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www.RadioMagOnline.com

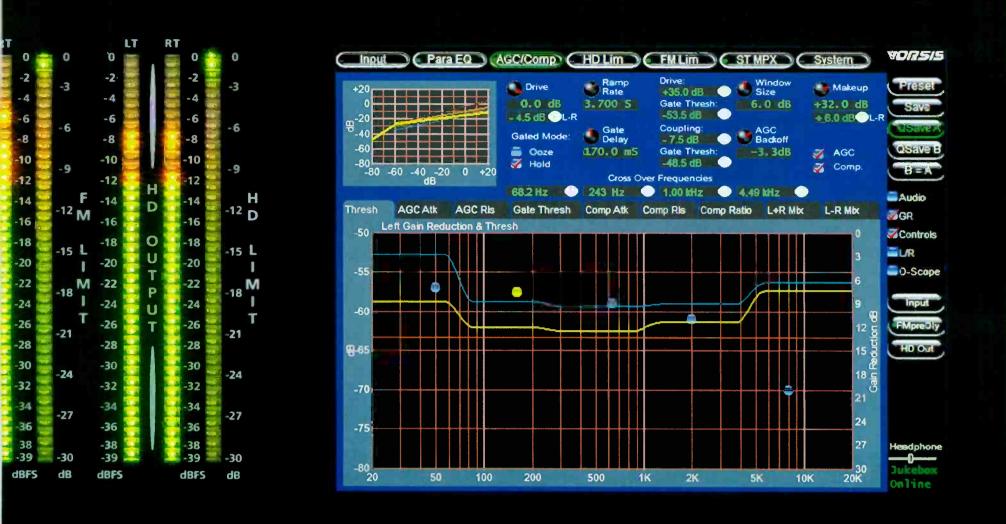
# A supplement to Radio magazine

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Visit us at NAB Radio in Booth #526

# Product Source

## The 2009 Product Source

The design of this year's *Product Source* gives me a renewed energy every time I look at it. Every year this supplement to *Radio* magazine takes a lot out of our staff; from selecting products to design to editing and making sure we have everything we're supposed to, it is a giant undertaking. Unlike the design this year, a spattering of random haphazard colors, this is anything but thrown together.

The energy I see exuded by the Product Source this year hopefully symbolizes a new beginning for broadcast manufacturers, and consequently for you, the reader. It's been a tough year for everyone, but some companies are forging ahead strong with renewed energy and really great products.

Look out for our 2009 Radio Pick Hit winners splattered throughout this publication. They represent the best this past year had to offer. We look forward eagerly to what next year will bring.

In the meantime, there were still plenty of products released in the past year. We hope we have brought together items that will make your job easier, more efficient, that you will take pride in what you do (because we sure do!) and you will have a renewed energy for the coming year.

#### Erin Shipps, Associate editor

## **Special Section Index**

Out and About
Portable Production
Beyond These Walls
Reference Room

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## **2nd Annual Radio Excellence Awards**

#### Online Sales & Marketing *Angie Gates*

Phone: 913-967-7516 Fax: 913-514-7516 E-mail: angie.gates@penton.com

#### List Rental Services Curvin Lovejoy

Walter Karl Phone: 845-732-7262 Fax: 845-620-1885 curvin.lovejoy@walterkarl. infousa.com Following the success of last year's first-ever *Radio* Excellence Awards, we are excited to present year two! 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, rew 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 2010 NAB Show.

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

2010 Excellence Awards

Radio

### 4 2009 Radio Product Source

# HYP&LOCAL

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e-mail: info@comr

COMREX



#### **IP** audio console system Axia Audio

Powerstation: This all-in-one IP-audio console system combines analog, digital and microphone I/O, a console power supply, DSP mixing engine and network switch into one package. To set up Powerstation,

connect the studio equipment with standard CAT-5 cables, connect an Element console with just one cable, name the sources with a browser, and it's ready for air. Powerstation can be the heart of a standalone studio or part of a larger Axia network. Powerstation simple networking can daisy-chain up to four Powerstations for a multi-studio installation without a separate core switch

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

#### Voltage regulator/ power conditioner **Furman Sound**

P-6900 AR E: Part of Furman's Prestige Series, the P-6900 AR E provides voltage regulation, power protection and filtration. It utilizes Furman's True RMS Voltage Regulation Technology to provide stable voltage to connected equipment, along with Furman's SMP/LiFT/EVS Technologies for professional-level protection and linear ac noise filtration. The P-6900 AR E provides stable voltage output (selectable between 230V and 240V). Furman's True RMS Regulation Technology utilizes an ultra-low noise, microprocessor-controlled, eight-tap torroidal autoformer, assuring quiet operation for critical listening and recording applications with minimal leakage of stray magnetic fields. The P-6900 AR E also features a switchable front-panel digital voltmeter/ammeter with a color-coded voltage range indicator for comprehensive power monitoring, and a front-panel USB charger for cell phones, personal media devices, or to power a USB lamp.

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



#### **Two-channel recorder** Nagra

design is patented by Sennheiser.

Nagra LB: Compact and versatile, the Nagra LB is a two-track recorder. It is a 16/24bit device with an Ethernet connection and Bluetooth communication. Sampling frequencies of up to 192kHz are available depending on the application desired. This portable recorder can record and edit the material in the field and return it to the studio over the GSM network by means of the Bluetooth communication with a mobile phone. It can be connected directly to the Internet through its Ethernet port. Files can be immediately transferred over IP, representing an easy way of putting music and other recordings onto the Web. The microphone inputs are fitted with a special integrated vortex filter to virtu-

860-434-9190; www.sennheiserusa.com

lit@sennheiserusa.com

**Headphones** 

**Sennheiser Electronic** 

Audiophile HD 800: A unique transducer and ear cup

design are two of the key design features of Sennheiser's

HD 800 headphones. This audiophile model uses a 56mm

sound transducer (reportedly the largest to be found in any

dynamic headphones) and an ear cup design that directs

sound waves to the ear at a slight angle. The vibrating part

of the diaphragm is not a circular surface area but a ring, which

is able to set the entire air volume over the transducer into motion,

generating the full-bodied sound of the HD 800. This annular

ally eliminate wind noise. They are equipped with linkable audio limiters, +48V phantom powering and independent sensitivity selection switches. An AES digital input can also be fed to a dedicated XLR connector.

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

Spectrum analyzer

**Bird Technologies Group** 

#### **Signal Hawk SH-**36S-PC: The Signal

Hawk SH-36S-PC analyzes the radio frequency spectrum, measures intended and

interfering signals, and allows setup of param-

eters such as frequency and amplitude markers. It displays signal amplitude versus frequency and saves traces on a PC. It is fast, accurate and sensitive (-135dBm noise floor) with the same spectrum analyzer functionality as the Signal Hawk handheld and rack-mount units. It is built in FCC compliance masks, has a waterfall display and a sophisticated spectrum analysis software package is included with the product.

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

#### **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<sup>-1</sup>/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 new 3-sided on air light with dimensions: 5"H, 3-1/8"W, 2-3/8"D.

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

#### **AES audio switcher Titus Technological Laboratories**



3-DRX: This AES digital audio device integrates both a two-input AES-3 switcher and a 24bit 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

#### **USB** microphone **Samson Technologies**

Go Mic: Go Mic is designed to record professional quality audio on any computer. Its unique design provides the user with a built-in laptop mount or allows placement on a multidirectional hinge; ensuring consumers

record only the intended audio. Go Mic is for applications such as Skype, Ichat, webcasting, podcasting, Voice over Internet Protocol and voice recognition software. Features include plug-and-play MAC and PC compatibility, USB interface for high-resolution, digital audio streaming, a custom design that clips to a laptop or sits

on a desk, compact, folding design that allows for easy storage in a brief case or laptop bag, condenser transducer with pressure gradient USB digital output, frequency response of 20Hz - 18kHz, selectable cardioids or omnidirectional polar recording pattern, available in black or white

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



#### **Digital EAS encoder/decoder Digital Alert Syst**



Equipment sales and service Mooretronix

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

520-896-0303; www.digitalalertsystems.com; info@digitalalertsystems.com

Used equipment dealer: With more than 20 years experience in design, construction and maintenance of every configuration imaginable, Mooretronix is able to assist you in making your operation as efficient and cost effective as possible. 800-300-0733; www.mooretronix.com rrmoorejr@aol.com



#### Modular analog console Arrakis

MARC-15: The MARC-15's modular design allows the console to be configurable, featuring 15 channels with up to 30 source inputs. Three output buses handle on-air, background production and a third mix. The mainframe supports up to two phone modules for simultaneous callers. The console features a PC-USB input module so that the console can play from and record to a Windows PC in digital. The optional studio monitor module facilitates control room/ talk studio applications

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

#### 2009 Radio Product Source 6

# **AM Antenna Solutions**



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**SINCE 1963** 



Audio-over-IP transmission Comrex

Bric-Link: Bric-Link transmits audio over IP networks and is suited for point-to-point "nailed up" audio links over a wide va-

riety of data circuits including ISM band IP radios, T1/E1s, satellite data channels, WANs and LANs. Contained in a small, desktop package, two BRIC-Links can be mounted in a 1RU rack space. Balanced analog 1/4' I/O, as well as switchable AES I/O, four contact closures, ancillary data and consumer level front panel I/O for monitoring are provided on BRIC-Link's compact and rugged chassis.

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

#### Portable transmitter **OMB** America

MRI 15: The MRI 15 is made of a four-audio-channel mixer and an externally synthesized FM transmitter that can provide a 15W RF output signal. This unit has been designed to be used as emergency radio station, really easy to use and to install. It can also be used as a small radio station in rural areas, or even as

an exciter of a more powerful transmitter. On its LCD Display,



**Connector protection** 

Wireworks

transmission parameters like forward power, reflected power and FMband modulation level (in 10kHz steps) can be visualized. The MRI 15 works with internal or external 12Vdc power supply, or with ac power supply between 110 and 220Vac. 800-662-4872; www.omb.com/en; usa@omb.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 builds-in 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

#### Social radio network **4Ever Centric Media**

Pantheon: Los Angeles-based social media developers Gamecentric Media and Chicago-based media company Njs4ever Networks have entered into a joint venture to launch a social media application suite for radio broadcasters. Dubbed 4EverCentric Media, this joint venture will produce Pantheon, a social radio network that merges traditional radio properties with customizeable and extensive social networking applications to foster engaging, interactive and user-friendly brand experiences between radio listeners and stations. End users can embed their favorite radio stations on a multitude of social networking platforms, focusing on Facebook and My Space. The technology itself allows for highly interactive applications, enabling fans to communicate with each other, rate songs, highlight sponsors and view additional information as determined by the stations while driving traffic to predesignated online destinations.

> www.4EverCentric.com paul@4evercentric.com

#### Software audio workshop **RML Labs**

Saw Studio Basic: Saw Studio Basic is based on the same original design concepts as Saw Studio, but now has more power, better audio guality and a built-in virtual console. Saw Studio combines virtual mixing and hard disk editing technologies into one application. This fully controllable console is coupled with a 24-bit hard disk engine. Its interface is a fully developed mixing console with multi-track recording/editing.



www.sawstudio.com; support@sawstudio.com

#### **On-air phone interface Broadcast Bionics**

Anywhere: Listeners already stream a station through their computers via the Internet. Anywhere makes it possible for them to contribute live through their computers. By using the Anywhere portal on a website, one click connects a listener to the studio, and allows them to speak and share video using a webcam, chat with the studio using instant messaging, register opinions for a track and agree or disagree with a discussion. A simple registration process captures all the listener information needed in the studio to pre-screen contributions and even provide a photo, and using instant messaging, the studio call screener can continue to assess suitability to progress the call to air.

