

# Radio

THE RADIO TECHNOLOGY LEADER

## 2012 product source

a supplement to *Radio* magazine



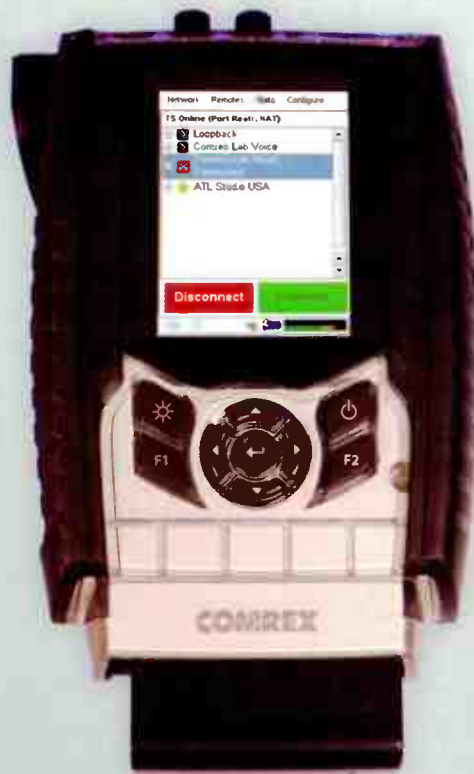
**ENCO  
DOES  
RADIO**

SCALABLE  
AUTOMATION  
LIVE ASSIST  
AUDIO PLAYOUT  
INTEGRATION  
IP AUDIO



[enco.com/radio](http://enco.com/radio)

THIS CODEC HAS BEEN THROUGH  
TWO WARS, MULTIPLE ELECTIONS,  
FLOODS, FAMINE, EARTHQUAKES,  
HURRICANES, MARATHONS,  
CHAMPIONSHIP GAMES, REGATTAS,  
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2USB

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[remotes.comrex.com](http://remotes.comrex.com)

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Introducing the

# NVLT Series

3.5 - 10 kW Analog FM

**RADIO SHOW**  
Presented by NAB and NAB

See us at booth #815

**Proven NV Series Architecture  
Outstanding Efficiency  
Intelligent Features  
No-Compromise Performance**



Meet the new NVLT Series for analog FM broadcasting. Based on the proven NV Series architecture, they're built tough with integrated exciter(s) and parallel power amplifiers, power modules and switching power supplies.



AUI Control System



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1110100  
Integrated Digital Exciter



## Exceptional value

Unmatched Nautel control helps you save time, trips and money. Add the highest efficiency in their class and the result is unprecedented value. 5 kW transmitters starting at \$34,900 US.



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# 2012 Product Source

## Your Facility: Built on a Solid Foundation



ny successful radio facility starts with a solid foundation. The right room design. The right racks and furniture. The right equipment. They all come together to create a performance space to make great radio. As you look to build or upgrade your facility's foundation, you can look to the pages of the Radio magazine 2012 Product Source. We're always on the lookout for new equipment and services, and each year we put this issue together to highlight some of the latest technology for you.

Radio magazine brings you new product information all the time. Each monthly issue has a new products section. Our twice-monthly New Products Extra email newsletter is packed with new products. And all that information is also posted online at [RadioMagOnline.com](http://RadioMagOnline.com). We've culled the information we have gathered over the past year to bring this annual compendium to you.

Much of what you'll find inside was shown at the 2012 NAB Show. To complement that convention's trove, you will also see the 2012 Pick Hits distributed within these pages. (And follow the link on [RadioMagOnline.com](http://RadioMagOnline.com) to see videocasts of these products.) But we also look beyond traditional broadcast circles and explore pro audio and IT products. Everything in this issue fills a need for radio. There are also several special sections that tie products to a specific function of radio.

And as always, you'll find all this information online as well at [RadioMagOnline.com](http://RadioMagOnline.com). Use the QR code below to quickly access the index from your mobile device and you can take it all with you.

We have constructed an extensive mix of new products and services, but we know there's always more. If you have found an interesting device, product or service, tell us about it. Like you, we want to know about the latest new technology, and we want to share it with you and your fellow readers.

### Special Section Index

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— Chris Scherer, editor



Take new products with you on the go. Just scan this QR code with your smartphone.

#### IP-to-audio/audio-to-IP streamers | Sonifex

##### Pro Audio Streamers:

This range of three IP-to-audio and audio-to-IP streamers have professional analog and digital I/O.

They allow audio to be streamed around a building, WAN or LAN using IP audio and CAT-5 cabling infrastructure. PS-SEND converts an audio input to an IP stream; PS-PLAY reads an IP stream and outputs to balanced and unbalanced audio line levels; and PS-AMP reads an IP stream and outputs audio to stereo speakers.

[sonifex.co.uk](http://sonifex.co.uk)



