eight status channels, analog channels and relays. It records EAS data (transmitted and received) and can be expanded to monitor up to six EAS receivers. Users will also receive multiple contacts for each alarm with delays between messages, a daily dead air report PDF by e-mail and filtered EAS alerts.

662-324-2769; www.plussine.com
support@PlusSine.com

Software-defined audio transport

Moseley Associates



2010 PICK HIT

Rincon: Rincon is a software-defined audio transport product optimized to deliver multichannel digital audio over IP, T1/E1 and radio links, and networks simultaneously. Rincon carries up to eight stereo audio channels over the multiple network choices. Backup solutions such as failover inputs, redundant outputs and automatic switchover in case of audio loss are included, and it inserts a backup audio file to keep audio on the air in case of total link failures. Choose from linear uncompressed audio or any advanced audio compression algorithms. Management and configuration is handled via Web and SNMP interface and can even be accessed via smartphone.

805-968-9621; www.moseleysb.com; info@moseleysb.com

Digital FM audio processor

Vorsis

FM-4: The FM-4 with its four-band AGC and limiter is for stations looking for FM-only audio processing. Equipped with a reference-grade stereo generator, analog, digital and SCA inputs, it can handle any input program source. The versatility of its composite and digital outputs allows it to interface to a wide variety of FM exciters. The FM-4 also features front-panel set up and easy-to-use tuning software. Remote connectivity is via 100Base-T wired Ethernet and Windows-based GUI.

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

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Serving Broadcasters for 26 years • www.graham-studios.com • Toll Free 866.481.6696

50W FM station in a box

Ramsey Electronics

PXB Series: LPFM and FM licensees often need a way to quickly get on the air at either temporary field locations or in the interim to their installed studio transmitter locations. Each PXB is factory prewired and tested, and ready to go on the air the moment it is received. The compact PXB5006D1 is specifically designed for standard domestic use or at other locations where the primary power is 110/120VAC, 60Hz. If you are looking for an export version designed for 230VAC, 50Hz overseas use, order the PXB5006E1. Features include 50W RF output continuous duty, 5-input stereo audio mixer, CD and MP3 playback, CD-R record, cassette playback and record, two dynamic mics, stands and cables, 3.4dB gain omnidirectional antenna and cable, and FCC certified under parts 2, 73 and 74.

800-446-2295; www.ramseyelectronics.com; sales@ramseymail.com

HD Radio receiver, translator

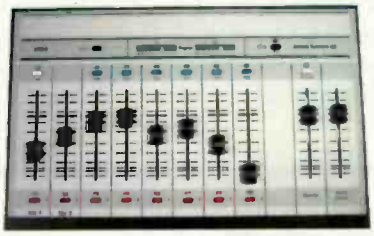
Fanfare

FP-TRO: With the advent of HD Radio comes the need to provide HD Radio translators and repeaters. 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

Radio console

Arrakis



ARC-8: With a single stereo mixing bus, the ARC-8 is for fast-paced live on air, production and remote applications. Two mics support a host and guest talk format. The mix-minus bus supports telephone talk formats or call-ins. The talk button on mic channel one feeds the mic to the caller and the caller to the console cue system. The ARC-8 has a built-in PC USB sound card on channel 8B to play in digital directly from PC audio software. At the same time, the program output from the console records in digital over the USB directly to PC recording software.

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

Transmitter reseller

Transcom Corp

Pre-owned transmitters: With many years of experience and service to broadcasters, Transcom 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

Monoblock STL

Pulsecom

PCAU-Suite: More than 7,300 Pulsecom PCAUs have been deployed in telco-based STL applications. The new PCAU-Suite makes PCAU technology available directly to broadcasters. Beyond audio and data capabilities (RS-232, UDP/IP and TCP/IP) offered by conventional STLs, the PCAU-Suite integrates enhanced Apt-x algorithm from Audio Processing Technology for cascade-resilient IBOC, FM and AM STL and TSL links. It also adds lightning protection and transparent analog-to-AES/EBU-digital migration. Everything is included and secured in an all-in-one armored enclosure.

800-381-1997; www.pulse.com

Multistudio phone system

Telos Systems

VX: Telos VX shares phone lines across a number of studios using standard IP technology. It is a scalable system that is compatible with a variety of VoIP gateways and PBXs. Gateways are available for POTS, T1/E1 and both BRI and PRI ISDN. Units can be installed as rack-mount units for large numbers of connections or desktop boxes that interface a few POTS lines. The SIP interface transfers calls between the office and studio systems. The VX Engine is a 2RU device providing call control and audio processing. There is one hybrid per line, allowing multiple calls to be conferenced and aired simultaneously with excellent quality. The VX Director Phone has two large, high-contrast color LCD panels that provide line status, detailed caller information and fader assignments. Text can be written to the line fields to describe calls from the Telos Assistant Producer PC application.

2010 PICK HIT

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

Power sensor

ERI-Electronics Research

PWR-100D: PWR-100D is a self-contained true RMS power meter/reflectometer/line section featuring an internal temperature sensor, line pressure and interlock inputs, Internet/intranet connectivity via LAN connection, serial and USB connectivity for local computer connection, 50-1000MHz frequency range, and optional on-board digital display of forward/reflected power, temperature, pressure and interlock status. It is compatible with the SWP-200 series power monitor and switch controller, VSWR protection systems or as a standalone power monitor. It easily expands for multiple power measurements with faultHolerant CAN bus or RS-485 connectivity between sensors. It connects up to 256 sensors to a single system. Phantom power is provided over standard CAT-5 cables.

812-925-6000; www.ERIinc.com; sales@ERIinc.com

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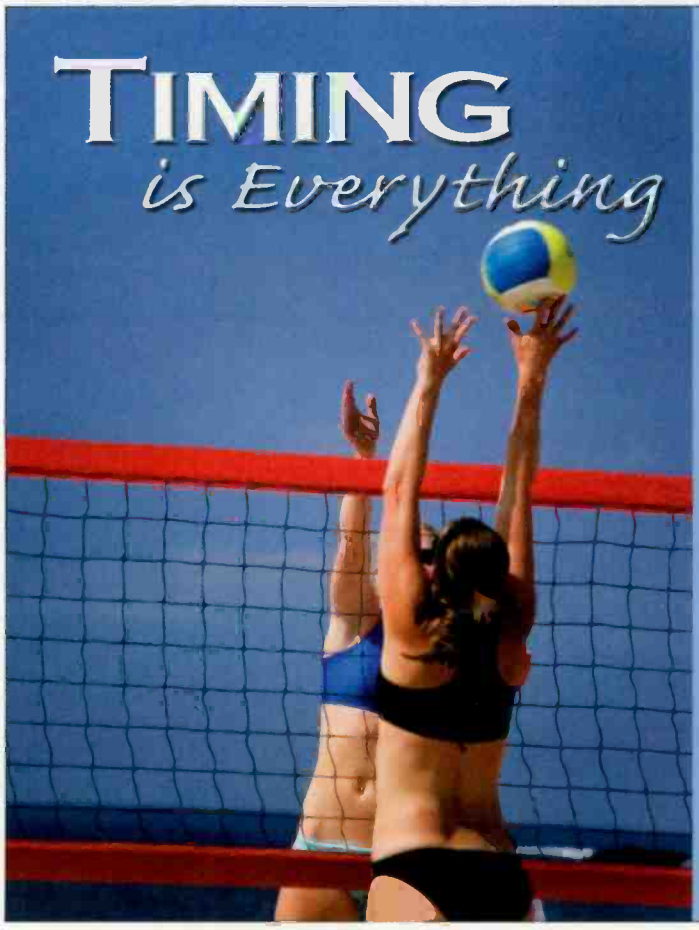
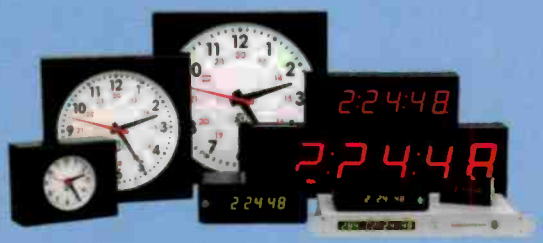
Weather receiver