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

nector safety when used as recessed lowvoltage mounting ring or when installed in NEMA-style surface-mount or flush-mounted electrical boxes. As a recessed low-voltage ring, a Guardian Panel Mount can be easily mounted directly into a wall or anywhere else by using mounting screws, fasteners or toggle bolts. A custom connector panel is then attached to the recessed flange, providing protected connectivity. When

used in conjunction with an electrical box, the mount can be ordered in the exact box size for surface-mount installations. Alternatively, the panel mount can be ordered with a flange one inch larger than the electrical box for flush-mounted applications, effectively enabling the wide flange to cover any seam between the box and the surrounding wall.

**Guardian Panel Mounts:** A simple

steel recessing ring, the Guardian Panel

Mount offers protection to connectors on a

custom panel by easily recessing them out

of harms' way. The mounts increase con-

#### 800-642-9473; www.wireworks.com info@wireworks.com

**USB** audio interface

buzz, noise, insufficient headroom and

incorrect levels. It also includes the most

useful features of the USB Matchbox

products, providing both analog and digital interfaces. There is stereo ana-

log I/O on XLRs at professional levels,

**Henry Engineering** 



#### **Studio monitors JBL** Professional

LSR2300: The LSR2300 Series includes the LSR2328P bi-amplified 8" studio monitor with 165W of amplification; the LSR2325P bi-amplified 5" studio monitor with 90W of amplification; and the LSR2310SP powered 10" studio

subwoofer with an integrated 180W power amplifier. JBL applied the same stringent linear spatial reference criteria used in the design of the LSR6300 and the LSR4300 Series. Instead of a single on-axis measurement of the speaker's performance, JBL's LSR requires 70 measurements. LSR2300's large waveguide and elliptical tweeter aperture work in conjunction with a 1" silk-substrate high-frequency transducer to

deliver superior imaging and smoother frequency response in the control room. 800-852-5776; www.jblpro.com; info@jblpro.com

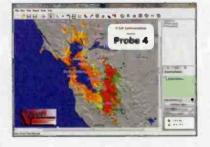


as well as an AES/EBU digital output, plus a headphone output for critical monitoring. The USB Matchbox II features Burr-Brown's generation phase coherent ADC/DAC, in addition to advanced audio circuitry. The unit supports 32, 44.1, and 48kHz sample rates and is plug-and-play compatible with Windows, Mac and Linux operating systems. It also features a built-in ac power supply to ensure operation at professional audio levels with available headroom.



#### **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

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

8 2009 Radio Product Source

# The Remote Badge Of Honor. Go Ahead...Wear It Proud!\*

JK Audio's BluePack™ Delivers Incredible Performance Using Your Cell Phone and Bluetooth™





### **Remote Scenario One - On Scene Interview Live To Station:**

You're at the game - any game...Pop Warner, High School, College, Pro...and you're calling it from the sidelines, live on the air with nothing but your Bluetooth-equipped cell phone, a mic, head-phones and BluePack! You sound great and are able to actually hear the station cues above the crowd noise.



### **Remote Scenario Two - Phone Interview From Anywhere:**

It's the morning after the game. You're doing a post-game wrap up interview for tonight's news from the comfort of your hotel, home, car - heck, you might even still be in bed. Grab your Bluetooth-equipped cell phone, headphones, mic and BluePack and bam! You're recording the interview to your recorder of choice using the world's handiest pocket digital hybrid!

### Info About BluePack and Bluetooth:

REAV THIS BI FIRST ar GO Te

BluePack is compatible with all Bluetooth-equipped cell phones and makes it a snap to connect – just press a button and go – no confusing and unreliable cables. Bluetooth Wireless Technology provides a substantial improvement in audio quality by letting us send digital audio through the phone, bypassing all signal processing in the phone. This results in transmission better than any cell phone call you've ever heard.







\*BluePack has a clip that lets you easily wear it on your belt

# JKAUDIO TOOLS FOR SUCCESSFUL BROADCASTS jkaudio.com

JK Audio, Inc. Sandwich, IL 60548 USA • Toll Free: 800-552-8346 • Tel: 815-786-2929 • Fax: 815-786-8502 • info@jkaudio.com

# Produci Source



**Plus-X 300:** The Plus-X 300 I/O interface simplifies distribution of monitoring and control to all areas of a facility by using Ethernet-based connectivity to the ARC Plus or ARC Plus SL. In addition to traditional



transmitter site applications, the Plus-X 300 is well suited for use in studios, control rooms, IT spaces because wiring paths back to the remote control rack are no longer required. Each of eight input channels can

be configured as either metering or status, allowing users to adapt the Plus-X 300 to the monitoring requirements of each installation. Relay outputs may be used in any combination of individual relays (momentary or latching) or in mutually exclusive raise/lower pairs. 800-255-8090; www.burk.com; sales@burk.com

#### EAS watch Endec serial monitor Cascade Technology Corporation



**ESM-1:** The ESM-1, Endec serial output monitor, is a freestanding unit designed to monitor an Endec for received EAS alerts. The ESM-1 provides reports for required weekly and monthly tests, saving time by eliminating the need for station test surveys and county checkins. When the unit detects Endec activity, it converts the alert message into a digital packet and sends the information to the server through an Ethernet connection via Internet. Unlike the RSM and OSM models, this unit does not monitor on-air broadcasts and therefore does not report whether the station is on or off the air. Connectivity is regularly confirmed by communications with the server. Should there be a connection disruption, the unit stores alert information and updates the server as soon as the connection is restored. The ESM-1 reports all alerts sent to the station's Endec allowing the EAS Watch server to detect and track spurious EAS alerts.

360-988-045; www.easwatch.com; info@easwatch.com

#### Audio over IP for broadcast Barix Technology

**Extreamer 1000:** The Barix Exstreamer 1000 is a professional audio-over-IP device designed specifically for radio broadcasters. The one-half 1RUunti combines Barix Instreamer and Exstreamer functionality in one device. It is also the first Barix Instreamer or Exstreamer device to include contact closures to trigger and control local announcements.

Eight contact closures transport data information with the audio to trigger and control local announcements, such as station identification, an EAS signal, or even local studio cut-ins to a national feed. The addition of contact closures eliminates

the need to use additional automation equipment to trigger local inserts. Other features include balanced I/Os, a high-quality signal converter (analog to digital and vice versa) with a significantly higher decibel level to reduce noise and improve audio quality, and a professional AES3 interface to capture a digital signal at the source and maintain it throughout the chain.

866-815-0866; www.barix.com; info@barix.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. 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** 

#### 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.

760-744-0700; www.rfparts.com rfp@rfparts.com

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#### Stereo Matching Unit Musicam USA



**MAT1:** The Musicam USA MAT1 translates between the low-level, unbalanced signals used by domestic and semi-professional equipment and the more robust, balanced format used in the professional environment. It is therefore the ideal solution to the common studio problem of interfacing inexpensive record/replay units to professional mixing consoles and other balanced equipment.

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

#### Radio broadcast transmitters Harris

HPX Series: HPX transmitters are available in analog FM-only or common amplification HD Radio versions, and incorporate an advanced transmitter control system. The compact design of the HPX transmitter utilizes matching amplifier and power

matching amplifier and power supply cabinets to minimize the footprint at the transmission facility. Its common architecture at all power levels simplifies the upgrade path for stations who wish to migrate from analog-only to an HD Radio common-amplification system or

increase HD Radio broadcasting power to the proposed -10dB when needed. 800-622-0022; www.broadcast.harris.com; broadcast@harris.com

#### Music libraries Firstcom Music

**Noise Pump Updates:** Noise Pump is a uinque production music library providing a wide range of musical styles and attitudes from down tempo chill to traditional orchestra. The five new volumes include Heritage Suite (orchestral themes); Media Business (contemporary overview of digital themes and business applications); Urban Drama (filmic scoring elements with an urban twist); Culture Clash (rhythmic pop); and Lo-Fi Culture (down tempo, chill and hypnotic time warps).

800-858-8880; www.firstcom.com; info@firstcom.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 80,2EX 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 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; Hires 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

#### Radio automation system *Wide Orbit*

WO Automation for Radio: Formerly Google Radio Automation, WO Automation for Radio ensures that stations are on the air every minute of every day. With it, stations can ingest, manage and broadcast audio content, and it integrates fully with WO Traffic. Features include instant availability, podcasting, HD Radio support, third-party widgets and an API, scalability and an imitated on-air screen.

Series III is now available to order as an analog-only variant for those currently concerned with audio analysis only in the analog domain. Analog-only units can be upgraded to digital functionality in the

Analog-only

**Prism Sound** 

audio analyzer

future. The family of analyzers offers comprehensive analog and digital audio signal generation and analysis, plus support for digital audio carrier testing, quasi-anechoic microphone/loudspeaker analysis and testing of Windows sound devices.

Dscope Series III Update: Dscope

973-983-9577; www.prismsound.com sales@prismsound.com

> musical styles and attitudes fra ; Media Business (contempora an twist); Culture Clash (rhythn



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





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# Product Source

#### Lighting Litepanels

**1x1 Low-Profile:** The Litepanels 1x1 Low-Profile fixtures protrude three inches from the ceiling or wall surface where they are mounted. This results in practically no loss of headroom or room space. Because the LED lamps on the Low-Profile are tilted at 40 degrees off axis, light is projected forward from the fixture to softly light the subject. Like all Litepanels LED lighting fixtures, the Low-Profile draws little power, and can be operated from 12Vdc. The fixtures are cool to the touch, even when operating, so they add no heat to a cramped space. And like other Litepanels 1x1 fixtures, it is dimmable via DNX or a control on the fixture itself, with no notice

able shift in color temperature. 818-752-7009; www.litepanels.com

info@litepanels.com

#### Linear PCI express sound cards Audio Science

ASI564x Series: The ASI564x series are the junior partners of the ASI6600 series of PCI Express sound cards, used extensively in radio station automation. The cards retain high end features such as +24dBu balanced analog audio with 110dB dynamic range,

together with AES/EBU digital I/O with hardware sample rate converters on all inputs. Multi-channel support is standard. Using the surround sound extensions (SSX), streams of up to eight channels may be played, recorded and mixed. These cards are ideal for applications such as radio production and automation systems that do not require DSP-based MPEG compression. The ASI564x series contains three models: The ASI5640 has four stereo/eight mono I/O with balanced analog interfaces, the ASI5641 has four stereo/ eight mono I/O with AES/EBU interfaces and the ASI5644 has four stereo/eight mono I/O with balanced analog and AES/EBU interfaces.

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

## PowerStation: the new console system from Axia.



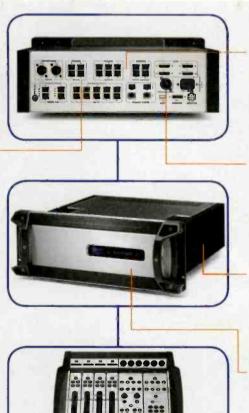


## Because there's no such thing as too much uptime.

All stops removed • Twenty years from now, you'll have forgotten this ad. But you'll still have your PowerStation, the full-featured onebox IP-Audio console/router system hardened with industrial-grade components and redundant power capabilities. Tough enough to take a football to the groin and keep on going. PowerStation minimizes setup and maximizes "bang for the buck." Engineered without compromise for broadcasting without interruption.