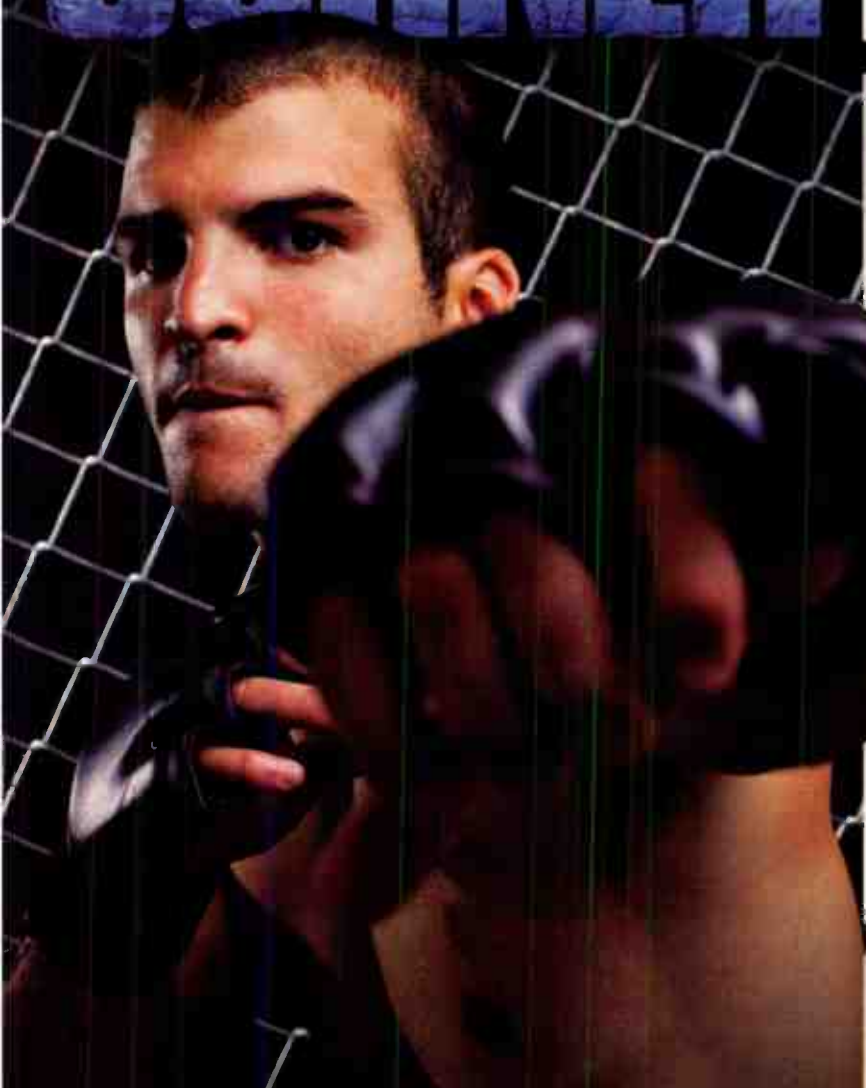
#### Audio monitor | Ward-Beck Systems

**32ME:** With so many audio signals being distributed within a station, the 32ME provides an easy way to see 32 channels at once in 1RU. The unit accepts AES3-ID, SDI embedded or MADI



audio signals depending on the model. All inputs have loop-through outputs. One channel can be selected for the monitor output. Levels are displayed in groups of eight (four stereo pairs) to easily identify tracks. A red LED at the 0 reference level allows monitoring from a distance. A blue LED indicates which audio pair is assigned to the stereo monitor output.  
[ward-beck.com](http://ward-beck.com)

# IN YOUR CORNER



**Ready for the next round?  
Let BE's *NEW* gear help keep  
you in the ring!**



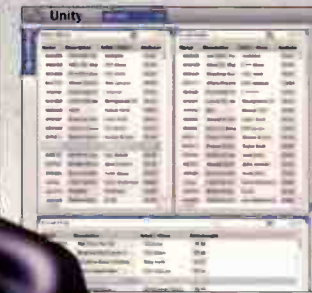
Broadcast Electronics • 217-224-9600 • [bdcast@bdcast.com](mailto:bdcast@bdcast.com)  
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World Radio History



## Commotion™

- Real-time social tools that redefine the listener experience
- Bring social back to your website and mobile app
- Mobile apps with a punch that will amaze your listeners **and** advertisers
- Turn social engagement into revenue
- Offer your advertisers what the competition can't!



## AVUnity

- Increase asset utilization across your group, from station to station
- Share "gold" music libraries across your stations
- Improve your remote workflow efficiency
- Easily integrates into your network with our "cloud" architecture
- Compatible with AVFleX and Vault2 platforms



## AVFleX 2.0

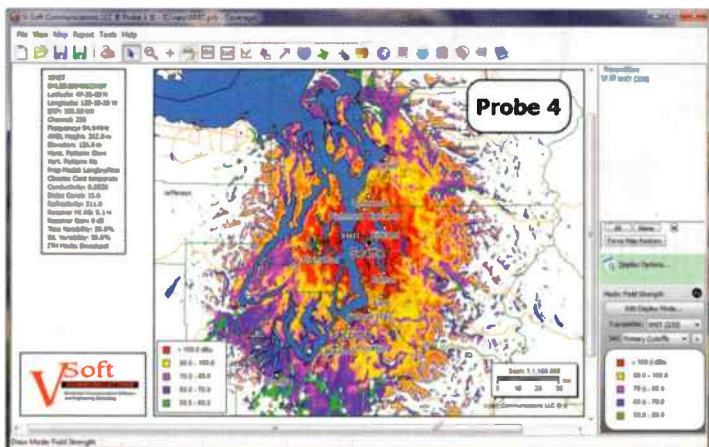
- Enhanced UI configurator allows for personalized workspaces by talent
- Support for new audio devices including Axia, Wheatnet, and cost effective ASIO devices
- New segue editor allows for ultimate programming control
- Enhanced integration production widget improves efficiency
- Unique screen sharing for multi-talent shows



## STX LP II

- New integrated digital exciter
- New smart redundant controller
- New dual digital exciter options
- Improved AC to RF efficiency
- Easy migration path to HD
- Scalable 1 kW - 5 kW architecture
- Identical components 1 kW - 5 kW
- IP connectivity with intelligent Remote GUI





### 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.

[v-soft.com](http://v-soft.com)

### Transmitter | Ecreso

**Helios FM 350W:** The first FM transmitters based on 6th generation MOSFETs, the new medium-power FM range is robust and delivers efficiency of up to 74 percent. Top signal quality and performance are achieved thanks to the FM band direct-to-frequency digital modulator, which is at the heart of this product line. The manufacturing quality and the simplicity of use make this a powerful transmitter to broadcast analog FM programs from 100W up to 2kW. Helios FM 350W is fully protected against overheating, VSWR and lightning. Features include full RDS encoding and automated audio backup. Fully featured for local maintenance and configuration, it also allows extensive remote control by Web server, SNMP, RS-232 or GPIOs. The 350W FM Transmitter is available either as a separate exciter and amplifier or as a single integrated 3RU unit.