Dayton Industrial Corp

AF630: A NOAA weather receiver housed in a 1RU chassis, this receiver offers a front panel that has a built-in monitor speaker with volume control. There are two 10-segment LED indicators, one for the modulation level indication and the other to indicate received signal level. The receiver has tone detector circuitry for the alarm circuit with front-panel indicator, test and reset controls. Rear-panel outputs are Line (RCA), SPKR (RCA), Relay (DIN) and balanced output (DIN). Input power is derived from a 12Vdc wall-mount converter. The receiver is phase lock loop controlled with the frequency of operation selected using an internal three-position DIP switch. A continuous receiver LINE audio output is provided. The SPKR output audio is controlled automatically by a tone detector circuit that monitors the receiver audio for the presence of a 1050Hz tone signal.

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





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www.ese-web.com

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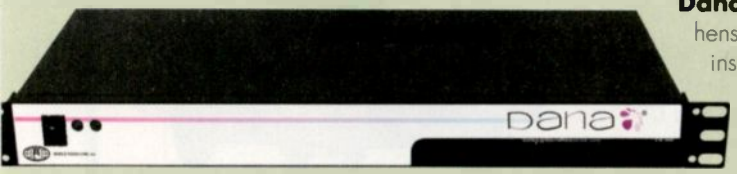
Media insertion tool
World Radio Link



Dana: DANA is a comprehensive system for media insertion with an integrated automated approach. It can manage from as few as one to hundreds of sites and automate scheduling, monitoring and reporting, all integrated in a unique collaborative environment provided by an intuitive user interface. Whether a signal arrives via satellite or terrestrially, whether used to provide 24/7 feed or interact with an existing feed, DANA manages and interacts with staff wherever they may be. It enables the insertion and broadcast of community content to exclusive areas. Broadcasters can easily localize and customize detailed broadcast content for those businesses, organizations and clientele that support or publicize their organization.

208-733-3551 Ext. 19; danaadmin.com; DANA@worldradiolink.com

FCC compliance service
Public File Online

Public Files: PublicFileOnline.com can organize and maintain radio and television stations' local public files via the Internet. Stations can now have a higher level of compliance, reliability and security, with secure access to all of their FCC required documents at anytime without the anxiety or aggravation of coming up short when those documents are needed most. Licensees can securely access their station's complete public file, engineering records and other documents from their main studio or any other location. Security is assured with password protection.

301-980-1021; www.publicfileonline.com

Streaming measurement
Ando Media

Get Measured: Get Measured is a programming code that will allow any streaming audio site to accurately measure listening audience. The self-serve code is easily installed on any site and will relay user information, not simply IP-level information on audience size. New customers signing up for the service at www.getmeasured.org or www.andomedia.com will receive access to industry-standard average active sessions data on a monthly basis. Advertisers and agencies will also have access to this data for evaluation for inclusion in advertising campaign buys. Ando's existing customers receive this metric plus significant and expanded metrics in Ando's Web-based, on-demand client portal.

847-892-0117; andomedia.com

Streaming service
Jetcast

Barter program: Jetcast is increasing the availability of its online streaming barter program. The program allows Internet radio broadcasters of any size to reduce or eliminate their online streaming costs and take advantage of the industry's growing online ad revenue by participating in ReplaceAds, audio, video and display ad impressions on Internet radio and television properties. Jetcast allows any broadcaster to use its barter program to eliminate the expense traditionally associated with high bit-rate streams, even if the station uses another provider for its low bit-rate streams.

917-338-1487; www.jetcast.com
team@jetcast.com

Production music marketplace
MusicRevolution

Music Library: MusicRevolution.com is an online marketplace for royalty-free production or stock music. Four purchase options include single tracks, CDs, subscriptions and an Internet music stream. With advanced search technology and automated cue sheet filing, MusicRevolution makes it convenient for customers to buy the production music they need. As an online marketplace, MusicRevolution provides professional and aspiring musicians with the opportunity to license their music while learning from and collaborating with the music community.

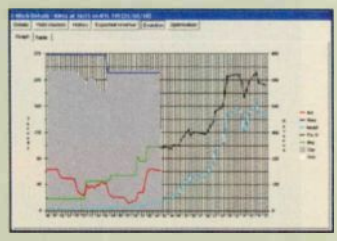
678-900-9228; www.musicrevolution.com

Service for advertisers
vCreative

vCreative Consulting: This flexible, full marketing consulting service for advertisers helps them connect with their customers through marketing strategies for radio, social media, viral marketing, Internet/digital and guerrilla marketing. vCreative Consulting is led by a small, hand-picked group of individuals who have been successful in both radio and marketing. They have created opportunities that connect advertisers and content with consumers and audiences. They also understand the unique needs of radio advertisers and how they can enhance their presence and brand.

800-497-9305
www.vcreativeinc.com
info@vcreativeinc.com

Revenue optimization
Telmar



Revenue Management: Telmar has worked with Mereo to create a revenue management system. With Revenue Management tools, sales houses representing any media can save time, reduce costs and maximize revenue by analyzing space consumption, overall advertising capacity, operational costs and service quality. Media owners can use the systems to predict and maximize revenue. Clients have saved up to 50 percent of employee time, increased their revenue by 5 percent or more and saved up to 25 percent of airtime through more efficient spot placement.

212-725-3000; www.us.telmar.com; usinfo@telmar.com

Text messaging service
Triton Digital Media

Mobile Xpress Messenger (MXM): Mobile Xpress Messenger is a mobile marketing service that drives ratings and revenue. MXM features a database marketing engine. Listeners can participate instantly, no pre-registration is required. Mobile opt-in functionality is now included, and stations can run ungated advertising promos, contests and polls.

818-528-8860; www.tritondigitalmedia.com; solutions@tritondigitalmedia.com

Digital FM/HD exciter
Continental Electronics

802Ex: This next-generation exciter is a one-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 Radio experience through the application of software 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

Voltage sampling unit
Kintronic Labs

VSU-1: The Model VSU-1 precision voltage dividing transformers provide sample voltages for RF voltage phase and magnitude measurement on AM broadcast directional multi-tower arrays. The transformers are available for a maximum tower base peak voltage of 20kV RMS to enable use with low- to high-power antenna arrays and standard- to high-antenna base drive impedances. These voltage sampling transformers have been developed to facilitate the method of moments (MOM) proofing of an AM directional antenna with towers having electrical height between 120 and 190 electrical degrees. The VSU-1 is housed in a painted aluminum weatherproof enclosure with a 7" ceramic bowl insulator and stud assembly for interconnection with the tower RF feedpipe.