**E** - **I** - **E I** / **O** • Finding space in the equipment racks is like living in a barnyard: too many chickens, never enough coops. So our team of obsessive designers fit an entire studio's worth of inputs, outputs, logic and network connections – plus an advanced DSP mixing engine and a massive console power supply – Into just 4 RU. There's inputs for 2 mics, 4 analog inputs and 2 AES/EBU inputs, with 6 analog and 2 AES outputs. 4 GPI/O logic ports round things out. Want even more? Just connect the PowerStation Expander to Instantly *double* the I/O — or plug some Axia Audio Nodes into its built-in Ethernet switch.

Everything's included • Yeah, we said everything: PowerStation combines half-a-dozen essential tools into one compact unit. No hidden extras to buy, no "gotchas" after purchase. Inside that muscular chassis you'll find a bulletproof mixing engine capable of handling consoles up to 40 faders, a beefy power supply (with optional redundant power), machine control ports, and audlo I/O, all in one box. And of course, since it's from Axia, the IP-Audio experts, a studio built with PowerStation can stand alone — or it can become a part of a large network quite easily. Thanks to PowerStation Simple Networking, you can daisy-chain up to 4 PowerStations directly for easy multi-studio installation without the need for a separate core switch. Just another way Axia makes IP-Audio easy.



Easy as TT • PowerStation combines a console DSP engine with audio and logic and a network switch, all in one box. As its name implies, there's a whole lot o' muscle inside that burly frame, but that doesn't mean it's complicated. In fact, setting up PowerStation couldn't be easier: connect your studio gear with standard CAT-5 cables, connect your console with Just one cable, name your sources and set preferences with a browser, and you're ready to rock. PowerStation makes building studios about 3.14 times easier than ever.

Redundant power redundancy • The power supply is the heart of any broadcast equipment, right? That's why PowerStation is hardened against failure with a super-duty power supply that sports enough amps to power an arc welder. And for those of you who like to wear a belt and suspenders, there's even a connection for redundant auxillary backup power - with automatic switchover, naturally - that kicks in If it's ever needed.

Fan free • PowerStation is silent and fanless. Because studios today are already full of PCs, laptops and playout servers clicking, whirring and generating heat -- who needs more of that? Not only is there no in-studio noise with PowerStation, those big extruded heat sinks are just plain cool. No pun intended (or maybe it was. We're like that, you know).

Built like a tank • Remember when consoles were built to last? We do. At Axia, we're all about the long haul. There are no compromises: PowerStation uses only best-of-the-best components. Like studio-grade Mic preamps and A/D converters. A rigid, steel-framed, EM-tight chassis that shrugs off RF like Walter Payton brushing off tackles. An Industrial CPU designed for high reliability in harsh environments. Beefy extruded heat sinks. Big, brawny handles to make rack-mounting easy. (And it looks cool, too.)

#### Active stereo matrix switcher Broadcast Tools

SS 4.4: The SS 4.4 provides matrix audio switching of four stereo inputs to four stereo outputs. Matrix switching allows any or all inputs to be assigned to any or all outputs. The SS 4.4 may be controlled via front-panel switches, contact closures and/or the multi-drop RS-232 serial port. Additional features include stereo silence sensor with relay, front-panel stereo LED VU meters, stereo headphone jack with level control, powered monitor level control all with output selection switching, 16 GPIs, four GPO open collectors and four SPST relays. Installation is simplified with pluggable Euroblock screw terminals. The SS 4.4 is supplied in a 1RU chassis. 877-250-5575; www.broadcasttools.com

bti@broadcasttools.com

#### Art diffusor Acoustics First



Transfusor Model C: The Transfusor Model C is a diffuser that passes light and can be used as a cover for a standard 2' x 2' light fixture, grid mounted, placed in front of windows or skylights, or mounted directly to a surface reducing both acoustical and visual glare. It is a patented series of binary array diffusers used to increase the clarity of sound while maintaining the ambient character of the room. The range is extended over other designs by its unique angled end caps to further control acoustic reflections above 4kHz. It is available in a variety of different materials including furniture grade woods and Class A plastics. Easy to install, these sound diffusers can be direct mounted to walls and ceilinas, covered with fabric stretch wall systems or dropped directly into standard T-bar grids. 804-342-2900; www.acousticsfirst.com info@acousticsfirst.com

#### Element 2 - 0 • With more than 1,000 consoles already on the air, Element is a huge hit. And now, thanks to -

suggestions from our clients, it's better than ever. Element 2.0 has cool features like Omnia<sup>™</sup> headphone processing presets to give talent that "air sound", super-accurate metering with both peak and average displays, one-touch phone recording with automatic split-channel feed, automatic mix-minus for every fader, an eight-channel Virtual Mixer that lets you combine multiple audio streams and control them with a single fader, and metallic bronze or silver module overlays. And we haven't even begun to tell you about Element's Show Profiles that instantly recall talent's favorite settings, its built-in Telco controls, fully-integrated talkback/IFB and Mic processing by Omnia. And durable? Element is nearly Indestructible, ready to take whatever pounding ham-fisted jocks dish out and keep going. You want examples? Element's avionics-grade switches are rated for more than two million operations. What look like ordinary rotary controls are, in reality, bullet-proof optical encoders — no wipers to wear out or get nolsy. The silky-smooth conductive-plastic faders actuate from the back, where it can't wear or chip off. The frame is made from thick aluminum extrusions that are stronger than truck-stop coffee. To find out even more about Element, visit <u>AxlaAudio.com/Element/</u>. Grab some coffee and prep for a good, long read — remember, our marketers get paid by the word.

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You're covered Axia has the most comprehensive warranty in the industry — 5 years parts and service. And (not that you'll need it), free 24/7 technical support, 365-daysa-year. We've got your back, my friend.



AxiaAudio.com

#### In-line audio VU meter, balanced Ocean Matrix

**OMX-INVU1:** OMX-INVU1 is a dualchannel, balanced, line-level audio VU meter with XLR input and outputs. XLR to TRS adapters are provided for 1/4" phone (TRS) applications. 12Vdc powered with a provided 110-220Vac adaptor. The unit may also be battery powered. www.markertek.com

#### **12** 2009 Radio Product Source

#### **Noise canceling headphones** Phiaton

PS 300 NC: Unlike many competing headphone models, the PS 300 NC still plays audio even if the noise-cancelling battery dies. It also features a convenient mute button so users do not need to remove the headphones to hear outside sounds. The PS 300 NC provides up to 18 hours of listening time on its rechargeable lithium-polymer battery. Phiaton ships the headphones with an extra battery as well as a battery charger. The battery charger also works in conjunction with a USB cable, allowing users to

charge the battery with a PC, laptop or from nearly any location. When the PS 300 NC is worn, the ear pads contract, exerting pressure on the front of the speakers. Phiaton's VH Sound Technology reduces air pressure and transforms incoming noise into reversed phase signals that cancel unwanted noise.

866-313-3203; www.phiaton.com; info@phiaton.com

#### 950MHz STL Harris

Intraplex HD Link: This 950MHz STL was built around cn integrated IP gateway. HD Link supports multiple channels of audio along with IP transport for HD Rodio, and can take advantage of any available IP return path for TCP support with plug-and-play operation. The integrated

IP channel for HD Radio program transport provides a link from Importer-to-Exporter or Exporter-to-Exciter for both audio and data carriage, with a separate low-priority Ethernet port included for other LAN and control traffic. Advanced coding and error correction mechanisms provide resistance to bit errors that can cause glitches in HD



Radio performance. The unit also offers powerful, reliable RF performance (up to 5W), high-quality multichannel audio performance, plus convenient set-up and reliable operation including full metering, monitoring, and command and control capabilities. 800-622-0022; www.broadcast.harris.com; broadcast@harris.com

#### **Facility control software** Audemat



Scripteasy: Scripteasy software suite is a user-friendly application installed on a computer connected to Audemat remote control units (IP2 Choice, Remote Control Silver or remote control option for the Goldeneagle FM, AM, TV, HD, DVB) and ready for setup. The intuitive GUI interface, consisting of the creator and the master view modules, supports easy development and allows real time status display and management.

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

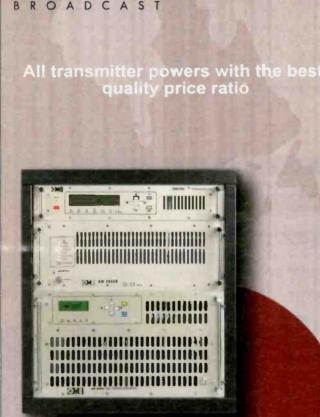
#### **Original music creations GMP** Music

Production music libraries: Gene Michael Productions has expanded GMP Music libraries to 344 CDs. New releases for GMP Music include: Drama Orchestral, Quirky and Eclectic, ADSHOP spot music, Cultural, Post Rock and Fusion Jazz. GMP Music has enjoyed recent placements in network and cable programming, ads and promos. Delivery formats include Itunes encoded AIF and MP3 files on DVD, online download AIR, WAV and MP3 files and CDs

800-955-0619; www.gmpmusic.com gene@gmpmusic.com

#### Asset management **Dalet Digital Media**

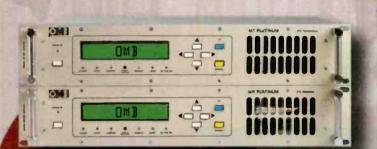
Dalet Plus 3.0: Dalet Plus is an asset management platform designed for HD production workflows and archiving for news, sports and programs, as well multimedia content creation and distribution to Web, Mobile and VOD platforms. Integrated powerful production tools to ingest, produce, play-out and archive are packaged into four offerings: Dalet Enterprise Edition, Dalet News Suite, Dalet Media Library and Dalet Radio Suite HD. Version 3.0 Dalet solutions will include features such as integrated CG production in the Dalet timeline; a new Dalet Dashboard for system-wide monitoring and analysis; native integration with Sea Change video servers; and new ingest technology based on cost effective IT servers. 212-825-3322; www.dalet.com sales@us.dalet.com



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# Product Source

**IP codec** 



#### **Tieline Technology Bridge-It:** Bridge-It allows users to tailor the codec to suit individual requirements. Encode-only or decode-only versions or both are available. Bridge-It has an SD card slot for failover playback of prerecorded audio, and the unit's menus can be fully programmed using comprehensive front-papel bardware

playback of prerecorded audio, and the unit's menus can be fully programmed using comprehensive front-panel hardware that includes a keypad and LCD display, or by using a Web interface. It is designed for desktop use, or two units can be installed side-by-side in a purpose-built 1RU mounting bracket.

keeper LTD Digital Hybrid

JK Audio

Btidge-It comes with a range of high performance broadcast algorithms plus optional AAC LC and AAC HE. Standard algorithms include 16-bit 22kHz linear audio at less than 12ms encode delay for uncompromised audio, G.711 G.722, MPEG

audio at less than 12ms encode delay tor uncompromised audio, G./11 G.722, MPEG Layer 2 and Tieline Music. The Tieline Music Plus algorithm also provides 22kHz mono, dual mono and stereo with 20ms encode delay at under 100kb/s. Bridge It has all the expected broadcast input connectors. Simultaneous analog and digital AES/EBU audio outputs are provided on XLR connectors and it includes a 1/4" stereo headphone output.

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

#### Digital hybrid JK Audio

**Inkeeper LTD:** Innkeeper LTD is a desktop digital hybrid providing talk show quality phone connections. This digital hybrid connects audio signals to a standard

analog telephone line without the transmit/receive crosstalk common to analog hybrids. Its digital signal processor (DSP) continuously monitors both the phone line and audio signals. This proprietary, dual-convergence echo canceller algorithm can achieve separation typically exceeding 50dB, without any setup and without sending a noise burst down the line. An auxiliary telephone is only required to place outgoing calls. The Remote jack allows connection to a JK Audio Guest Module, for remote control and dialing without an auxiliary telephone.