[ecreso.com](http://ecreso.com)

### Automation system | Enco Systems

**Enco1:** Enco1 is a completely virtualized automation system environment. Replace 50 or more rack units of equipment with two servers and a network switch. Reduce long-term operating expenses and short-term integration costs. Gain new levels of redundancy and flexibility with this cutting edge technology.

[enco.com](http://enco.com)



### Steel studio doors | Soundproof Windows and Doors

**175C:** This new model of steel doors boasts an STC (sound transmission class) of 58, which exceeds the STC53 commonly found in similar doors from other manufacturers. The doors are 1.75" thick, so standard latching hardware can be used. The door sits on three cam hinges and uses invisible gaskets to hide the seals when closed. Gaskets can be replaced in the field if needed. The one-piece frame can be sized to a standard door opening or any custom size. Glass can be added to a door, and STC data for doors with glass is being gathered.

[soundproofwindows.com](http://soundproofwindows.com)



### Broadcast console | Arrakis

**ARC-15:** The ARC-15 is a general purpose console. Channel one is a high performance mic channel while channels two-five are selectable as mic or line inputs. Channel 15 is an advanced telephone interface to an external hybrid for live callers or an off-line contest call. Seven stereo line input channels easily handle the other audio sources, such as CD players. Channel 14 is selectable as either a Windows PC USB interface or an unbalanced stereo consumer level input. Windows software for live on air, automation, and production is provided standard. With 5 million operation, LED lighted, switches; long life faders; and electronic switching of all audio signal paths; the ARC-15 is a versatile console.

[arrakis-systems.com](http://arrakis-systems.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 2.5" D. These warning lights are 110V and use two 7W bulbs. The text on the lens reads On Air. They are available in 12- and 24Vdc as well as custom text/foreign language by special order. Sandies also has a three-sided on air light that measures 5"H, 3 1/8"W, 2 3/8"D.

[sandiesusa.com](http://sandiesusa.com)

# ROC YOUR WORLD



## The new ROC console from Logitek

When Logitek introduced its first ROC console back in the 1990s, it marked a revolution in audio console design. One of the industry's first router-based digital consoles, the original ROC boasted simple wiring and access to multiple sources at each fader.

Over the years, the router-plus-console Networked Audio concept has become the standard in console architecture. Although the original ROC was retired years ago, Logitek has continued to develop systems for both TDM and AoIP audio networking. The new ROC takes the best of the original design and pairs it with the latest technology and styling.

Available in multiples of 6 faders (up to 24), the ROC is housed in an attractive tabletop enclosure. Durable Penny & Giles faders, OLED source indication and intuitive controls make the ROC a natural for on-air, production rooms or even in temporary studio setups. Two monitor feeds, front panel headphone connection and user-assignable softkeys will please even your fussiest operators.

Call today or visit our website for more information.



The ROC is paired with the JetStream,  
a powerful 128-channel networked audio node.



Logitek Electronic Systems, Inc.  
Phone: (713) 664-4470 | Toll Free: (800) 231-5870  
[www.logitekaudio.com](http://www.logitekaudio.com)

# Portable Production

Handy gadgets for production on the go



**Portable recorder | Olympus LS-10S:** This pocket-sized audio recorder features a sleek, convenient design that fits comfortably in the palm of a hand. Intuitive control buttons and menu commands allow even novice users to record professional-quality audio. Capable of recording 24-bit/96kHz audio for up to 12 hours, the device operates on just two AA batteries and requires no external gear. It is also made of lightweight aluminum, providing a durable, yet light recording device, weighing only 5.8oz, including batteries. A powerful built-in stereo speaker is capable of capturing high-quality audio in PCM, WAV and MP3 formats. It also offers 2GB of built-in memory with a SD/SDHC card slot for expanded capacity. [olympusamerica.com](http://olympusamerica.com)

## Portable device microphones | MicW

**i-Series:** Designed for use with iOS and other devices with a four-conductor 3.5mm connector, the i-Series line includes five microphone models. The i436 professional Class 2 mic is for measurement and recording. The i456 cardioid general purpose mic and i266 high-sensitivity cardioid mic are for high-quality recording. The i825 omni lavalier mic and the i855 cardioid lavalier mic provide the same connectivity in a lapel-worn package. The i456 and i266 mics tout a frequency response of 20Kz to 20kHz with a roll off at lower frequencies. The i436 shows a nearly flat frequency response from 20Hz to 20kHz. All the mics are powered by the portable device's jack. [mic-w.com](http://mic-w.com)

## Portable mixers | Yamaha

**MGP16X, MGP12X:** High-

end features of these mixers include D-PRE discrete Class A microphone preamps for superior phase response and Xpressive EQ using Yamaha's VCM (virtual circuit modeling) for a more musical sound.

Dual digital effects including an SPX block with reverb, delay and modulation effects and a dedicated REV-X high-density reverb engine, offer flexibility to build complex effects and enhance the sound quality. The mixers also include a ducker function, which automatically lowers the level of background audio to accommodate the voice of an announcer coming in on another channel. The Leveler automatically maintains a consistent sound volume when playing music from an iPod/iPhone or other audio source, including the USB port, which allows a direct digital connection to an iPod, iTouch or iPhone, also charges these units.