2010 PICK HIT

423-878-3141; www.kintronic.com; ktl@kintronic.com

Site Control

WVRC-8 Web-enabled and Voice Dial-up Eight Channel Remote Control

Site *Sentinel® 16* Web-enabled Sixteen Channel Site Remote Control System

WVRC-4
Web-enabled and Voice Dial-up Four Channel Remote Control

Site *Sentinel® 4*
Web-enabled Four Channel Site Remote Control System

VAD-2 Plus
Dual channel Voice alarm Dialer

AUDIO *Sentinel™*
Web-enabled dual channel stereo silence monitor

I/O *Sentinel® 4*
Web-enabled four logic/status input, four relay output module

Relay *Sentinel®* Web-enabled three relay module

Relay *Sentinel® 16*
Web-enabled sixteen open collector/SS relay module

Schedule *Sentinel®* Web-enabled Event Scheduler

Status *Sentinel®*
Web-enabled three input status/logic module

Status *Sentinel® 16*
Web-enabled Sixteen-input status/logic module

Web*Switch™* (not shown) Web Remote Power Switch

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Crouse-Kimzey Co. / ProAudio • Giesler Broadcast Supply, Inc. • Lightner Electronic Inc. • RF Specialties • SCMS

IMITATED... but not equaled !

Attractive, ultra low profile tabletop design

- *On-off switches below the faders where they belong*
- *Inline (not side by side) Program assignment switches reduces errors*
- *Real VU meters for high resolution metering, not cheap LED meters*

NO compromise, take no prisoners design ...

Our ARC-15 (Advanced.Radio.Console) is called advanced for many reasons: 15 input channels, 5 assignable mic preamps with optional phantom power, Telco interface, PC USB sound card built in with free Radio software, analog VU meters for high resolution and ease on the eyes, socketed ICs for ease of repair, RJ45 connectors with cables included for fast wiring, electronic switching of all audio for crystal clear performance, LED lamps for highest reliability, and so much more.

ARRAKIS SYSTEMS INC.

As Arrakis has done repeatedly for more than 30 years, our ARC series consoles have created an entirely NEW CLASS of Radio consoles with a unique new set of features to meet the needs of our ever changing marketplace. Imitated down through the years but never equaled, Arrakis has once again set a new standard for others to follow.

In the ARC-15 model, channel one is a high performance mic channel while channels 2-5 are selectable as mic or line inputs with optional phantom power. Channel 15 is an advanced telephone interface with logic to an external hybrid for Live callers or an Off-line contest call. Seven stereo line input channels easily handle the other audio source inputs. Channel fourteen is selectable as either a Windows PC USB interface or an unbalanced stereo consumer level input. Windows software for Live On Air, Automation, & Production is provided standard. With multimillion operation LED lighted switches; long life conductive plastic faders; and electronic switching of all audio signal paths; the ARC-15 is a rugged, reliable, and versatile console for 'todays' professional Radio studio applications.

- *Easy access connectors for Fast installation...*

- *BOTH balanced and unbalanced Outputs*
- *RJ45 balanced inputs WITH cables supplied*
- *XLR connectors for ALL mic inputs*

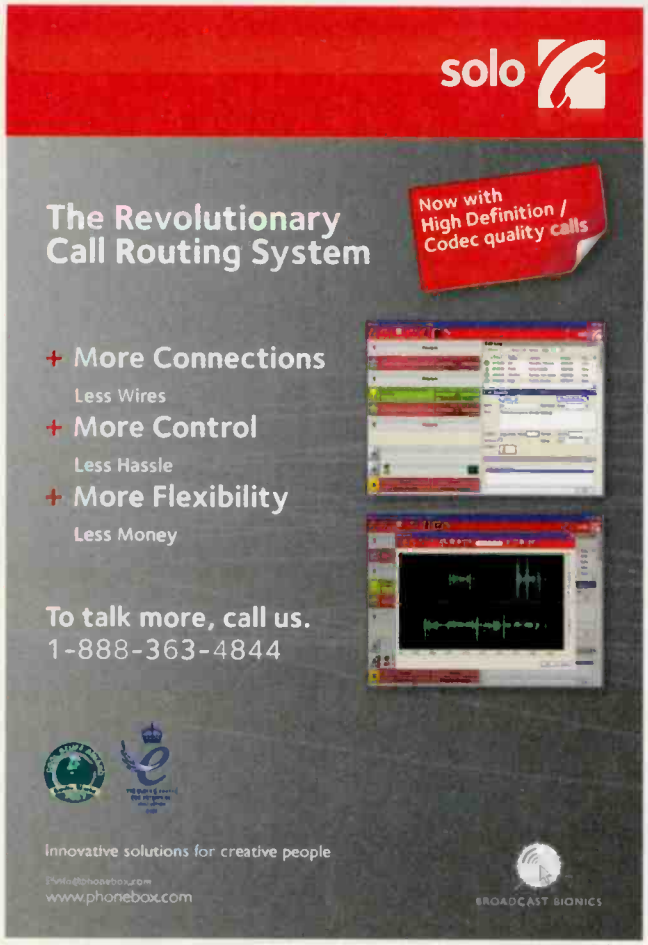
ARC-15

only $3,495 msrp

8, 10 channel & modular models

AARC-NET ethernet audio networking compatible

970-461-0730 ext 309

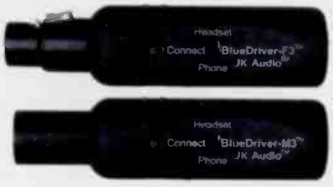


2010 PRODUCT SOURCE

Wireless audio interfaces

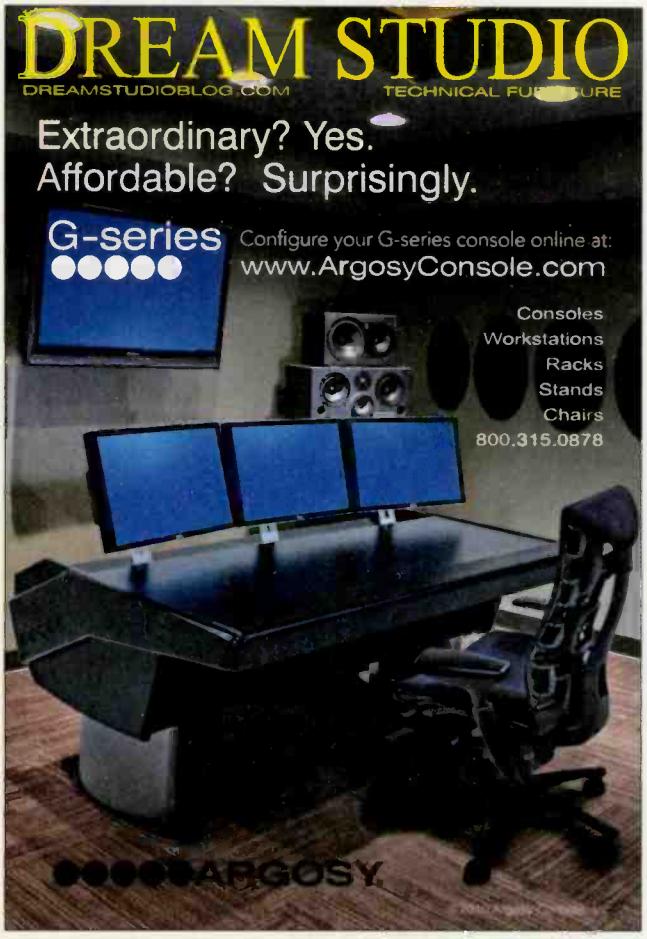
JK Audio

BlueDriver Series: The BlueDriver series of audio interface adapters uses Bluetooth wireless technology. BlueDriver-F3 plugs directly into a dynamic mic or the mic-level output from a mixing console. Pair it to a Bluetooth-equipped cell phone or headset. The 3.5mm stereo jack contains a mic-level output suitable for recording, with the clean mic signal on the left channel and the Bluetooth return on the right. BlueDriver-M3 plugs into the mic input channel of a mixer. The 3.5mm jack will accept a signal from the headphone output of the mixer for transmission back to the cell phone or headset. A switch on either unit selects between connection to a third-party Bluetooth headset or a cell phone.