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



Towers & Poles A Division of Sabre Industries, Inc. 1-800-369-6690 broadcastsales@sabrecom.com



#### Mid-field monitor Blue Sky International

**SAT 8:** Blue Sky's SAT 8 is a three-way, tri-amplified, 300W, compact mid-field monitor featuring an 8" high excursion hemispherical woofer, a low distortion 4" hemispherical midrange driver, and a 1" dual ring radiator tweeter with integral



waveguide. To reduce destructive cabinet diffraction reflections, Blue Sky has developed and incorporated into the baffle, the proprietary Multi-Aperture Acoustic Diffraction Absorber, which helps to maintain smooth on and off axis frequency response throughout the critical MF and HF frequency range, without the need for a large wave-guide or horn. The rear panel also has controls for full space (placement in a room) or half space (mounted in a baffle wall) operation, along with individual HF, MF and LF level trims, as well as controls for variable gain settings. **516-249-1399; www.abluesky.com; info@abluesky.com** 

#### Remote control Circuitwerkes

**Sicon-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

#### All-digital portable audio system Amplivox Sound Systems



SW915: The SW915 digital audio travel partner delivers 250W to audiences up to 10,000, covering rooms as big as 30,000 square feet. Standard equipment includes a UHF eight-channel diversity internal wireless receiver (with choice of handheld, headset, collar or lapel mic and transmitter,} a CD/RW/MP3 disc player with pitch control plus SD card slotand USB input. Additional features like ducking and a

remote control make the unit easy to use. The digital audio travel partner runs on either ac or battery power with up to 10 hours of runtime from two user-replaceable 12V rechargeable batteries. The self contained system is portable and durable - with retractable handle and large wheels for easy travel and maneuverability. 800-267-5486; www.ampli.com

Fiber optic acoustical panels **Auralex Acoustics** Sonolux Elite: Sonolux Elite fiber optic acoustical panels incorporate Auralex's Pro Panels with Isky's fiber optic lighting, offers a plug-and-play star field experience. These midnight blue panels feature Isky's Star Engine lighting effects, which mimic the random glimmer of the night sky. Sizes include 24"x24" 30"x30" and 48"x48" Each kit includes all the tools necessary for installation and requires zero maintenance once installed. Custom sizes and shapes are also available upon request. 317-842-2600; www.auralex.com auralexinfo@auralex.com

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**14** 2009 Radio Product Source

#### Vector impedence analyzer **AEA Technology**

VIA Echo: The Echo is a hand-held vector impedance analyzer (vector network analyzer), spectrum analyzer, power meter, and frequency domain reflectometer (FDR) in one instrument. Models come in frequency ranges of 4MHz to 1.0GHz or 4MHz



to 2.5GHz. The VIA Echo network analyzer was designed for performing antenna testing and tuning, transmission line testing and fault locating, cellular. site turn-up testing and troubleshooting. It can be used for individual component testing, system or network testing. The VIA Echo's all come with two ports S11 and S21 to perform both reflective and loss/gain measurements.

800-258-7805; www.aeatechnology.com sales@aeatechnology.com



#### Semi-open pro headphones Avlex

Superlux HD681: Superlux HD681 dynamic headphones employ a semi-open design that enables one to monitor the audio source with realism without being acoustically isolated. Key to the HD681's performance attributes are the large, 50mm dome type, neodymium dia-

phragms. Featuring a 10Hz - 30kHz frequency range and total harmonic distortion of less

than 0.25 percent, the headphones deliver wide dynamic range. The large, circumaural, padded vinyl earpieces provide a comfortable experience. The HD681's 8' singlesided, digital grade cable and the included gold-plated 3.5mm-to-1/4" screw-on adapter provide for freedom of movement and the ability to adapt to a multitude of audio playback sources.

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

#### Masterclock time code generator ESE

324 12 15 58

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

#### Solid-state FM transmitter line Nautel

NV Series: Building on the NV40, Nautel now offers FM output power ranging from 3.5kW to 44kW with the NV3.5, NV5, NV7.5, NV10, NV15, NV20, NV30 and the flagship NV40. The NV Series of products offer several unique capabilities. An



Advanced User Interface (AUI) provides more control with access from virtually apywhere, and the AUI increases station efficiency by making it easy to monitor and control. Nautel provides a control system with a 17" touch screen interface that manages the whole transmitter and multiple exciters. Real-time instrument-grade spectral analysis allows a station to guickly ensure that the signal is optimized for digital broadcast. All NV Series transmitters are digital-ready, allowing a plug-in Exgine upgrade to HD Radio broadcasting. Adaptive pre-correction provides linearity and IBOC transmission with no need for additional filters. Common modules across the product line are a plus for customers with multiple transmission sites.



Shively Labs

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

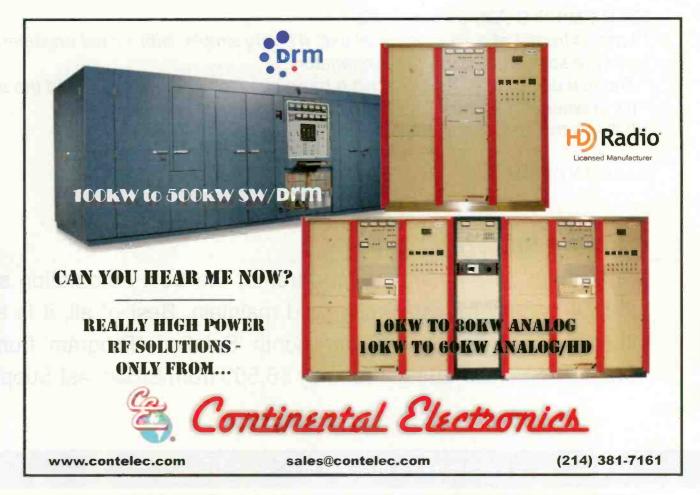
#### Transmitter reseller Transcom Corp

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

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#### 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

#### 15 2009 Radio Product Source

# Read what our users say...

#### KPSM/KBUB, Brownwood, TX

When asked how things were going with his Xtreme Automation Systems he replied, "Real well! . . . I would definitely recommend it . . . it's trouble free . . . I never hear any complaints . . . I believe in keeping up with the newest & best equipment . . . I've had other automation systems . . . this is our 3rd & I believe in having the best equipment in our stations!" Jack Ruth (owner)

#### KIQS, Four Corners Broadcasting, Durango, CO

"I love the flexibility (of Xtreme). The switching capability of the bridge is great. I've used (other automation) & Xtreme is much more user-friendly. I have recommended it for cost, capability & support. I always get an answer from your support guys!" Ward Holmes, Regional Manager

#### WHFT, Avon Park, FL

"The tech support is a huge help. Nothing but good things to say, they've always been great & resolved any issues quickly." Tony Scott, Program Director

#### WJQS, Jackson Mississippi

"Everything's GREAT with the Xtreme! I'm running 3 Xtremes. I love it because I can run it remotely from home. I would definitely recommend it because it's easy to work with & once you get started you can't break it!" Monte Lyons, Operations Manager

WMER, Meridian, MS

"I love (Xtreme)! I'm a one man show . . . & it does the work of four people! Support is wonderful & very patient! Even when they're busy they always call back right away! I have made several referrals to my friends."

Mike Glass, owner

#### Woodland Hills, CA Internet Radio

"You bet I'd recommend it for the ease of use & it's robust. I learned the software in about 15 mins." John Tobin

#### KIKO-FM/KIKO-AM, Claypool, AZ

"I rate (Xtreme) at a 10 for ease of use. It's very simple, with limited engineering experience needed. You open the software & it's all self-explanatory."

"The manual is great! When I have a basic question I can open it & find the answer."

"It's inexpensive & does EVERYTHING! I'm still finding new features!"

Shelly Harrison, General Manager

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### www.arrakis-systems.com

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# Product Source

#### Power Monitor/RF Switch Controller Broadcast Devices

SWP-200: The SWP-200 package consists of an RF directional coupler, an RF sensor and supervisory chassis/display. The product is suitable to measure analog and digital FM or TV RF power. The product is available

with one or two dual-port sensors to monitor up to two transmission lines simultaneously. Other features include reflected power fault detection and three strike counter. The SWP-200 is also a full-featured four-port RF switch controller capable of controlling from one to four RF switches. The unit is compatible with most RF switches. It manages interlock and transmitter control and has an RF fault sensor for automatic switching upon failure and an exclusive Safe Switch feature preventing switch operations with RF present. This product is designed for new transmitter installations or can be added to any legacy RF facility where automation of transmitter operations is desired.

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



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**M4DDM:** This diversity delay monitor is the first Day Sequerra product to incorporate the company's newly developed Timelock DSP algorithm to automatically maintain alignment of the HD Radio main program signal (MPS) analog and HD-1 digital audio. Using its selective off-air tuner, the M4DDM measures the MPS analog and HD-1 digital audio diversity and generates a continuous stream of correction vectors to keep the analog and digital audio time and level aligned. These correction vectors can be processed internally by the M4DDM to delay the digital program audio or can be sent via Ethernet to an HD Radio outputs for confidence monitoring and alarm outputs for loss of program audio and OFDM sidebands as well as HD Radio data and RBDS data payloads. The algorithm used in the M4DDM is based on a new digital audio correlation methodology developed jointly by Harris and Day Sequerra.

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

#### Advanced Wattchman monitor/alarm Coaxial Dynamics



81094: The Model 81094 is the first in a series of Internet/intranet accessible Advanced Watchman 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.

440-243-1100; www.coaxial.com sales@coaxial.com



be removed and used as a stand-alone desktop intercom station, the 3RU intercom panel features a high-resolution touch-screen selector to create multi-channel intercom systems. It works interchangeably with VCOM Control Panels on PCs, tablet PCs and handhelds. VCOM Touchpanel's 7", touch-screen GUI supports a virtually unlimited number of channels configurable for point-to-points, group calls, party lines, and program audio listens. Moreover, the entire VCOM Matrix System can be dynamically configured and monitored from any VCOM Touchpanel on the network. The modular unit supports a gooseneck microphone and has dual integrated speakers. It can also be used with a USB headset (XLR connector optional) or wirelessly with Bluetooth

#### 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 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

#### 716 924-4560 www.ramseyelectronics.com sales@ramseymail.com

#### Touchscreen GUI Intracom Systems VCOM Touchpanel: Des

**VCOM Touchpanel:** Designed using a tablet PC core that can readily

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-Rod Graham, President



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#### 518-827-8502; www.intracomsystem.com; info@intracomsystem.com

#### Direct connect dc power Vycon Energy

**VDC and VDC-XE:** The VDC systems feature higher power and more energy storage in a smaller footprint than VYCON's previous generation system. Utilizing VYCON's patented flywheel technology, the VDC unit provides up to 220kW of dc power while the VDC-XE (Xtended Energy) model supplies up to 300kW of dc power within a single cabinet. For longer run times and higher power capacities, the VDC models can be easily paralleled without needing a special communications link. For extended power outages, the VDC will seamlessly provide enough ride-through protection to transfer to a standby engine generator for a continuous power system. **714-386-3800; www.vyconenergy.com; sales@vyconenergy.com** 



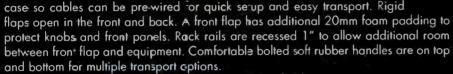
#### **18** 2009 Radio Product Source

# **Out and About**

Useful items to simplify remotes

#### **Pro lightweight** rack case Ace Products/Kaces

KPRC-2, KPRC-4: KPRC-2 and KPRC-4 lightweight rack cases feature rigid plastic panels designed to absorb shock and protect equipment; a water-resistant luggag∋-grade nylon exterior; and 2Cmm padded laptop pocket that opens to the interior of the rack



707-765-1500; www.kaces.com; info@kaces.com

#### Multimedia DSLR **Think Tank Photo**

**Multimedia Wired Up Collection:** With the introductions of the Canon 5D Mark II and the Nikon D90, and with the line blurring between still and video/audio imaging, pho-ographers and videographers are increasingly required to be experts in multimedia.