[yamaha.com/proaudio](http://yamaha.com/proaudio)



## Field interview tool | JK Audio

**RemoteMix One:** This tool allows live man-on-the-street interviews through a cell phone, providing a professional look and feel to field reporters and live remote talent. It provides two-way IFB connections through a cell phone or notebook and connects to cell phones and notebooks through the wired headset jack. This professional microphone preamp and powerful headphone amplifier provides a vast improvement in sound quality. A 3.5mm stereo line input jack allows recordings to be mixed into the broadcast. The 3.5 mm stereo line output jack provides a full bandwidth microphone signal on the left channel and the return audio on the right channel. The stereo headphone output gives a mix of the XLR microphone input, 3.5mm input, and return audio. This powerful 0.5W stereo headphone amplifier will cut through any crowd noise.

[jkaudio.com](http://jkaudio.com)

## Solid-state audio recorder | Infomedia

**PAW-V:** The PAW-V recorder has built-in, high-quality, directional XY stereo microphones that fit various recording conditions with a 20Hz to 40kHz frequency response. Various record settings (sampling rate, bit-rate and algorithm) can be stored and recalled to simplify operation in various settings. The unit can record in linear PCM, MP2 and MP3 formats. A pre-record buffer can capture up to 3 seconds of audio before recording is engaged. The unit accepts SD cards up to 32GB foreextended recording times. Basic on-board editing can also be done. It includes a built-in speaker for playback.

[infomedia.com.cn](http://infomedia.com.cn)





### Voice processor | Sound4

**Voice:** Sound4 Voice processors are available in three versions: AD, L and Ravenna. Eight-channel versions include VoiceRavenna and VoiceL, which is powered with an HQSound 192kHz audio processing engine. A 3-band, 6-channel voice processor, VoiceAD features analog/digital I/O. It runs on the Sound4 PCI express board, a card powered with Shark DSPs. All processors are powered with an HQ Sound 192kHz processing chain, which includes a 3-band noise gate, an advanced de-esser, a 3-band processor, a 4-band parametric EQ and a brick wall limiter for finalization.

[sound4.biz](http://sound4.biz)



### Digital FM/HD exciter | Continental Electronics

**802E, 802Ex:** The 802E FM digital exciter is the base system for the 802Ex FM/HD Radio exciter. The 802E incorporates the basic spectrum readings and display and can easily be field upgraded for IBOC with the addition of the CEC Engine card, iBiquity software and an 800EXP Embedded Exporter. Software features of the 802Ex include Continental's exclusive Insight HD Radio performance monitoring system, which shows spectral, constellation, filter and adaptive precorrection performance. Standard in the 802Ex exciter is Continental's fully adaptive, real-time forward precorrection, allowing changes in transmitter or RF system performance to be automatically sensed and corrected; software-selectable HD Radio power levels of -20dB, -10dB or any power level in between; hi-res color LCD screen for maximum clarity and accuracy; built-in stereo generator; built-in audio delay (up to 16.4 seconds); synchronization using GPS 10MHz signal; multiple AES3 digital audio inputs; AES3 audio output; standard composite input and two baseband SCA inputs.

[contelec.com](http://contelec.com)



### Creative sharing hub | Adobe Systems

**Creative Cloud:** Adobe Creative Cloud provides tools and services for creative people worldwide. A subscription-based offering, Creative Cloud is a hub for making, sharing and delivering creative work and it is centered around the release of Adobe Creative Suite 6 software, packed with innovation across its industry-defining design, Web, video and digital imaging tools. Creative Cloud membership includes: access to download and install all CS6 applications, new HTML5 desktop products and deep integration with Adobe Touch Apps; easy storage and sharing of content across desktop, mobile devices and the cloud; integrated website publishing and hosting; and ongoing innovation with the most up-to-date products and services.

[adobe.com](http://adobe.com)

### Digital RF power meter | Broadcast Devices

**DPS-100D:** This power meter provides accurate and reliable measurement of RF power and other transmission line parameters. Forward and reflected power, transmission line temperature and readings from optional external temperature and line pressure sensors are provided simultaneously on an internal backlit LCD display and remotely via an internal Web server and SNMP agent. Proprietary 3-strike VSWR protection and interlock management protects equipment and provides e-mail alerts when user configurable thresholds are exceeded. The DPS-100D incorporates a precision directional coupler available in all standard EIA line sizes and also includes Type N models.

[broadcast-devices.com](http://broadcast-devices.com)



### 50W FM station in a box | Ramsey Electronics

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

[ramseyelectronics.com](http://ramseyelectronics.com)

# The Tieline Mic Adapter



## The world's smallest Codec

### What is it?

The Tieline Mic Adapter is designed to work with our Report-IT audio codec application on the iPhone. It lets you connect a professional XLR Dynamic Microphone to your iPhone 4\*. Simply plug your iPhone into the Mic Adapter for high quality remotes or record beautiful rich bass tones, crisp midrange and crystal clear high frequencies.

### What's it got?

- Full 20Hz – 20kHz frequency response
- An XLR input for a pro dynamic microphone
- 2 stereo headphone outputs
- Adjustable mic gain with Automatic Gain Control (AGC)
- A stereo line input

### What do you need?

- Your iPhone 4\*
- Tieline's Report-IT – the World's most popular mobile codec iPhone App.
- A Tieline codec at the studio
- A dynamic mic & headphones

[www.tieline.com/micadapter](http://www.tieline.com/micadapter)

[www.tieline.com](http://www.tieline.com)

**Tieline**   
The Codec Company

317-845-8000

\*iPhone and App Store are trademarks and/or registered trademarks of Apple Inc., registered in the U.S. and other countries

World Radio History

# Station Services

What can these companies do for you?