2010 PICK HIT

800-552-8346; www.jkaudio.com; info@jkaudio.com



Digital audio leveler

Translantech Sound

Ariane Sequel: Like its analog predecessor, the Ariane Sequel features the company's sum-and-difference processing and adds many new features. The audio processing path is fully digital, not a hybrid analog/digital design. It provides independent two-channel and stereo-linked modes, protection limiting, input/output level metering, TCP/IP and RS-232 remote control, and software upgrade capability. Adapting the Ariane leveler conecpt to a digital system was the result of Translantech's partnership with Broadcast Warehouse.

212-222-0330; www.translantech.com
david@translantech.com

Digital EAS encoder/decoder

Digital Alert Systems

Dasdec: The Dasdec is a new IP-based, FCC-certified EAS encoder/decoder and EAS character generator controller. Remote operation using a Web browser over a LAN comes standard. The Dasdec is a Linux-controlled PC design featuring the latest communications methods with the ability to interface to any digital communications platform. Dasdec provides a bridge between existing EAS compliance and emerging EAS methods.

585-765-2254; www.digitalalertsystems.com
info@digitalalertsystems.com

RDS/RBDS encoder
Inovonics

Model 730: Inovonics' Model 730 RDS/RBDS encoder features tagging and RT+ technology, along with dynamic scrolling of the song title, artist information and station ID. With an LCD display, jog wheel and three ways to connect (USB, RS-232 and IP), the 730 is convenient to set up and easy to use. The 730 connects with virtually any playout system, integrates with popular third-party software systems, displays incoming data from automation on the fly and shows outgoing scrolling messages exactly as they are seen by listeners. Messages may also be queued with the built-in scheduler, and a programmable data delay puts messaging in sync with delayed analog audio (diversity or profanity). The included Windows software enables programming through any of the encoder's data ports, while internal data diagnostics and transmission safeguards guarantee foolproof installation and operation. Free field-upgradeable firmware ensures compatibility with any forthcoming RDS/RBDS and Open Data Applications (ODA).

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

Radio automation system
Arrakis

Digilink-Xtreme 1.9: Xtreme-Complete is a radio station in a box. On air, production, scheduling and logging can all be performed at the same time on this workstation. No additional hardware or software is required. A workstation is used for each on-air channel in a facility. For the other studios in the station such as traffic, production and news, Arrakis can supply a preconfigured Dell PC or the customer can supply their own PC. Xtreme comes free with X-Sched software for the scheduling room, X-edit-pro for the production room, and Xtreme-Studio for the news room.

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

Media player
Abacast

Premier Media Player: The Premier Media Player is designed to integrate with a website's identity and brand while delivering a high-quality stream easily to the entire online audience. It also increases the ability to monetize a streaming business model. The player is for both audio and video streams and is customized to integrate into streaming needs for the browser or operating system determined by the customer. It employs the technologies of Adobe, Microsoft and standard HTML to help with browser compatibility providing a better user experience.

360-834-5229; www.abacast.com
info@abacast.com

2010 PICK HIT

Radio broadcast mixer
Allen & Heath

XB14: The XB14 is designed for a broad range of applications from small radio or Internet broadcast studios, to larger studios with multiple rooms. The XB14 features telephone communication modules for telephone callers, mic fader start sensing for external connection and internal automatic muting of the speaker outputs, stereo channel start/cue outputs for CD transport control, separate headphones mix and outputs for guests, and an audition bus.

800-431-2609; www.allen-heath.com/US

Solid-state audio player

Denon Professional

2010 PICK HIT

DN-F400: The DN-F400 solid-state audio player implements stable and reliable solid-state media technology as the source medium. It can read MP3 files and uncompressed WAV files from SD or SDHC cards. It is a 1RU, half-rackspace unit designed for any application requiring audio to be running continuously. The DN-F400 features balanced/unbalanced outputs and is also controllable via RS-232-C and GPIO. Additionally, the optional RC-F400 Remote Controller features a large LCD display and enhances the DN-F400's capability by providing an ergonomically designed, intuitive control unit for instant playback of audio or audio elements.

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

Industrial Ethernet cables

Belden

DataTuff: DataTuff Industrial Ethernet cables include: Belden 7953A – an Ethernet/IP-compliant CAT-6 shielded cable featuring solid bare copper conductor and overall Beldfoil shield. Belden 7939A – a CAT-5e shielded cable featuring stranded bare copper construction and overall Beldfoil shield. Belden 7938A – a CAT-5e high-flex shielded cable rated for 10 million flexes features stranded bare copper alloy conductors and overall Beldfoil shield and 85 percent TC Braid. All cables feature Bonded-Pair technology.

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

Linux-based automation

Smarts Broadcast Systems

Skylla: This multistation, Linux-based automation system has been under development for several years. Smarts has been migrating into Linux for a number of years. Servers running in Linux have recorded uptimes of more than a year without a reset. Skylla is suited for live, satellite automated and music on hard drive automated operations, and interfaces to the Smarts Secgen Traffic System, the Digital Program Director Music selection system and many other popular music and traffic programs. Skylla is designed around a central processor unit that runs one station and auxiliary audio heads that handle the audio stream for additional stations. One unit can handle many different audio streams. Switching operations can be centralized or can be handled by the individual audio heads in the system. Skylla can be operated or monitored via the Internet.

800-747-6278; www.smartsbroadcast.com; info@smartsbroadcast.com

Indicator assemblies

RDL (Radio Design Labs)

AMS-LED: AMS-LED indicator assemblies fit all AMS mounts. They are 24Vdc and come in green, yellow, blue and red.

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

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50 West 106th Street, Suite 5C, New York, NY
212.222.0330 sales@translantech.com
www.translantech.com

Grounding wire
Nott Ltd.

Copperweld: Nott now distributes Copperweld grounding wire. This wire has been used by the electric utility industry for many years and just now comes to broadcasting. Standard Copperweld wire is not annealed, making it very springy. However, the 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.

800-443-0966; www.nottltd.com; ron@nottltd.com

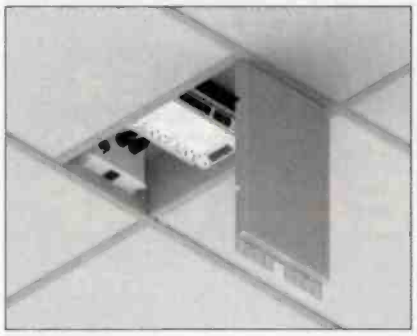
Surge suppressor
Henry Engineering

Powerclamp Series 10: Powerclamp Series 10 wire-in parallel TVSS devices are rated at 200,000 surge amps per phase and will suppress lightning-induced transients, massive high-energy surges and power line spikes. Their surge suppression will greatly reduce equipment failures and computer lockups that are caused by power line disturbances. Operation is not affected by the power requirements of the load. Each line phase is fused, with a fuse status lamp. An unlikely failure will not interrupt power to the load. The Series 10 offers optional remote failure detection to monitor the suppression integrity of the device from a remote location. A Series 10 unit should be installed at the main entry electrical panel in any environment where frequent and severe lightning occurs.