A "Mu timedia DSLR" is defined as a DSLR that has the ability to take still photos, video, and audio required to create a multimedia presentation. To aic them in carrying their imaging and audio gear comfortably and accessing it quickly, Think Tank Photo has launched an entirely new concept and industry first in carrying equipment, The Multimedia Wired Up Collection. The products include: Multimedia Wired Up 10 and 20, Wired Up Mic Drop In, Wired Up Recorder, Wired Up Big Audic, and Wired Up Wireless Mic Kit.

866-558-4465; www.thinktankphoto.com; sales@thinktankphoto.com

#### **Promotional fent Promotional Design Group**

Pop UP Tent with Logo: Promotional Design Group tents are manufactured in the U.S. and fecture a 3-year warranty. They feature higher-grade fabrics for onger life and 2" anodized aluminum tubing on the rames that can resist high winds without bending easily. All tents are zinc plated to prevent rust and corrosion. All tent graphics are heat sealed to prevent water permeation and an aqueous protective coating is applied using a laminator to all dig tally printed tent tops, sidewalls and short skirts for additional UV protection and

anc a more durable and protective barrier against scuffing. www.promotionaldesigngroup.com info@promotionaldesigngroup.com

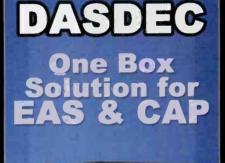
**Custom tents EPS-Doublet** 



Pop-up Terris: This selection of quality graphic ten's provides many options for fu-thering branding efforts. Full coverage custor graphics are available for canopy tents of any size, so it is possible to create virtually any desired effect. If something more cirect is preferred, logo tents provide an ideal showcasing of your company image. Highly customizable, there is no limit to the type of engaging presentation that can be made with our portable aluminum canopies and tents.

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Web: http://www.acousticsfirst.com



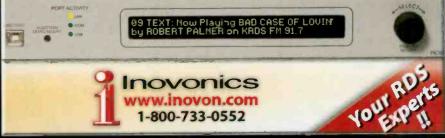
### Inovonics Model 730 is the Swiss Army Knife of Radio Data Encoders

- Supports 'Song Tagging,' TMC and other RT+ apps.
- Versatile connectivity: USB, Serial, 2x TCP/IP, UDP, UECP
- Dynamic-DNS utility for non-static IPs

Firefly: Combining a high-visibility safety-green lid with rows of animated red LED lights, the Firefly offers cable protection and tripping hazard prevention in low-light environments. With a 36" length, it fits in most commercial doorways. Anti-snag features such as tapered channel divers and beveled edges cn the lid prevent bundled cables from snagging during loading and unloading as well as a flat hinge design that starts with the lid instead of the base to keep the lid from "pinching" the cables, and prevents the protector from collecting dirt. 866-222-0030; cableorganizer.com sales@cableorganizer.ccm



- Front-panel programmable
- Fully compatible with popular playout systems and third-party software applications



#### www.RadioMagOrline.com

#### 2009 Radio Product Source 19

# Irce



#### **Broadcast communications system** Wheatstone

Crosstalk: Wheatstone Crosstalk is a new series of monitoring and communications stations for radio broadcast facilities.

Crosstalk integrates with the Wheatstone Wheatnet-IP audio-over-IP and Bridge TDM networking systems. It is ideal for news operations, two-way communication with talent and production staff, locally and at remote sites. Crosstalk is a perfect TOC monitoring station, with the ability to talk down remote feeds for pre-air setup. Crosstalk R-16 is a rack-mount station with 15 pre-programmable talk/listen keys, one dial-up talk/listen key, built-in speaker, front-panel mic, communications XLR-5 headset jack, and stereo 1/4" headphone jack. Desktop versions with eight and 16 talk/listen keys are also available

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

#### FM modulation and AF spectrum analyzer Sierra Multimedia

Microgen TS9080: The TS9080 FM modulation and AF spectrum analyzer has been designed for precision monitoring of FM radio broadcasts. Connected to a standard Windows PC via a USB port, its user-friendly interface displays all modulation data on screen for analysis. The enclosure is a custom designed dual-chamber aluminum extrusion. Audio outputs are provided for headphone or loudspeaker monitoring, with full RBDS decoding available and live off-air data recording. Broadcast data is automatically logged with the included llog software. Remote control is possible with simple text file commands allowing the unit to be controlled from third party software applications. Unique to this class of product is a FFT spectrum analyzer. 479-876-7250; www.sierramultimedia.com; ray@sierramultimedia.com





#### **USB** turret panel **Sierra Automated** Systems

TP-USB: This turret panel provides an easy way for talent or guests to connect a laptop to the SAS audio network. Typically, guests must feed the unbalanced line or headphone output to the audio network, which can lead to audio problems from ground loops and poor audio quality from the laptop's internal sound card. The card puts a USB B connector receptacle in easy reach to provide a bidirectional stereo connection. The panel fits in a 6" × 1.6" space. It connects to the SAS network via a CAT-5 cable. It is also available in

55

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a rack-mount version. 818-840-6749; www. sasaudio.com; sales@sasaudio.com



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, 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.

505-327-5646; www.nottltd.com; ron@nottltd.com

#### **Broadcast supplier Bay Country Broadcast Equipment**

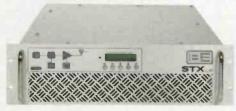


Equipment Dealer: This broadcast equipment dealer offers a 15-day return guarantee. In business since 1997, the company offers new and used equipment and also rents test equipment. The company's website includes a list of recent used equipment offerings as well.

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

### Solid-state transmitter

#### broadcast Electronics



STX LP: This frequency-agile solid-state transmitter is scalable from 1kW to 5kW with integrated FM exciter. Available in 1kW, 3kW and 5kW models, the STX LP transmitter fits a small profile and can be power upgraded in the field by adding PA modules. The STX LP includes IP connectivity for configuring and monitoring operation remotely from any laptop or PC, and is HD Radio compatible for later conversion.

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

#### 20 2009 Radio Product Source

# **Portable Production**

### Handy gadgets for production on the go

#### Modular USB-powered sound card



**PUC2:** PUC2 is a professional USBpowered soundcard with digital and analog audio interfaces. It combines failsafe installation with a new modular design. It still features PUC'n'Plav technology while improving audio quality to deliver up to 24-bit/192kHz. AES-3 is the standard interface of every PUC2 soundcard. The modular design enables delivery of varying interfaces for the back. The analog line input; 'output module provides professional levels +15/+18dBu full scale. The microphone input module with 48V phantom power and up to 60dB gain dissolves the need for additional mic preamp equipment.

+49 2173-967 30 www.yellowtec.com info@yellowtec.com

Portable music production studio



Wavepad: This sound editing software is a full-fea ured professional audio editor for Windows, Mac OS X or Pocket PC. I- lets you record, make and edit music, voice and other audio recordings. When editing audio files you can cut, copy, and paste parts of recordings and, if required, add effects like echo, amplification and noise reduction. Wavepad works as a WAV or MP3 editor but it also supports a number of other file formats including VOX, GSM, real audio, AU, AIF, FLAC, OGG and more. This program is free, but an upgrade called Master's Edition is available with additional effects and features.

303-557-0211 www.nch.com.au

#### Video enhancement software Motion DSP



V Reveal: V Reveal fixes common video problems and offers enhancement features including increased resolution, reduced noise and stabilization. It runs on CPU-only systems, automatically locates all the videos on your PC and presents them in a single gallery, plays video files, features simple editing and sharing capabilities. It can import AVI, MPG, ASF and WMV files. With Quick Time instaled, it can also play MOV, MPEG4 and 3GP files. Minimum requ rements include Windows XP or Vistc, Intel or

TASCAN

AMD : 6GHz CPU, 1GB RAM and 50MB hard drive space. 650-288-1164; www.vreveal.com

## Portable recorder

**DR-07:** Based on Tascam's DR-1, the DR-07 records to SD or SDHC card media, and a 2GB SD card is included with the unit. A stereo pair of electret condenser microphones captures performances as 24-bit WAV or MP3 files. The DR-07 is powered by AA batteries and files can be transferred to computer using a high-speed USB 2.0 connector.

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

## Mikey: Mikey is a recording device for the lood

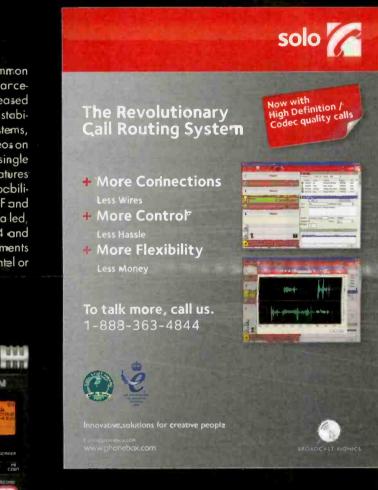
Portable recorder for Ipod

that makes recording lectures, voice notes, live music, and interviews easy on the ubiquitous music and video player. Mikey features a Blue stereo condenser capsule, three-position user-selectable gain settings, built-in speaker for playback and unique user-positioned head. Mikey works with Ipod 4G, 5G, 6G, Ipod Nano 2G, 3G and Ipod Classic and is compatible with most protective cases.

818-879-5200; www.bluemic.com

#### Audio recorder Olympus

LS-11: The LS-11 has an expanded internal memory capacity of 3GB, an intuitive interface that enables users to add index marks and edit files within the recorder, and records in uncompressea 24-bit/96kHz Linear PCM format for digital stereo recordings. For podcasters and other traveling audiophiles who want to keep files small and record basic audio, the LS-11 is optimized for mono-recording as well. 888-553-4448; www.olympusamerica.com



### RECEIVERS

**OUTSTANDING** specifications and pricing on professional quality receivers for **EAS**, monitoring and translators.

The AFC3 is a three receiver rack mount that is configured to your EAS or monitoring specific application. Each receiver has internal frequency selection (PLL) switches, front panel controls and indicators, and rear panel connections.

#### Converter unit Optocore

XGR: The XGR is an eight-in-one, 16-channel, analog-AES/EBU converter in a 1RU enclosure. Its flexibility emerges from the two card slots on the rear that can be equipped with five different card types. No matter whether conversion of analog signals (16 inputs, 16 outputs, 8 inputs and 8 outputs, dual microphone inputs with two independent adjustable gains) to AES/ EBL, or a sample rate converter for AES3 input signals is required, the XGR is the customized device to provide the interfaces in the Optocore and sample rates up to 192kHz. 416-287-5723; www.optocore.com t.helmle@optocore.com

and others. 617.423.9004 www.cakewalk.com

V-Studio 100: Sonar V-Studio 100 inte-

grates a USB 2.0 audio interface, DAW

controller, digital mixer, SD recorder, and VS production pack for Mac and

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face and universal DAW controller. The

VS Production Pack, a powerful suite of

high quality instruments and effects has been designed to enhance productions on

both Mac and Windows in conjunction

with popular DAW software including

Sonar, Cubase, Logic, Abieton Live,

Codec interface Dixon Systems



www.RadioMagOnline.com

**Pro USB:** Dixon Systems' Pro USB codec interface device employs Texas Instrument's PCM stereo audic codec with a USB in place of a computer's sound card and works with virtually any audio recording or editing software. A USB 1.1 (or higher) connection to the PC is protocol and the controller requires no software. Pro USB is a high performance, desktop, professional USB audio PCM-2900E, single USB-compliant full-speed protocol controller.