## 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.  
[sabretowersandpoles.com](http://sabretowersandpoles.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.  
[trcorp.com](http://trcorp.com)

## Equipment sales and service | Mooretronix

**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.  
[mooretronix.com](http://mooretronix.com)

## Installation services | AM Ground Systems

**AM ground system installation:** Specializing in grounding for AM broadcast and lightning protection, AM Ground Systems Company offers comprehensive ground system inspection, evaluations and repair. Using state-of-the-art test equipment, the company can locate faults and repair ground systems that would have required a full rebuild in the past. Available services include AM ground system inspection, evaluation and repair, new construction of AM ground systems, rebuilding AM ground systems, inspection and evaluation of lightning grounding, installation of lightning grounding, turnkey site work and tower tuning.  
[amgroundsystems.com](http://amgroundsystems.com)

## Sales management software | Wide Orbit

**WO Sales v3.0:** The latest release of WO Sales introduces an entirely new and streamlined user interface with simple and easy-to-use workflow, navigation and menu options. It is comprised of two modules: WO CRM and WO Proposal. New features include the ability to submit new accounts and account assignments to WO Traffic, improving on the existing integration. WO Proposal features include new simplified wizard setup and export options, and redesigned export output for avails and proposals, which improves the overall efficiency of the sales submission process. The post-buy analysis feature has been expanded to support spot level modifications and improves upon the real-time posting capabilities provided by seamless integration with WO Traffic. WO CRM features include enhancements to forecasting for simpler pending update, providing visibility into the sales pipeline across stations and revenue streams. Sales reports have been enhanced to include a simple wizard setup and enhanced filter options that enable fast and flexible revenue analysis across the organization.  
[wideorbit.com](http://wideorbit.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](http://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.  
[rfparts.com](http://rfparts.com)



# GIVING YOU THE TOOLS TO CREATE GREAT RADIO



*Corus Quay Studio shot - Courtesy of John Coldwell - Corus Entertainment*



## **iMediaTouch** Radio Automation Software

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at 888-665-0501 or via email at [sales@imediataouch.com](mailto:sales@imediataouch.com)



# Beyond These Walls

When the work is outside the studio



## Cable tester | Hosa Technology

**CBT-500:** Designed to quickly and easily check a variety of cable types, the CBT-500 cable tester enables users to verify the integrity of a cable before interconnecting equipment. The compact, handheld unit is capable of testing the following cable terminations: XLR, balanced and unbalanced phone, phono (RCA), Speakon, DIN, Ethernet (RJ-45) and USB Type A to Type B. The CBT-500 consists of a front-panel rotary knob and two rows of 8 LEDs – one row amber colored, the other row green. The rotary knob enables switching from one pin to the next.

[hosatech.com](http://hosatech.com)

## LED-based beacon | Technostrobe

**LED-RED-Standard:** This red LED beacon features reduced energy consumption by 90 percent versus incandescent. Its optical design reduces ground disturbance, a stable light output conquers voltage variations, and expected minimum lamp life is 10 years. The beacon features a standard 13-1/4" bolt circle, GPS capabilities, flash or steady burn lighting, and the controller and power supply can be ordered self-enclosed or split. Power consumption is 20W and requirements are 120/240Vac, 50/60Hz. It is compliant with FAA AC 150/5345-43F and Transports Canada CAR 621.19.

[technostrobe.com](http://technostrobe.com)

## Multi-platform scheduler | RCS

**Selector2Go:** Selector2Go is an Internet-based multi-platform scheduler. This puts the Selector and GSelector scheduling engine in the hands of radio programmers no matter where they want to schedule. It delivers a powerful, easy-to-use interface. Now programmers can check back from anywhere on those extended schedules they started before they left the office.

[rcsworks.com](http://rcsworks.com)

## Medium intensity L-864 red LED beacon | International Tower Lighting (ITL)

**IFH-1700:** The IFH-1700 utilizes the latest LED technology and advanced optics to achieve a compact, energy efficient L-864 medium-intensity red beacon. It comes ready for installation with a 10' cable attached. Designed for durability, the IFH-1700 has an aluminum top and base and a clear acrylic cover. The beacon is designed for long term maintainability with field replaceable LED boards, power supply board, and light engine.

[itl-llc.com](http://itl-llc.com)

## Grounding wire | Nott Ltd.

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

[nottltd.com](http://nottltd.com)



## Frequency counters | Kaltman Creations

**RF-id Station, RF-id Solo:** Part of the Invisible Waves product line that aid in identifying wireless devices' frequencies, the RF-id Solo and RF-id Station are near-field frequency counters. The Solo is a handheld device for spot checking RF spectrum. The Station is primarily for audio wireless users and is housed in a self-contained case. The Station allows RF technicians to efficiently stage and manage wireless microphones and other wireless devices before and during a live event/performance. It consists of a rugged plastic carrying case with eight designated foam-formed slots for wireless microphones or wireless belt pack transmitters. Each slot has a backlit, near-field frequency counter readout providing the exact frequency of the transmitter and a barograph signal level display. Up to eight transmitters can be staged at one time and swapped-out as needed. Just below the frequency counter display is a dryerase, write-on strip to help keep track of microphone/transmitter assignments. With an LCD readout, the RF-id Solo can confirm exact frequencies and transmission signal strength, avoiding the need to handle the transmitter (which often involves menu scrolling and converting group and channel readouts to frequency values). It works with digital and analog single carrier transmissions in the 50MHz to 2.5GHz range.