2010 PICK HIT

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

Ceiling boxes
FSR



CB-12, CB-22: These ceiling boxes are designed to conceal equipment above the tiles and blend with existing décor. With both agency and plenum ratings, the units are available in two sizes and six varieties with numerous options. A white rim-style door inserted into any ceiling tile is included on all boxes. CB-12s provide external ac receptacles in a 2'x1' enclosure, with four additional unswitched ac receptacles inside. CB-22 is 2'x2' for two full rack pieces of equipment or four half-rack pieces. It features an external ac receptacle and switch/circuit breaker on the ceiling surface, with five ac outlets for wall warts inside. CB-22S features an energy-saving built-in auto-sensor. It includes two monitored unswitched outlets, a main switch/circuit breaker and four switched ac outlets. The CB-12P, CB-22P and CB-22SP models include a 1 1/2" NPT fitting.

973-785-4347; www.fsrinc.com
sales@fsrinc.com

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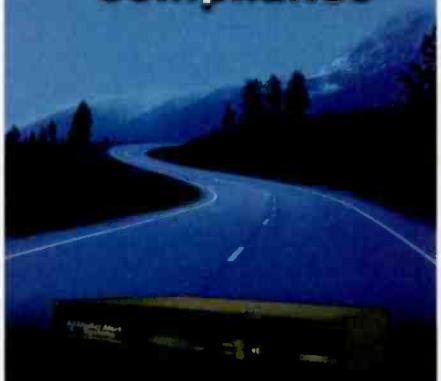

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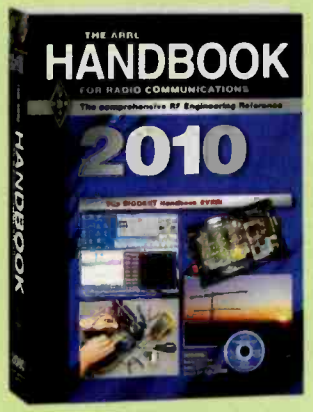


RF engineering reference

American Radio Relay League

The ARRL Handbook for Radio Communications: Since it was first published in 1926, The ARRL Handbook has been a mainstay for the radio electronic experimenter. A resource for radio amateurs, hobbyists, engineers and scientists, The Handbook is the authoritative reference on practical communications topics. It is both reference book and tutorial. More than 60 authors and reviewers contributed more than 70 percent new or completely revised content, making this the biggest Handbook ever. It includes new treatments of digital communications technology, solid-state RF power amplifiers and switch-mode power supplies. A CD-ROM is included with design software and fully searchable book.

860-594-0200; www.arrl.org; hq@arrl.org

Broadcast resource

Elsevier/Focal Press

Broadcast News Writing, Reporting, and Producing, 5e: Broadcast News Writing, Reporting, and Producing presents a solid foundation for any student learning how to become a broadcast journalist in today's world of convergent journalism. The broadcast industry continues to morph as newer and more advanced content platforms are hatched and developed, and broadcast journalists must understand how to write, report and produce for multiple platforms simultaneously. New photos and illustrations, a restructuring of the text, expanded end-of-chapter exercises, newer and more relevant examples, and more information on producing all contribute to giving readers what they need most: a nuanced understanding of how the media of today function in a world without news boundaries.

781-221-2212; www.elsevier.com
usbkinfo@elsevier.com

Exam preparation

Society of Broadcast Engineers

CertPreview: The SBE's CertPreview can be downloaded from the SBE's website or received on CD by mail. The program will be installed onto a computer and will be machine specific, available for Windows and Mac. Each sample test contains 100-150 questions typical of those found on an actual exam. Users will take the exam in its entirety and be able to mark and review questions before scoring the sample exam. A percentage is then given along with a breakdown of categories contained within the exam. This will help identify strengths and weaknesses. The user can also revisit questions answered incorrectly.

317-846-9000; www.sbe.org
mclappe@sbe.org

Sound reference

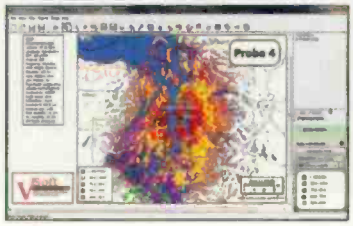
Macmillan

Perfecting Sound Forever: Greg Milner takes readers through the major breakthroughs and glorious failures in the art and science of recording. An American soldier monitoring Nazi radio transmissions stumbles onto the open yet revolutionary secret of magnetic tape. Japanese and Dutch researchers build a first-generation digital audio format and watch as their "compact disc" is marketed by the music industry as the second coming of Edison yet derided as heretical by analog loyalists. The music world becomes addicted to volume in the 90s and fights a self-defeating "loudness war" to get its fix. Should a recording document reality as faithfully as possible, or should it improve upon or somehow transcend the music it records? The answers he uncovers will change the way we think about music.

646-307-5151; us.macmillan.com

Terrain analysis software

V-Soft Communications

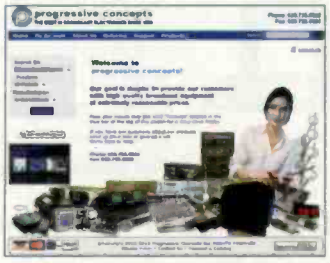


Probe 4: This program update includes several new tools and program enhancements. A new Calculation Engine takes advantage of multiple computing cores for faster calculation times. The updated Profile Tool makes units, line types, number of divisions and other setting user-configurable. Also new is the display of the path broken into multiple line-of-sight paths, multiple Fresnel zones and the ability to edit the hard copy output to add custom user labels, arrows, legends and logos. Other updates include display enhancements, improved search functions, IBOC interference tools and expanded plotting and contour displays. Probe 4 is bundled with a variety of database information as well.

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

Equipment sales and service

Progressive Concepts



Broadcast equipment dealer: Founded by Eric Hoppe in 1990, Progressive Concepts is a broadcast equipment supplier with its sales office and warehouse in the Chicago area. Progressive Concepts has provided its customers with high-quality products and services for 20 years. The company's philosophy is that the products it sells are of such high quality that there will be no reason to return them. Some items sold feature an exclusive 30-day no-fault guarantee, so items can be returned for a full refund.

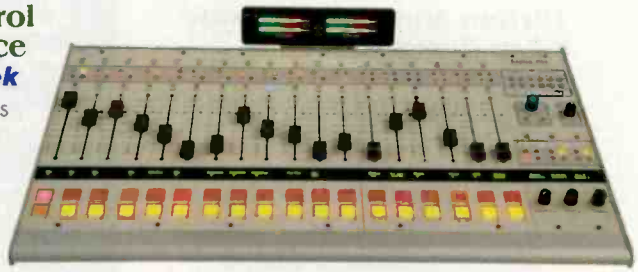
630-736-9822
www.progressive-concepts.com
sales@progressive-concepts.com

Dialog noise suppressor
Cedar

DNS One: A Pro Tools plug-in that runs on both Mac OS X and Windows, the DNS One provides a new user interface that allows users to control hundreds of channels of DNS (software and hardware, in any mix) from a single Pro Tools host. DNS One makes unusable interviews intelligible and saves huge costs in dialog replacement. DNS One is controlled using the dedicated DNS control system software. More than just a GUI, this RTAS plug-in for Pro Tools LE and HD systems allows users to control as many instances of DNS One as the host system can support, plus up to 126 DNS2000s and/or DNS3000s.