416-261-3773; www.cixonsystems.com; helpdesk@dixonsystems.com



Price: Approximately \$1,300 (depending on receiver choice)

Select three receivers from our FM or FM/SCA, NOAA Weather, Public Service and/or AM Monitor/Receivers. All receivers are PLL (syrthesized) designs using the latest state of the art components and are available as stand alone receivers as well as in AFC3 combinations.

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# OUCT rce



#### **AC voltage regulators Superior Electric** Stabiline BVR Series: The BVR

Series offers a compact AVR package. With a new (patent-pending), solid-state step regulating design that eliminates full load carrying transformers and servo-motor control schemes, the BVR is up to 40 percent lighter than other devices being offered. The input range is the range of input voltages over which the unit will maintain constant output voltage. BVR models are offered in two standard ranges - narrow and wide range to accommodate various installation needs (source stability and critical load requirements) as well as site location. The power that must be corrected is areater for wide range units than narrow range units. The Series features no moving control parts or fans, all models offer individual phase control, NEMA 1 enclosures allow for easy wiring access, it has low audible noise and low added harmonic distortion.

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

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#### 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.

252-757-0279; www.lbagroup.com lbagrp@lbagroup.com

#### **XLR to USB** adapter Shure

X2U: The Shure X2U XLRto-USB signal adapter is slim, portable and simple to connect. Making it easy to record whenever you want, anywhere you take your computer; it is useful for multi-track recording and features builtin headphone monitoring

with zero latency. It also features easy controls to balance microphone and playback audio 800-25-SHURE

www.shure.com; sales@shure.com



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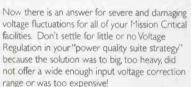
For more information on the new BVR and other power quality solutions visit us at www.superiorelectric.com

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- Integral Long-Life VCA Stereo Level Control
- Balanced or Unbalanced Inputs
- Switch-Selectable Input Sensitivity

#### Web-controlled power switch BTX

#### Dataprobe Iboot:



BTX is now Datapobe's A/V distributor in the U.S. and will carry the Iboot Web-controlled power switch and the Iboot Bar remote power management system.

Iboot is a 10/100 Ethernet-network-attached, IPaddressed, Web-controlled power switch. Anyone with

a Web browser can access lboot to perform power on, off, or reboot (timed power shutdown). Dataprobe's rackmounted, network-controlled power strips allow remote power management to reboot, or power on or off any ac device. The Iboot Bar system provides independent control of each outlet on the device from the Web, Telnet and simple network management protocol (SNMP). Iboot Bar enables network access plus out-of-band control via serial port and internal modem with both data and DTMF tone dial control

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

#### **Combo line Shively Labs**

2700 Series: Shively Labs offers its new 2700-Series comb-line, band pass filter offering four-pole response in a three-pole package. The 5kW balanced combiner shown uses these filters, and the new compact hybrids will fit in tight 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

**Automation interface Enco Systems** 



Shown in AFM-DC1N tabletop chassis

Switch-Selectable Mono (Left) or Stereo Operation

 Amplifier To Drive High or Low Impedance Headsets Convenience of APPFLEX<sup>™</sup> Mounting Possibilities

The AF-SH1 is part of the group of versatile APPFLEX products from Radio Design Labs. These modules combine advanced circuitry, durable all-metal construction, attractive RDL ULTRASTYLE™ colors and versatile mounting possibilities. APPFLEX modules are ready to drop in a cabinet, chassis or panel cutout. Numerous ULTRASTYLE wall mounting accessories and tabletop chassis are optionally available to facilitate system design.



Presenter: Presenter, like its predecessor DAD, sup ports all forms of audio technologies including IP audio,



traditional sound cards, audio router control, console interfaces, and general purpose 1/O, touch screens, etc. The single

screen interface features a panel design with many userselectable tools including voice tracking, hot buttons, recording, database, search and more. Other features include cut, paste and block move of playlists elements, user tabs, backsell log and a number of new and refined user friendly tools designed for live assist and voice tracked operations

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

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# **Beyond These Walls**

When the work is outside the studio

#### USB right-angle adapters L-com Global Connectivity

**UADAA90 Series:** The DB15 allows tables to mate at a 90-degree angle to avoid nearby obstructions, features a 1" low profile, 100 percent shielding throughout for protection against EMI/RFI; go d contact plating provides reliable connections with repeated mating cycles and connector options are DB9, DB15, DB25 or HD15 male to temale with two exit prientations. The new right angle adapters are perfect for applications that require tables to be connected in tight spaces. They come in either exit 1 or exit 2 syles so the cable tan approach from either direction.

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

#### Wall plates Hosa Technolog

**Standard and Pro series:** Available in both single and dual gang configurations, these wall plates bring order to the common challenge of cable clutter. They are available with all the standard pro audio connectors, including XLR3F, XLR3M, <sup>1</sup>/<sub>4</sub>" TRS (balanced phone), <sup>1</sup>/<sub>4</sub>" TS (unbalanced phone), and 4-pole Speakon. The Standard series features generic non-locking connectors while the Pro series features Neutrik locking connectors. Both series of wall plates are manufactured using US32D satin stainless steel precut to accommodate industry standard D-style connectors.



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

#### Locking system Master Lock

Truck Bed U-Lock: Master Lock's Truck Bed U-Lock locking system safely secures virtually anything you can carry in a pick-up truck's cargo area. The Truck Bed U-Lock is designed to deter grab-and-go theft of valuable items as well as constant shifting of objects being hauled. Anchored by a weather proof lock and cable system, the U-Lock is a semi-permanent device whose locking body swivels 190 degrees and it fits into most pick-up truck bed stack hole pockets without any drilling. It is constructed of a hardened steel shackle with a lock body, has a key cover to protect it from the elements and uses Mast Lock's patented Python-style cylinder which allows the cylinder to be charged to make keyed alike sets for use with multiple Truck Bed U-Locks.

www.masterlock.com



#### Wall plate system

AV Portal+: Designed as a wall-mount AV connection system, a comprehensive range of receptacles, switches, connectors and ports are available. Bezels are easy to install, robust and require no tools to remove or replace. Black, brass or steel bezels are available, plus a 10-slot mounting plate that holds the various sectional plates. Configu-

ration of the sect onal plates is coordinated by Altinex. Using a series of screw-driven clamps that press and secure the mounting plate into the wall slot, installation of the system is quick and easy and requires nothing more than a Phillips screwdriver – after which, the bezel snaps into place to provide a quality finished appearance. 800-ALTINEX; www.altinex.com; solutions@altinex.com

#### Embedded Clara e nai a sta adapter Sealayel



Sealink/PC.SC, Sealink+2/PC.SC: Sealink/PC.SC (one-port) and Sealink+2/ PC.SC (two-port) embedded US3-to-serial adapter with a <sup>3</sup>C bracket can be used for adding serial ports to any PC using the computer's internal USB connection. The serial ports cre software configurable for RS-232, RS-422, or RS-485, which eliminates the need for an external converter and provides a clean, pro-essional installation. All configuration and electrical interface selections are hand ed through the driver software, so it is not necessary to shut down the computer or open the system enclosure to set jumpers or dipswitches. Additionally, the devices maintain their e ectrical interface settings in hardware, allowing the host computer to be repaired or upgraded without

**Spotlight bulb Leatronics LED High-Power PAR30:** This general-purpose bulb is made up of five 3Watt, high-power LEDs and replaces filament-based PAR30 bulbs, combining advanced LED technologies, standard ac voltages, 26mm Edison screw-in base,

Narrow-beam



anc light-optimizing design, producing 367 lumens or 2,938cd total end foo candles. The 15-degree narrow-beam PAR30A LED bulb runs on a voltage range of 85V to 260Vac. Other voltages like 12Vac or dc are opt onally available. The Ledtronics PAR30A-style lamp is a direct screw-in replacement for up to 75W PAR30 incandescent or halogen bulbs, but has a maximum power draw of only 9.5W.

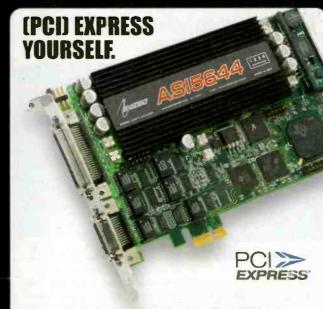
800-579-4875; www.ledtronics.com; webmaster@ledtronics.com



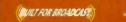
#### Remote control Intrinsic Net

My Sine: The easy-to-use computerbased application allows quick and simple setup of a Sine Systems RFC 1/B remote control, avoiding the time-consuming process of entering everything with a telephone keypad. My Sine allows users to keep multiple

sites in one single database. Multiple RFC configurations can be maintained in one central location. Programming can be through remote DTMF, local DTMF or serial connection. A built-in 10-key phone pad allows users to



Now, and in the future. Our speedy ASI564.; linear PCI Express sound card gives you 4 stereo analog and 4 AES/EBU inputs and outputs so you'll never be at a loss for words (or music). Great features, too, like +24dBu analog levels, SoundGuard surge protection ard SSX surround sound. And the PCI Express connector guarantees your card will work with today's computers, and tomo row's. Analog-only (ASI5640) and AES/EBU-only (ASI5641) cards also available. To learn more, call us at +1-302-324-5333 or go to www.audiosclence.com.





### NAGRAALB Two channel digital audio recorder Bluetooth / Ethernet / USB 2.0 file transmission Full audio editing system Internal flash & removab e compact flash

- Pre-record buffer
- "Hot Svrap" card capable
- Linear PCM, MP2, MP3 recording

reconfiguring the serial ports. 864-843-4343; www.sealevel.com sales@sealevel.com



www.RadioMagOnline.com

check the programming on the fly inside the program. No need to disconnect cables or restart the program to check work. <u>662-324-2769; www.plussine.com; support@PlusSine.com</u>

#### PC backup device Storage Appliance

**Clickfree Traveler:** As light as a pen and the size of a credit card, the flash-based Traveler slips easily into a wallet, allowing users carry up to 64GB of data in their hip pocket or purse. Despite its small size, the Traveler includes an auto-launch feature, so there is no need to install or configure software. Just insert the Traveler's USB plug into a PC, and Clickfree does the rest, searching, copying and organizing more than 400 types of digital data.

866-680-0516; www.goclickfree.com; support@clickfree.com



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# Product Source



#### Iphone radio application Weather Underground

Wunder Radio: Users of Windows Mobile phones will now be able to listen to more than 36,000 live Internet radio streams on Wunder Radio. Awarded the title of best Iphone radio application (terrestrial division) at the Mac World Expo, Wunder Radio has already been downloaded by more than 100,000 Iphone users who use it to listen to AM/ FM and Internet radio stations from across

the world. Users can browse the directory provided by Radio Time, to find radio stations that meet their needs and tastes, searching by location and more than 400 different genres such as music, talk, sports and entertainment.

866-917-9797; www.wunderradio.com; info@radiotime.com



**PPM Assurance:** The PPM Assurance protects ratings and reduces overhead by constantly monitoring all PPM encoders and providing automatic encoder toggling. E-mail alerts and exception reporting keep stakeholders up to date. It is a complete automatic recovery system. In addition to providing reliable backup encoder activation, the PPM Assurance monitor establishes direct data connectivity to the Arbitron equipment to verify code accuracy. And because loss of audio means lost PPM credit, built-in silence sensing enables swift program recovery.