[kaltmancreationsllc.com](http://kaltmancreationsllc.com)





THE WORLD LEADER  
IN  
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AND  
AUTOMATION  
SOLUTIONS**



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**ENCO 1  
AUTOMATION SYSTEM**

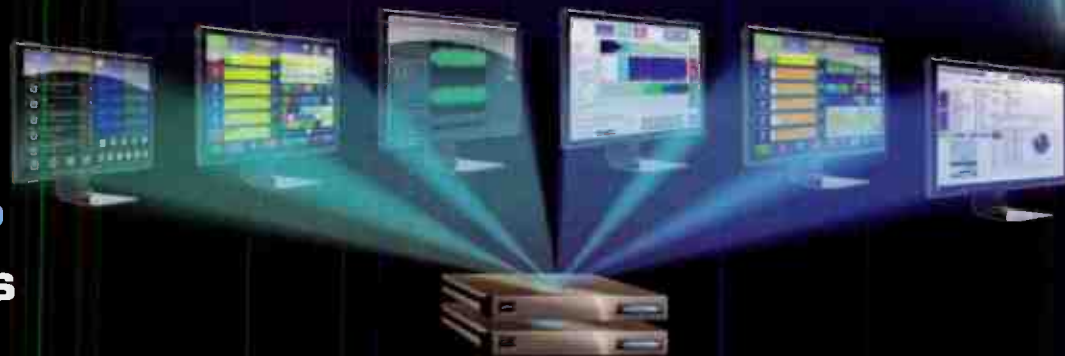
[enco.com/radio](http://enco.com/radio)

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DOES**  
VIRTUALIZATION  
RELIABILITY  
INTEGRATION  
IP AUDIO  
SMALL MARKET  
NON-COMM  
PUBLIC  
REDUNDANCY  
LIVE ASSIST  
CONTENT MANAGEMENT  
REMOTE VOICE TRACKING



**ENCO 1**

The Virtually Perfect Automation System.



### Interconnect box | Altinex

**TNP512:** As a compact interconnect solution designed for installation into tables, podiums, or other furniture as part of an AV presentation system, the new TNP512 offers convenient, one touch access to a variety of video, audio, computer, network, and power connections. Of particular note, the new TNP512 employs a new leaf-spring mechanism replacing the gas spring design of previous models. It is a sharp looking, highly functional tool for facilitating power, Internet/network access, plus audio and video connections for a laptop. The standard TNP512 incorporates the SP3500SC sectional plate that provides two standard U.S. power receptacles, computer video (15-pin HD), a COM Port/RS-232 (9-pin D), video (RCA), S-Video (4-pin mini DIN), audio (2-RCA), computer audio (3.5 mm), modem (RJ-11), and network (RJ-45) input connectors. All connectors have 6' cables attached that feed through to the bottom of the unit. [altinex.com](http://altinex.com)

### Motorized variable acoustics banner | acouStaCorp

**acouStac:** When this motorized variable acoustics banner is deployed in an otherwise reverberant room, the acoustical character of the space changes. The banner consists of two parallel fabric panels made of individual horizontal segments held together by stackers. The stackers separate the panels at a constant dimension over the full height and width of the banner. Inner chambers are 3" or 6" wide formed by stackers and 6", 11" or 15" formed by fabric segments. The panels are made of either 26oz DRF wool serge or 25oz IFR Velour. [acoustacorp.com](http://acoustacorp.com)

### Remote digital audio switcher | Broadcast Tools

**AES Switcher Sentinel 4 Web:** A simple way to remotely switch AES audio feeds via the Web or locally, the AES Switcher Sentinel 4 can be controlled and monitored locally and/or remotely over any IP network via a Web browser, Web-enabled mobile device, front panel switch and/or contact closures. Email notification may be configured to alert up to eight recipients when alarms are detected. The user may also enable a sound effect to play on a PC speaker when an alarm is generated. The active AES output is monitored for activity and may be configured to perform user-defined action sequences if activity is lost and switch to a defined back-up source. Logging of system status along with the site ID may be emailed in time spans from once an hour to once a day. SNMP and SMTP username and passwords are also supported. Front panel and remote contact closure control and monitoring functions are provided. Audio connections are made with plug-in Euro-block screw terminals. Four units may be mounted on one RA-1 1RU shelf. [broadcasttools.com](http://broadcasttools.com)



### Portable RBDS monitor | Dan Stofer

**Proteus-1:** This handheld device (slightly smaller than a deck of cards) is a portable radio receiver with RDS/RBDS monitoring software. The unit can display frequency, signal strength, stereo and RDS status, PI (Program Identification), PTY (Program Type), PR (Program Service Name) and RT (Radio Text). Stations can be selected by direct channel tuning or seek function. The Active Groups Screen and Group Inspector Screen show greater detail about the RDS stream down to individual bits and can warn when RDS data is invalid. [dan.stofer@gmail.com](mailto:dan.stofer@gmail.com)



### EAS station multiplexer | DM Engineering

**Multi Station Relay Adapter:** This device expands the allowable controlled number of stations from a single Sage Endec to a total of four. It is a microprocessor-based, three-stereo-channel accessory that interprets the Endec audio commands to select the appropriate station or stations for EAS broadcast. The MSRA communicates with the Endec via RS-232, and the EAS audio for the MSRA is derived from the Endec speaker line output. A multi-turn, recessed front panel input gain trim potentiometer and individual multi-turn station gain controls are provided for controlling the active stereo distribution amplifier sections having balanced output levels capable of greater than +12dBm into a 600 ohm load impedance. An optically isolated open collector tally output for user control applications is provided and is active when any or all of the three controlled stations are activated, and remains active until the end of the EAS activation. [dmengineering.com](http://dmengineering.com)





ARRAKIS SYSTEMS INC.