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

Mixing control surface
Logitek



Pilot: Available in multiples of six faders (from 6 to 24), the Pilot offers full access to the sources available on a Jetstream or Audio Engine router along with simple bus selection and intuitive monitor controls. The Pilot, combined with the Jetstream Mini, provides a cost-effective way for facilities to implement IP audio routing and mixing. Features include: cue switch over every fader with built-in cue speaker; room for 16 character source names on bright, wide-angle displays; change button over every channel and central select knob for easy access to new sources; 12 user-configurable soft keys; quick route button for selection of program, auxiliary and two user-defined sources for monitoring; buckets full of mix-minus; four GPI inputs and eight GPI outputs on back of surface along with RJ-45 for connection to audio engine; simple tabletop mounting and 20W power consumption.

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

Remote monitoring
WorldCast Systems Audemat

2010 PICK HIT

Mini Control Silver: The Audemat Mini Control Silver is a system for management and monitoring of remote equipment. It can be configured to connect with any equipment at a remote site through serial ports, status or metering inputs, commands (relays) or IP. All units linked to the Mini Control Silver can then be monitored and controlled locally and remotely via a variety of communications modes (ADSL, LAN, GSM, PSTN, etc.). It will send notifications via e-mail, SNMP and optional voice/DTMF interface, and features ScriptEasy software for automatic actions and remote control.

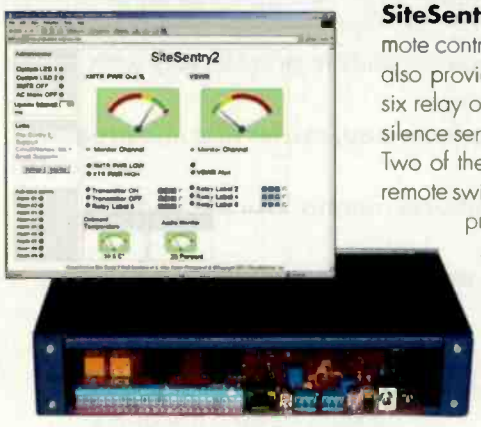
305-249-3110; www.audemat.com; contact@audemat.com

USB condenser mic
Blue Microphones

Yeti: Yeti is the first THX Certified microphone. It is the first USB mic to offer Blue's premium condenser capsules in a proprietary triple capsule array. It includes four patterns (omni, cardioid, stereo, bidirectional). Yeti has studio quality performance and features, with zero latency, amplified headphone monitoring, microphone mute, and hardware-based gain adjustment. The Yeti's angle can be adjusted on its custom-designed desk stand.

818-879-5200; www.bluemic.com

Two-channel remote and monitor
Circuitwerkes



SiteSentry2: This two-channel, Web-based remote control can take 10-bit analog readings and also provides two optically isolated status inputs, six relay outputs (latching or momentary), a stereo silence sensor and an onboard temperature sensor. Two of the relays are DPDT and can be used for remote switching of balanced audio. An affordable price point makes it a viable option for stations on a budget. It's also ideal for applications requiring a handy way to Web-control six relays or for use as a back-up controller for a main remote control. Further, it can be used as a stand-alone, four-channel audio/silence monitor.

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

Recording app for Iphone
Radio Weave

Soundbiter: Soundbiter is an iPhone and iPod Touch app that allows users to capture and share short-form audio content. When the app is running, Soundbiter is always recording, continually saving the last 60 seconds (or preset length) of audio until the user presses its one giant button. Then the sound bite is captured, ready for editing and uploading. Soundbiter is a free application available for download from the Itunes App store.

radioweave.com
radioweave@matternow.com

Masterclock time code generator

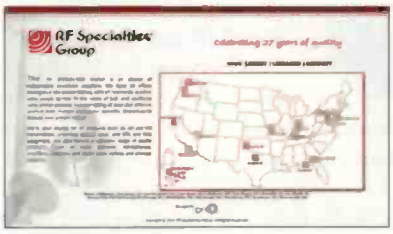
ESE

ES-188: The ES-188 is a 1RU black anodized unit that displays nine digits (day of year, hour, minute and second) of time as received via a user-selected NTP server. Several types of time code, as well as a 1PPS signal, are generated by the ES-188 and output on the rear panel. These outputs allow the unit to interface with new or existing computers, automation systems and third-party clock systems. The clock features automatic correction for Daylight Saving Time and a four-hour battery backup. Options include ASCII NPR time-code output, relay contact closure, 220Vac, 12 to 35Vdc power input and UL-approved power supply.

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

Broadcast Equipment

RF Specialties



Equipment distributor: This distributor of radio broadcasting equipment with 10 offices across the country supplies the broadcasters with a range of audio and RF equipment by more than 200 manufacturers. Products include AM and FM transmitters, antennas, coaxial cable, and STL and RPU equipment, a complete range of studio products, such as audio consoles, microphones, amplifiers, speakers and digital audio editing and storage systems. The company's site offers a complete online catalog. You can also review articles from the RF Spectrum newsletter and download the latest version of RFS, the company's broadcast-engineering software.

816-628-5959; www.rfspec.com
rfofpa@aol.com

Management system

Efficio Solutions

Yield: This dynamic rate card and inventory management system is Web-based and can be used as an integrated module with the Efficio system or as a stand-alone Web application. Efficio's Web-based system also offers an Account Management/CRM solution and a recently released Corporate Rollup application, both of which utilize centralized dashboards and integrated sales modules. This centralization enables stations and corporate offices to manage advertising clients and all sales processes, from account management, CRM and budgeting to sales activity, forecasting, collections and now yield management.

614-895-9584; www.efficiosolutions.com
sales@efficiosolutions.com

Sage Digital ENDEC – Emergency Alert System

Great Upgrade - CAP Ready

The gold standard in EAS since 1996, the Sage ENDEC, has been surpassed by the Sage Digital ENDEC. Even as FEMA and the FCC prepare the new EAS and CAP regulations, broadcasters and public safety agencies across the country are already taking advantage of the new features of the Sage Digital ENDEC, including:

- Digital AES/EBU audio
- LAN connection
- Flash software upgrades
- Free software update to CAP
- Enhanced logging, automation, remote monitoring, multi-station support

The Digital ENDEC is a drop in replacement for the classic ENDEC including rear panel connections and programming concepts, but new users love it too.

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Info@sagealertingsystems.com • **www.sagealertingsystems.com**

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MX12LW

215-547-2570
www.sandiesusa.com

SANDIES

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MODEL 343

Digital snake
Roland

RSS S-0808: The S-0808 digital snake is an 8-in/8-out compact, lightweight snake that supports multiple power options including battery power, embedded powered over REAC and power over Ethernet (PoE). The inputs offer remote controllable preamps, phantom-power, 24-bit 96kHz A/D conversion as well as choices of XLR, TRS line and even Hi-Z capability to reduce the need for direct boxes. It works in conjunction with the S-4000M REAC merge unit, which allows up to four digital snake heads to be merged into a REAC stream where the master device recognizes it as single REAC slave unit. This technology enables distribution of multiple input/output units around a location.