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

#### 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 LE

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

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

#### Advanced Wattchman Monitor®/Alarm

For Analog and Digital Broadcasting



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.

It is designed to work with a series of specialized line sections from 7/8" to 6-1/8" and standard Coaxial Dynamics elements for either analog or digital applications.

Coaxial Dynamics 6800 Lake Abram Drive • Middleburg Hts, 0H 44130 Phone: 440-243-1100 Toll Free: 800-COAXIAL Fax: 440-243-1101 sales@coaxial.com • www.coaxial.com



## Passive single-pair sender *RDL (Radio Design Labs)*

**D-TPS6A:** The D-TPS6A is a single-pair audio sending module compatible with RDL Format-A twisted pair products. The front panel features two gold-plated phono jacks intended for stereo consumer line level audio sources. A studio-quality transformer provides isolation between the audio source and the RJ45 TP cable. This module drives only one cable pair, therefore a TP cable RJ45 jack is provided to accept signals and power from other mic level or line level Format-A senders. Two other single-pair senders may be chained to a TP cable jack, or a single two-pair sender may be connected. If three single-pair senders are connected together, each sender must feed a different pair: A, B or C. The D-TPS6A must be set to feed pair A if it is connected together with an RDL two-pair sender that feeds stereo audio on pairs B and C.

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

#### Studio furniture Graham Studios

a 12V power source.



#### **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 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.

970-225-1956; www.graham-studios.com; rod@graham-studios.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

#### Database mapping capabilities Cavell, Mertz & Associates

FCC Info on Google Earth: Cavell, Mertz & Associates has combined the FC-Clnfo.com databases with the extensive mapping capabilities of Google Earth to display up-to-date FCC broadcast, microwave and tower structure databases in a readily understood visual format. The 3-D building and terrain features of Google Earth permit a unique perspective of FCC data not freely available anywhere else. FCCInfo on Google Earth features include: click on any station's balloon for information such as channel and for links to details from the FCCInfo.com website; microwave paths are plotted above ground using licensed transmit antenna heights and, when available, receive antenna locations; towers and antenna structures are plotted as a vertical line based on their registered heights; show or hide facilities using AM, FM, TV, microwave and antenna structure checkboxes in the Google Earth Places Menu; all data is automatically kept up-to-date with no user intervention; useful for verifying coordinates shown on station licenses and tower registrations; to assure accuracy, broadcast coordinates are automatically converted from FCC datum to Good Earth's native datum; and it works on Windows, Mac and Linux operating systems. 703-392-9090; www.CavellMertz.com



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

## RDS/RBDS Encoder Inovonics

**Model 703 INOmini:** Inovonics' 703 is the newest mini encoder and the first in its line of cost-effective INOmini products. This is a quick way to an RDS/RBDS presence, with easy USB programming using the supplied Windows software. A station's data goes into non-volatile memory, and the unit may then be reinstalled at the transmitter site. The 703 will identify a station by format,



display a station's street name, and continuously transmit station promos or advertising message to your listeners. An optional rack-mount kit accommodates up to three INOmini-style products.

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

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# **Reference Room**

Selections for your bookshelf reference

#### Book Elsevier/Focal Press

Audio

Production

Worktext

Audio Production Worktext, 6e: The modern radio/broadcast student must understand that audio content is now utilized on multiple platforms. Each chapter of Audio Production Worktext has been carefully updated to increase the book's scope from just radio production to the broader topic of audio production. The 6e edition delivers an introduction to the modern radio production studio, the equipment found within and the basic techniques needed to accomplish radio production work. Chapters addressing the basics of field recording and production planning are also included.

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

#### Business start-up book Kaltman Creations

**Start-Up Tactics for the Small Business:** S-art-Up Tactics for the Small Business is not your typical business start-up book, as it goes beyond the business structure, funding and licensing subjects typically found in similar books. Instead, it takes the reader into detailed business planning, practical applications, time management, and budgeting. Mark Kaltman is best known as president of Kaltman Creations. But, he is also known by many for his successful start-ups and early stage management roles with CMT Security Systems, AETA Audio, Klotz Digital, Denon Electronics, Wheatstone and Sabine, and also as a tecipient of Gold and Platinum albums for his audio engineer expertise.

678-714-2000; www.kaltmancreationsllc.com; sales@kaltmancreationsllc.com

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START-UP TACTICS

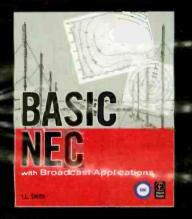
#### Worktexf Elsevier/Focal Pr

Broadcast Announcing Worktext, 3rd Edition: Broadcast Announcing Worktext provides aspiring broadcast performers with the skills and techniques needed to enter this highly competitive field. In addition to the principles of good performance, this text addresses the importance of audience and how messages change to communicate effective y to various groups. TV and radio studio environments, an-

various groups. TV and radio studio environments, announcer specializations and responsibilities, developing a broadcast delivery style, and now how you use your talents for the many areas of information distribution are just a few of the many topics covered.

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

#### Numerical Electromagnetics Code book



Broadcast Applications: Basic NEC with Broadcast Applications addresses computer modeling of MF directional broadcast antennas and illustrates the assets and licbilities of the Numerical Electromagnetic Code (NEC). The

Basic NEC with

book's how-to approach reveals the fundamentals of NEC operation, teaches broadzast applications and shows the reader how to use NEC-2 to: model nonradiating 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. 317-846-9000; www.sbe.org cwaite@sbe.org

Antenna resource

Antenna Zoning: Il you are building, cdding to, modifying, or even upgrading a commercial antenna system, and





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most especially f you hope to erect a new tower, then zoning laws apply to you. Anterna Zoning enables you to successfully navigate structure regulations, permitting and even



lease necotiations Author Fred Hopengarten is a specialized communications lawyer with extensive experience in antenna and tower regulation, and has been involved in many high-profile zoning cases. His Frst-hand experience comes in this book with lessons learned, case studies, examples, and materia presented in an easy-to-understand manner.

317-846-9000; www.sbe.org

#### **Barix Exstreamer 1000**

STL, MP3, PCM, Uncompressed, Streaming, EAS, Station ID Insertion

VoIP, Audio over 1P, Confidence Monitoring, Silence Detection IP, Ethersound, "Studio Transmitter Link"

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IRR IX @

Stored Message Player, Decoder, IP Audio, Remote Contribution, Syndication, Intercom, Contact Closures

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Barix IP Audio - Intelligent Products around Audio, Streaming and Control → www.barix.com

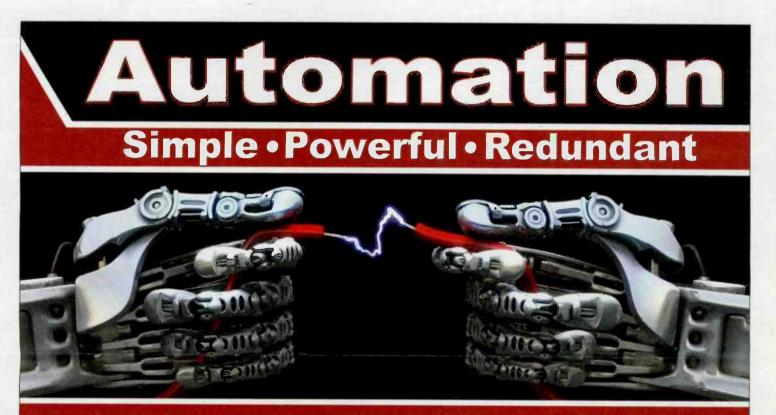
# Product Source



#### Digital plug-ins Waves Audio

**Waves Hybrid Line:** The Hybrid Line offers the color and character of classic analog hardware processors with the features and flexibility of Waves digital plug-ins. The first two products in the Waves Hybrid Line are the H-Comp Hybrid Compressor and the H-Delay Hybrid Delay. H-Comp is a brand new dynamics processor that combines the modeled behavior of transformers, tubes, and transistors with the power and precision provided only by modern-day plug-ins. Features and capabilities include: wet/dry mix option for easy parallel compression, analog modeled release behavior, unique transient pass-through control, exclusive BPM sync release function, multiple analog

character modes, output limiter/clipper modes and external side chain support. H-Delay delivers real vintage as well as PCM42-style effects. Features and capabilities include: delay time of up to 3500ms (TDM), variable pitch delay time behavior, multiple analog character modes, infinite feedback support, LFO-controlled pitch modulation, LoFi mode, and tap + BPM synchronization. 865-909-9200; www.waves.com: info@waves.com



Not since Axia audio-over-IP was introduced to the broadcast industry have we at BGS been so excited! It is with great enthusiasm we'd like to invite you to take a look at the new Op-X Radio Automation delivery system for any single or multi-station cluster. Op-X works seamlessly with Axia IP-Audio networks or as a stand-alone system.



"The merging of traffic and music logs takes a mere :30 seconds, making it among the easiest I have ever worked with. Once you get used to your adjustable personal color scheme, everything is pretty easy to follow. The best part about this system is the LACK of "dead-air" or "hangups" during automation. PD's will breathe a sigh of relief at this. Another thing that stands out is the absolute ease with which you can build your personal hot keys for each air talent. If you organize your show properly ahead of time and know where you are going, this system will make your show much easier and let you concentrate on \*sounding good\* on the air."

BGS



"Finally, an automation system that keeps in mind that not every jock is also a computer whiz. This system is easy to operate from the word go..... yet offers all the bells and whistles that help make your station sound great. The clock builder option makes interfacing with satellite shows very easy. Plus, it has the best voice-tracking capabilities available."

> ~ Matt Scurry, Operations Manager WWFN/WHLZ, Florence - SC



"A fast paced station needs a system that can keep up and is easy to use. Op-X gives us the tools we need to deliver the sound Houstonians have come to expect from KRBE."

> ~ Leslie Whittle, Program Director KRBE, Houston - TX

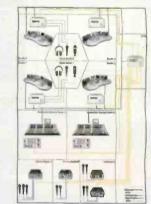
#### High-fidelity stereo audio wallplate balun Intelix



**AVO-A2-WP110:** The AVO-A2-VVP110 wallplate balun distributes a high-fidelity stereo audio signal up to 2,500' over standard twisted pair cable, such as CAT-5 or CAT-6. The front panel features two gold-plated female RCA connectors on a white decora face-plate. The rear panel features a 110 punchdown block and includes a 110 termination tool. The installed unit fits in a standard depth wall-box. Used in pairs or with a rack-mountable Intelix AVO-A2-F modular balun, the AVO-A2-VVP110 transmits 20Hz to 20kHz analog audio.

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

I/O sharing system **Studer** 



Relink: Relink (Resource Linking) 1/O sharing system can link numerous Studer consoles in various locations of a broadcast facility to allow audio source and control data sharing across a wide network. Based totally on Studer's existing Score system, no additional hardware or breakout boxes are required to complete the network. Any combination of Studer Vista, the On Air 2500 and 3000 consoles, as well as Route 6000 can link with each other via Relink, communicating over TCP/IP. Other console-based networking systems on the market are often restricted to a single type of console. Relink is scaleable, flexible, and can start with a simple link between two Studer consoles, and scale up to multi-console systems using a two-step topology where all signals are matrixed through a central device, for example the Studer Route 6000 system.

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

~ Jim Franklin, Program Director WVBO, Appleton/Oshkosh - Wisconsin If you're looking for an audio delivery system~ you owe it to yourself to find out more about Op-X. Give us a call or email info@bgs.cc!