# THE NEXT GENERATION ANALOG CONSOLE



ARC-10BP... \$2,495  
ARC-10UP... \$1,999  
ARC-10U... \$1,599  
msrp

## ARC-10 ADVANCED RADIO CONSOLES

a NEXT generation analog console that mixes analog & digital with a PC USB sound card built in. And, for today's infrastructure the ARC-10BP uses Cat5 cables. Powerful, reliable, easy to install & easy to use.

- Ten channels
- Two Stereo Program outputs
- 2 mic, 6 stereo line, PC, & Phone in
- USB PC sound card on ARC-10UP & ARC-10BP
- Mix minus in-out for an external Telephone hybrid
- Conductive plastic faders & multimillion operation switches
- Socketed ICs for ease of on site repair & LED lamps for long life



CAT 5 cables  
included on the  
ARC-10BP

The ARC-10UP with unbalanced inputs and PC sound card built in is displayed above. The ARC-10U has unbalanced inputs without a sound card. The ARC-10BP has balanced inputs with the PC USB sound card

[www.arrakis-systems.com](http://www.arrakis-systems.com)

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# Out and About

Useful items to simplify remotes



## HD portable mobile phone and commentators unit | Glensound Electronics

**RECCE HD:** The result of adding a Glensound HD Voice Broadcasters' Mobile Phone to a dedicated commentary mixer, is the RECCE HD. It is an evolution of the Glensound ISDN codecs, with Glensound HD Voice replacing ISDN as the link. It has a built-in three-channel mixer (mic/line). A three-input headphone amp allows three commentators to monitor a mix of themselves, the return audio cue, or an external input. A high quality compressor/limiter circuit is included to prevent overloading of the outgoing mobile circuit. The unit is fully portable using 6 C cells. External dc power is available.

[glensound.co.uk](http://glensound.co.uk)



## iPhone/Android app | Comrex

**VIP QC:** VIP QC (which stands for Quick Connect) is an app that can be easily downloaded and installed on an iPhone and Android Smart Phone and used to call a Comrex STAC VIP VoIP Call Management System, using the phone's available data connection. Then, it's as simple as select and connect. A list of stations available for connection is presented to the user after the app starts. Once the station is selected, the app becomes locked to that station,

displaying logo information whenever the app is restarted. The app can even be configured behind the scenes to call Comrex Access and BRIC-Link codecs.

[comrex.com](http://comrex.com)

## AoIP software | Digigram

**Iqoya V\*Mote:** An Audio-over-IP "SIP" software solution for remote contributions, simply install V\*Mote on a laptop PC to turn it into a professional contribution codec. Establish a full-duplex connection with a newsroom or a studio in a breeze. V\*Mote can establish an IP audio link to/from any N/ACIP compliant codec installed in the studio, including third party codecs and Iqoya codecs. The contribution input -- usually a microphone -- may be either mono or stereo. Apply the included automatic gain control preset if necessary and send the resulting signal to the studio. The modulation of the transmitted signal is conveniently displayed in a VU-meter. Record contributions on the fly, send them via the virtual DirectSound channel, receive an audio return signal from the studio, check audio quality through software monitoring, and send a request-for-talkback signal.

[digigram.com](http://digigram.com)

## Audio codec | AETA Audio Systems

**Scoop 4IP:** Scoop 4IP is a rack-mount codec focused on IP links, designed specifically for live transmissions over IP, such as remote links of STLs. Features include: high audio quality, reliability, X24/V11 and Ethernet interfaces, a wide range of coding algorithms, and 4SB ADPCM at a low latency in quality 15kHz. In addition, Scoop 4IP also has audio analog input/output, simultaneous AES, additional I/O, and the option to configure and manage the equipment via embedded Web page.

[aeta-audio.com](http://aeta-audio.com)

## Phone app | Tieline Technology

**Report-IT Enterprise for Android:** This application turns an Android smartphone into a pocket-sized, digital quality live audio codec and recorder to provide a 15kHz live audio codec and a portable 20kHz recorder. The app is available on the Enterprise 50 and 100 packs, and both can be configured and managed remotely using a Web browser graphical user interface (GUI), which is accessible from any computer with an Internet connection.

[tieline.com](http://tieline.com)

## Wireless mic system | Line 6

**XD-V55:** With 24-bit, 10Hz - 20kHz, compander-free performance, XD-V55 series digital wireless systems provide full-range audio clarity and license-free operation worldwide. The line includes handheld, lavalier, and headset digital wireless systems. The family offers pure, 24-bit reliable sound in an easy to operate, desktop or rack mountable format. Line 6 digital wireless technology does not use companders or compress the audio signal in any way, and audio quality does not degrade with distance, inspiring vocalists to perform with confidence. XD-V55 systems operate in the 2.4GHz band, which is free from interference due to TV broadcast, public safety announcements, cell phone towers and other transmitting devices.

[line6.com](http://line6.com)



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Mid West:	1-513-899-3036
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Latin America:	1-760-650-1427
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FM Amplifiers



RDS Encoders



FM Receivers



STL



Audio Processors



IP Codecs



Proudly supplying equipment for the 2012 Games

### Console surface | Logitek

**ROC:** Available in configurations of 6, 12 or 18 faders (including split fader configurations), the ROC includes Penny & Giles faders, OLED source indication, and a durable reverse-printed overlay surface a tabletop enclosure. RGB-addressable lighting in the console's ON/OFF and softkey buttons allow users to specify any desired color for console functions. The console's monitor control module includes controls for source selection, timer start/stop, two monitor feeds and headphone output along with 12 user-assignable softkeys. Additional modules with 12 softkeys per module are available as an option. Front panel headphone jacks (both "o" and mini) are provided. An optional onboard Logitek router control panel with OLED source/destination indication allows fast access to router functions with simultaneous display of five sources.