800-542-2307; www.rolandus.com

Super electret condenser mic
Equation Audio

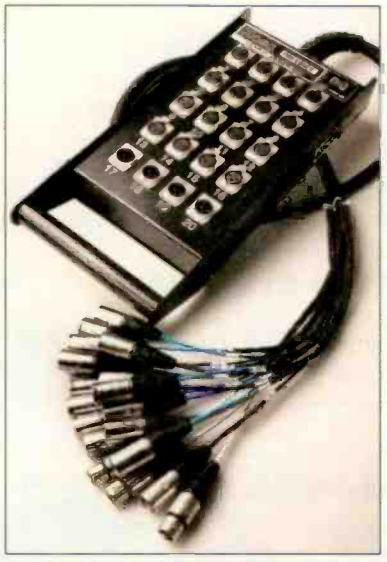
F.20: The F Series microphones are not made from parts off the shelf, won't be found in various colors and finishes under other brands and can easily enhance studio and live performance projects without compromising the total equipment budget. A single F.20 microphone could competently provide all the recorded sources required for the highest quality recording, and a matched pair could very well become a favorite in the mic locker.

800-575-4607; www.equationaudio.com

IP audio codec
WorldCast Systems

APT Astral: The WorldCast Astral will be the industry's first IP codec to also offer remote control capabilities and audio back up from a streaming server. This IP STL platform offers a full complement of professional audio delivery algorithms, including Enhanced apt-X, Linear, MPEG L3, MPEG L2, G.711 and G.722. It can then be tailored to meet the precise needs of the broadcaster wishing to build in extra functionality for reliability, remote control or compatibility. For added reliability, the WorldCast Astral offers redundant power supplies and a new audio backup suite. Should the main IP link go down, the audio backup package allows a station to continue to broadcast from either static files stored on an SD card within the unit, or direct from a Shoutcast stream.

305-249-3110; www.aptcodecs.com; ussales@worldcastsystems.com



Pro-conex stage boxes
Hosa Technology

SNX Series: Incorporating a wealth of features designed to provide years of reliable service, the SNX Series Pro-Conex stage boxes provide clean, transparent audio feeds to and from the house audio console and, with all terminations being XLR, are ideal for live-sound environments where long cable runs are common. The SNX Series is available in multiple configurations and lengths. Heavy-duty construction is a hallmark of the new SNX Series Pro-Conex stage boxes. These stage boxes utilize genuine Neutrik XLR connectors on all sends and returns for trouble-free connections, free from clicks, pops or other annoying sonic artifacts. Additionally, all models employ foil-wrapped, heat shrink-protected internal wiring. Similarly, each lead/signal path is individually shielded using 24 AWG x 2 OFC (oxygen free copper) conductors—thus ensuring superior signal transmission.

714-736-9270; www.hosatech.com; lee@hosatech.com

IP codec
Lawo

Dallis: The Dallis IP codec board networks remote units, such as remote studios or OB vans, with the main broadcast station. It is now available for the Nova73 HD router, mc² series and zirkon systems. The codec supports a multitude of algorithms and enables real-time audio streaming via IP for two inputs and two outputs.

+49 7222 1002 0; www.lawo.de; info@lawo.de

CobraNet audio interface
Audio Science

ASI6316:

Using Cirrus Logic's CobraNet for streaming audio over Ethernet, the ASI6316 provides 16 mono/8 stereo inputs and outputs. It can be connected to any CobraNet-compliant device and has dual redundant CobraNet interfaces. It is based on the TMS320C6713 VLIW floating point DSP connected to a high-speed bus-master PCI Express interface. AudioScience MRX technology allows up to 16 streams of different formats and sample rates to be played, recorded and mixed over CobraNet. A choice of 16-bit PCM, MP3 or MPEG layer 2 compression is available on all streams. ASIControl allows CobraNet routing connections to be set up between the ASI6316 and any other compliant CobraNet device on the network. Alternatively, third party CobraNet design and management software may be used.

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

Digital microphone interface

Neumann

DMI-8: An eight-channel version of the DMI-2 digital microphone interface, which provides remote digital microphone control and conversion from AES 42 to AES/EBU, the DMI-8 offers more channels at less cost per channel in a space-saving rack-mountable chassis. But the DMI-8 also adds new features to the digital microphone interface concept, including computer-free gain adjustment, multi-unit cascading up to 128 channels, and a variety of industry-standard multi-channel output formats.

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

Diversity delay monitor

Day Sequerra

M2DDM: The M2D-DM is available in two versions: a single station-single version with built-in digital audio delay; and a multi-station model providing the capability to monitor and time-align up to 100 AM/FM stations. The TimeLock algorithm in the M2DDM measures the main channel MPS analog and HD-1 digital audio time diversity and generates a continuous stream of correction vectors. These correction vectors can be processed internally to synchronize the program audio or can be sent via Ethernet to an HD Radio Embedded Exporter. The M2DDM has digital audio outputs for confidence monitoring and provides alarm outputs for loss of program audio, OFDM sidebands, HD Radio data and RBDS data payloads.

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

Audio-over-IP

End to End Technologies

Audio Compass 2.0: Audio Compass transfers low-delay, clear audio over the Internet from one location to another. It works for sporting events, live remote, remote talk show hosts, pre-recorded broadcasts and more. Audio Compass is purely software. Key features include the ability to see all broadcast locations in your account group, text-chat to all members of your team, Nat Traversal Server, UDP and TCP support, remotely control audio switchers and send relay closures via RS-232 serial port.

801-756-9133; www.audiocompass.com
support@audiocompass.com

Audio router

NTP Technology

Penta 725: The Penta 725 series is a new-generation compact modular audio router packs up to 384 x 384 crosspoints into a compact 1RU 19" chassis. 64 AES3 stereo and four MADI inputs/outputs can be accessed for interfacing digital audio sources. Controllable via TCP/IP or front-panel navigation keys, the Penta 725 accommodates a variety of software modules. Two high-speed bi-directional links are included for connection to NTP 625 or additional Penta 725 systems. An AES3 monitor output is provided for input and output monitoring.

+45 4453 1188; www.ntp.dk; ntp@ntp.dk

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

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The Model 81094 is the first in a series of Internet/Intranet accesible Advanced Wattchman® Wattmeter/Alarm systems that will monitor both forward and reflected power in two transmission lines with only one controller. Unlike previously available systems that needed one controller for each transmission line, the Advanced Wattchman® will monitor two lines (4 ports). The front panel display shows power on both systems simultaneously. Operating conditions may also be displayed on a PC from any location on the Internet/Intranet.

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Phone: 440-243-1100 **Toll Free:** 800-COAXIAL **Fax:** 440-243-1101
sales@coaxial.com • www.coaxial.com

Computer shortcut keys

P.I. Engineering

XK-24: The XK-24 features 24 keys with green or red backlighting with a black and gray co-injected case suitable for hand-held operation and equally comfortable on a desk. It comes with MacroWorks 3 (MW3) for Windows 7, Vista, XP or 2000. MW3 allows any computer user to build and customize a workflow keypad. Also included, ControllerMate for X-keys offers Mac OS-X users a new interface with full support for all X-keys USB devices. These new X-keys devices may be flashed with firmware upgrades and offer a new reflector mode to communicate with even the most reluctant software applications.