# Broadcasters General Store 352-622-7700 • www.bgs.cc



#### Analog to AES digital converter Whirlwind

AESAD: The AESAD provides extremely high quality analog-to-AES digital conversion. It features mic or line input with 48V phantom available, 110Ω balanced and 75Ω unbalanced outputs, dual function meters to display either digital output or analog input levels, a headphone monitor, is powered by internal batteries or external power input, and converts to the most popular AES sample rates. 800-733-9473; www.whirlwindusa.com sales@whirlwindusa.com

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#### Automatic AC power controller Henry Engineering

Powerswitch: Powerswitch is an automatic failsafe ac power controller that switches ac power to backup equipment if main

equipment fails. Powerswitch was developed for use with Arbitron PPM encoders. If a PPM Monitor is used, the Powerswitch will automatically switch to the backup PPM encoder if the main encoder fails. This redundancy with automatic backup ensures that radio stations never lose ratings data in the event of a fault with their main PPM encoder. Powerswitch can also be used as a remote rebooter, to reboot a PC at a transmitter site or other remote location. It can also be used in any application where ac power needs to be remotely turned on or off.

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

#### Software products Sadie

Sadie Packages: Sadie digital audio workstations have been used for the last 18 years in broadcast. Until now users have needed specific proprietary hardware to run their systems but with the new Sadie packages, users can access products on any computer running Microsoft Windows with ASIO compatible audio hardware, as well as existing Sadie5 hardware platforms. The new products are application based

The extended compatibility will significantly reinforce its appeal. 973-983 9577; www.sadie.com; sales@sadie.com

#### **FM transmitter** PTEK

Gamma 3000: The Gamma 3000 features 1,250₩ power ampl fier modules coupled with the hot pluggable power supplies. The power amplifiers and power supplies are independently operated and removable from the front of the

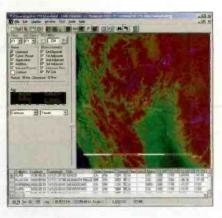


unit while it is installed. They are load sharing. The minimal 10W of drive required can be provided with the optional PTEK FM25ES exciter. The Gamma 3000 is simple and quick to install. The system is 4RU weighing 88 pounds.

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

#### **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



#### Firewire audio interface Focusrite Audio Engineering

a manager and the second a

Saffire PRO 24 DSP: Focusrite proudly launches the new Saffire PRO 24 DSP, a 16-input/8-output Firewire audio interface that features Virtual Reference Monitoring (VRM) in addition to real-time DSP-powered tracking plug-ins. VRM technology provides the ability for a user to mix through their choice of more than 15 different sets of commonly used professional studio monitors and hi-fi speakers, in different acoustic environments and from different positions. Focusrite has crafted the product's two preamps to capture every subtle nuance of an audio source.

516-249-1399; www.focusrite.com; sales@focusrite.com

#### **Remote control Sine Systems**

Plus Sine: This simple, user-friendly PC-based remote control and data acquisition system can be used with the RFC-1/B from Sine Systems. It can be purchased with a new Sine Systems Remote and is backward-compatible with the existing systems. Detailed data acquisition logging is managed by the parameters that the user establishes. Data collection and reporting is only limited by hard drive space. Viewing data is simple using real-time trend charts where a user can view multiple analog or status channels at once and see their time relationship to each other. Customized reports can be accessed immediately or sent via scheduled e-mails in the format the user chooses such as PDF, RTF, Microsoft Word files.

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

#### Podcasting sound effects library **Blastwave FX**

Podcaster2: Podcaster 2 is a high definition MP3 sound effects library specifically designed for podcasting and virtual media. Blastwave FX provides podcasters and virtual media producers with a complete collection of music, sound effects and production elements in this collection of 500 sounds. Every sound was fully produced at 24/96 to ensure the highest quality for today's production needs, then delivered as stereo MP3 files, making audio productions easy to produce and manage.

www.blastwavefx.com; info@blastwavesfx.com

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#### File transfer software **Applied Answers**

File Genius: File Genius replaces insecure FTP and e-mail file transfers. An intuitive interface works through a Web browser and does not require set up, hosting or maintenance. It provides security for all environments: SSL encryption, SHA hashed file directories, no password storage, no cookies, a proxy file system for layers of security, no FTP or other protocol port access, no session pages published all over the Web with links to download files, and hidden site addresses that cannot be found in search engines or site explorers. There are also no usage limits.

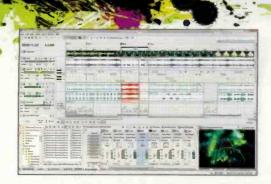
888-753-2245; appliedanswers.com inquiries@appliedanswers.com

www.RadioMagOnline.com



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# urce



#### **Digital audio** workstation Sony Creative Software

Acid Pro 7: ACID Pro 7 software advances the application's DAVV functionality with new features that make the music production process flow even smoother by leveraging the Transparent Technology that Sony is so well known for in all of its professional music applications. The software

provides extensive digital audio production tools that support many different production workflows in one complete application. In addition, the software now includes interactive tutorials to help new users get started quickly. New ACID Pro 7 features include: Audio and MIDI mixing console; MIDI Track Freeze; Real-time rendering; Input busses; Enhanced time stretch and pitch shifting with Zplane élastique Pro; Enhanced Beatmapping for tracks with multiple tempos; Tempo curves; and FLAC, AAC, AC-3 Studio, and MPEG-2 format support

608-204-768; www.sonymediasoftware.com

#### Wi-fi Internet radio C. Crane Company

CC Wi-fi Radio: The CC Wi-fi gives you an American style of Internet Radio, combining straightforward style with all the convenience of tuning in more than 11,000 radio stations from around the world. The CC Wi-fi radio has excellent audio in a small footprint that fits nicely on a desktop, kitchen counter or bedside table. There's

a headphone socket for private listening and a line-out for use with your component speakers. Features 99 memory presets, remote control, an alarm clock and an Ethernet port for a hard-wire network connection. 707-725-900; www.ccrane.com; ccraneco@aol.com



## MOORETRONIX **Our 5th Year**

Our client list continues to grow. Thank you for your confidence and equipment purchases.

### We Re-Condition

Pacifi Recorders BMX I-II-III, AMX, ABX and RMX, Stereo-Mixer and Mixer News-Mixer products.

Now available, the MOORETRONIX GPI interface.



This is a direct replacement for the PR&E CI-2 interface. Use where OPTO ISOLATION is needed between your device and console logic. Each module comes with connectors, pins and instructions. Optional mounting panel for 8 modules and 2 Warning Light relays.

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	2000E, solid state
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	05 (IBOC) HD, solid state
	, solid state
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	al 816R-4B
1994 Harris HT3	
2003 Harris HT3	BOCD
1982 Harris Con	nbiner w/ auto exciter-
transmitte	er switcher
USED AM TRANSMITTERS	
	MW5A
	MW5B
	SX5A, solid state
	ND5, solid state
	ental 316F
1985 Harris	MW10B
1989 Nautel	Ampfet 50, solid state
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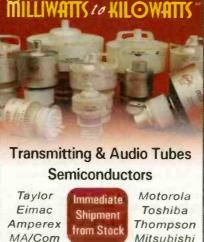
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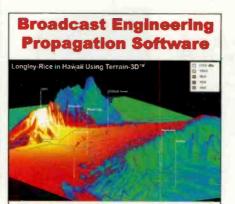


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Digital audio has evolved into a higher form that can be transported via a packet-switched network as IP audio. By attending you will learn how to implement this technology, including hardware considerations, as well as gain insight into the various formats available. Instructor: Jeff Smith, CEA CBNT

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While IP audio has found suitable use with a studio facility, it also has practical applications for transporting audio between facilities for remotes and studio-to-transmitter links. By attending you will learn how to use ensure reliable results when using this technology over a variety of connection paths. Instructor: Doug Irwin, CPBE DRB AMD

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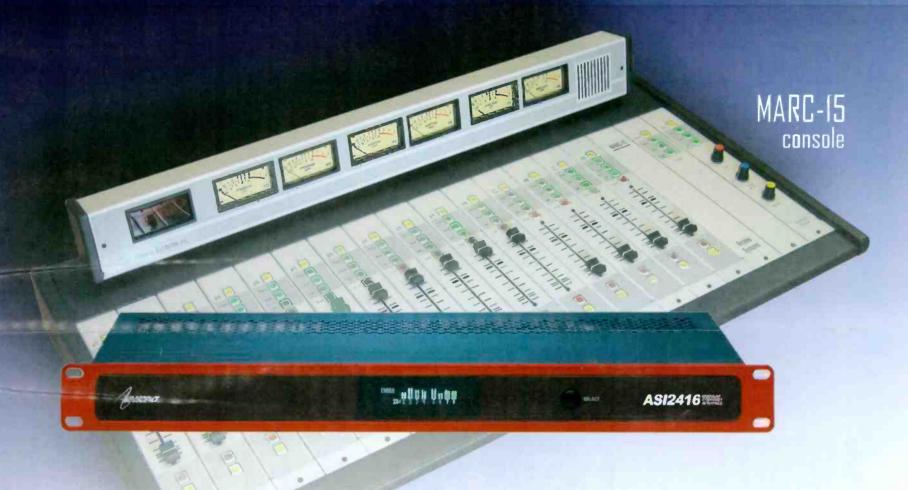
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# ARRAKIS AARC-NET AUDIO NETWORKING MADE SIMPLE



**NEW**... Arrakis announces the introduction of AARC-NET, (Arrakis.Advanced.Radio.Console.Network). It is a seamless integration of Arrakis consoles & automation, 'Cobranet' audio networking products, and Arrakis software. Cobranet is THE world standard in audio networking with over 1,000,000 nodes installed. All Cobranet products from different manufacturers work together to form a powerful audio network. The core of the AARC-NET network are AudioScience Cobranet products. Plug-in compatible with the Arrakis ARC & MARC consoles, installation & setup takes minutes. No more punchblocks or multipair cables. Changing a wiring connection is a simple software choice. AARC-NET is fast, easy, and inexpensive.

One of the important features of AARCNET is that it integrates standard analog and digital consoles onto the network instead of using expensive network based digital mix engines. You can therefore integrate consoles that you already own into the system. This makes repair and maintenance easy, and your console isn't dead when the network crashes. Most importantly, AARC-NET is world standard Cobranet audio networking, not a custom one-of-a-kind network.

**Inexpensive**... a standard AARC-NET system is 1/3rd to 1/2 the price of competing systems, thus bringing networked audio within the reach of the entire radio market. A current MARC-15-12 console with 8x8 network is under \$7,500 !!!

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For FM stations, expect a sound that easily holds its own with your high-power major market competitors. Listeners comment that with the VP-8 they now hear the rest of the music! AM stations often experience a dramatic increase in coverage area along with greatly improved intelligibility and sound quality.

Of course, if tweaking is your thing, VP-8 lets you under the hood with a complete toolset - in the VP-8, nothing is hidden. With its 4-band AGC/compressor and 8-band limiter, the VP-8 boasts more bands than any other processor in its price range to give you a very clean, loud, competitive sound that doesn't destroy the music.

It also includes features rarely found even on top-of-the-line processors: a reference-grade stereo encoder for FM, built-in test oscillator, diversity delay, multi-point headphone monitoring, and extensive metering.

The VP-8 is also ideal for streaming audio, studio processing, as a versatile backup processor or as an STL protection limiter.

The bottom line? The Vorsis VP-8 gives more bang per buck than any other audio processor in its class (and then some). And since Vorsis is designed and built by Wheatstone here in the US, you know it'll hold up and be supported 24/7 for years and years.

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