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

Stereo condenser mic

Audio-Technica

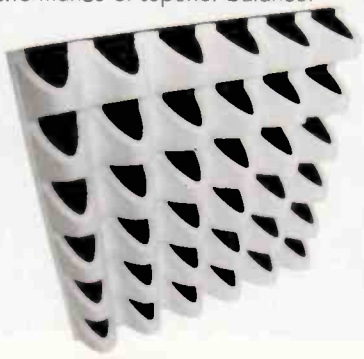
AT4050ST: The AT4050ST stereo condenser microphone was developed in direct response to feedback from end users. It is a stereo side-address externally polarized (dc bias) condenser microphone with independent cardioid and figure-of-eight elements, configured in a mid-side arrangement with switch-selectable internal matrixing. The AT4050ST offers a left-right stereo output (wide 127 degree or narrow 90 degree) via the microphone's internal matrixing system, or discreet mid-side signals for later manipulation.

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

Acoustic panel

Jocavi Group

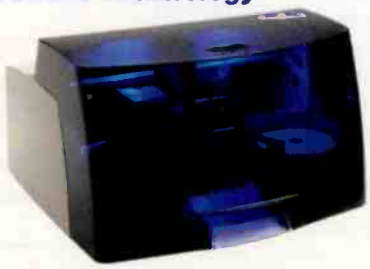
ATP Pyramid: The Pyramid acoustic panel combines diffusion and absorption features. It combines hemispherical acoustic diffusion and absorption and was specifically designed to be applied on the continuous areas of walls and ceilings. This panel can be set on T-ceilings or glued on walls and ceilings. The design was based on a quadratic shape with flat absorption surfaces made of acoustic foam and on curved diffusion surfaces made of EPS which give it an aural and visual performance of superior balance.



+351 219243097; www.atp.jocavi.net
info@jocavi.net

Disc Publishers

Primera Technology



Bravo Pro Xi-Series: Bravo Pro Xi-Series Disc Publishers are new and improved versions of Primera's award-winning Bravo Pro Disc Publishers. With their built-in high-speed recorders, direct-to-disc printing and fast robotics, these desktop units automate the process of burning and printing quantities of CDs and DVDs. Features include 300 percent faster robotics, interior blue LED lighting with job status feedback, seventh-generation disc picking mechanism, Windows XP/Vista/7 and Mac OSX 10.5 compatible, and optional Blu-ray Disc recordable drives.

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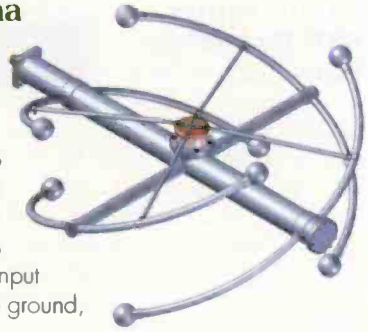
ILS-2400, ILS-3400: These medium intensity lighting systems utilize xenon flash tube technology and Fresnel optics to provide a reliable, long-term maintainable dual tower lighting solution. The systems feature flash head interlock switches for enhanced personnel safety; alarm contacts (Form-C) for Power Failure, White Strobe, Red Strobe, Side Light and Photocell alarms; status contacts (Form-C) for day/night mode; support for LED and incandescent side lights, manual mode override switch; and monitoring and communications options available.

615-256-6030; www.itl-llc.com
info@itl-llc.com

Sidemount FM antenna

Dielectric



DCR-S: The DCR-S provides a low-wind load alternative for broadcasting multiple FM stations from a common antenna. When paired with Dielectric's patent-pending, ultra-compact manifold combiner, the DCR-S creates a package for broadcast applications where space is limited. Without the requirement for flexible jumpers, the new antenna is simple to install and maintain. The DCR-S can be used by broadcasters to establish multistation broadcasting, to add HD Radio broadcasting to an existing multi-station site or to provide a reliable auxiliary antenna. The DCR-S is a circularly polarized antenna with a power rating of 28kW for a single bay, and is available in stacked arrays of up to 16 bays for a power rating of 120kW. The antenna system is engineered to support high-input power as needed for multiplexing. Designed specifically to reduce downward RF radiation to the ground, the DCR-S features a custom feed design with shorter spacings and a series-fed configuration.

800-341-9678; www.dielectric.com; dcsales@dielectric.com

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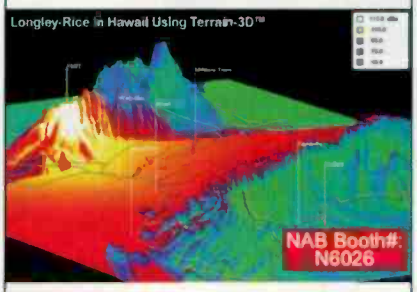

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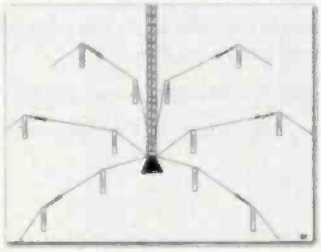

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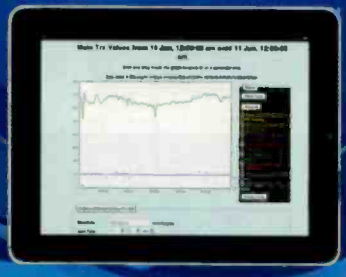

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3.5+1.75KW	2007	BE FMi301, solid sate
3.5 KW	2007	Harris ZX3500, solid state
4 KW	2007	BE FM4C, solid state
5 KW	1995	Continental 815C
10 KW	1999	Nautel FM10, solid state
14+5 KW	2005	BE Fmi1405 (IBOC) HD, solid state
20 KW	2005	BE FM20S, solid state
27.5 KW	1986	Continental 816R-4B, solid state IPA
35 KW	1986	BE FM35A

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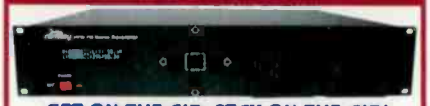

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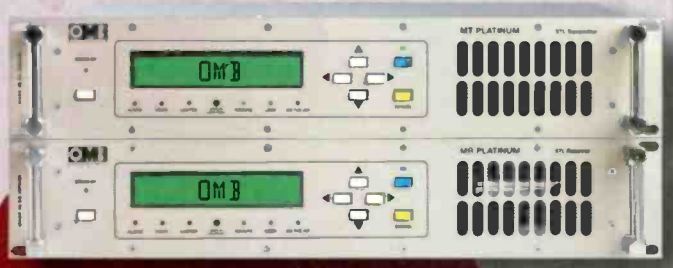

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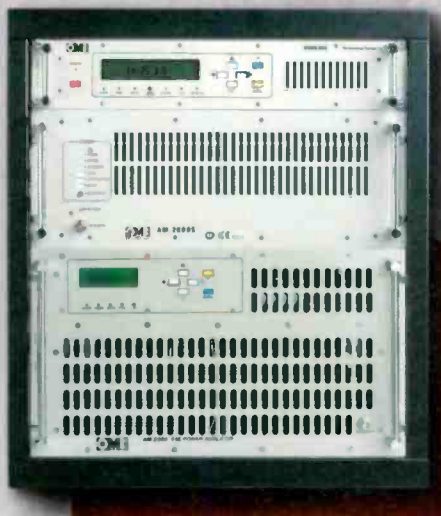

EM 2000

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 amplifiying modules work independently thanks to a power combining struc ure 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 amplifiying modules works independently thanks to a power combining structure that provides high isolation between them.

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