[logitekaudio.com](http://logitekaudio.com)



### Mic compressor | RDL (Radio Design Labs)

**HR-MCP2:** The HR-MCP2 is a dual-channel microphone compressor that produces a consistent audio output level over wide variations (up to 25dB) in the microphone input level. Rear-panel switches allow setting each output to mic or line level. Each channel can therefore be used as a mic-level in-line compressor or as a microphone preamplifier with compression. The unique circuit design preserves full studio-quality low-noise performance at any gain setting. The HR-MCP2 is compatible with dynamic and condenser microphones. A front-panel switch is provided to enable 48Vdc phantom to both microphone inputs. It is designed to hold average output levels constant without altering the sonic integrity of dynamic sources. Gain reduction is nearly instantaneous for both expected and severe input overloads. Automatic release time adjustments result in nearly inaudible compression action over the entire dynamic gain reduction range.

[rdlnet.com](http://rdlnet.com)



### Solid-state transmitters | Elenos

**Indium Series:** The Indium Series combines high system efficiency with planar technology, which views a circuit in its two-dimensional state, and uses photographic processing

concepts to achieve a series of exposures on a substrate. As used in the entire RF section, this process reduces the parts count, weight, cost, and greatly improves reliability. Additional features of the Indium Series include design suggestions from engineers in the field. The conservative rating of all components extends the life of the transmitter, meaning the transmitter will operate in a much hotter environment. Design steps have also been taken to reduce the impact of high humidity conditions. The ETG2000.20 is a 2kW transmitter with integral built-in exciter. RF Power can be adjusted from 200 to 2kW. The transmitter occupies 2RU. The ETG5000.50 is a 5kW transmitter with built-in integral exciter. RF Power can be adjusted from 300 to 5kW. This model occupies 4RU and does not externally couple two amplifiers to achieve the total output.

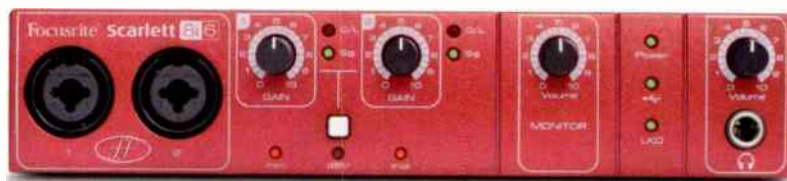
[elenos.com](http://elenos.com)



### Portable StudioFoam absorbers | Auralex Acoustics

**ProMAX Panels:** Designed as a portable, lightweight sound absorption treatment, ProMAX panels are flexible, simple to set up and transport, and easily assembled and disassembled. They can be moved easily and positioned to reduce audible reflections in any recording or listening environment. The panels can also be grouped together to form a portable vocal booth on the fly and can be positioned around a drum kit to "tune" room sounds in recordings. Able to be extended up to 8', the panels feature an adjustable contour for precision positioning.

[auralex.com](http://auralex.com)



### Audio interface | Focusrite Audio Engineering

**Scarlett 8i6:** The Scarlett 8i6 is an 8-in/6-out audio interface with two award-winning Focusrite preamps. Alongside the two high-quality mic preamps, two additional analog inputs, four analog outputs, S/PDIF and MIDI open the door to true multi-track recording. Two Hi-Z instrument inputs let the user plug straight in without the need to buy additional DI boxes, and two virtual Loopback inputs are also available for routing digital audio between software applications. Included with the Scarlett 8i6 is Scarlett MixControl, an 18 x 6 DSP mixer.

[focusrite.com](http://focusrite.com)

# Drops jaws. Not audio.



Broadband Internet is everywhere. Which makes it ideal for live remotes.

Unfortunately, the internet is also notoriously erratic. Even if you're lucky enough to get a good connection, it might deteriorate during your show. So you dial back the bitrate, sacrificing sound quality to play it safe.

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[www.telos-systems.com](http://www.telos-systems.com)

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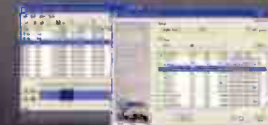
World Radio History

## STREAMING AUDIO



Hardware and software products for processing, encoding and streaming your audio content.

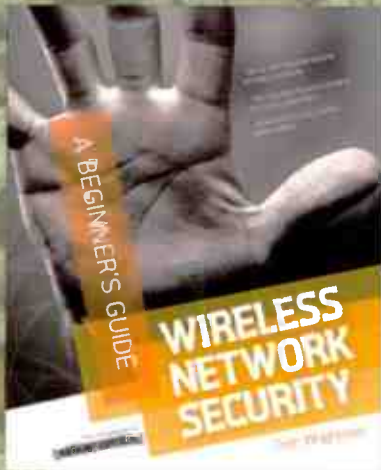
## AUDIO LOGGING



PC Software for archiving and logging all of your stations audio.

# Reference Room

Selections for your bookshelf reference



## Bookshelf reference | McGraw-Hill Professional Wireless Network Security: A Beginner's Guide:

By Tyler Wrightson

Protect wireless networks against all real-world hacks by learning how hackers operate. This book discusses the many attack vectors that target wireless networks and clients and explains how to identify and prevent them. Actual cases of attacks against WEP, WPA and wireless clients and their defenses are included. Learn how to securely deploy WPA2 wireless networks, including WPA2-Enterprise using digital certificates for authentication. The book provides techniques for dealing with wireless guest access and rogue access points. Next-generation wireless networking technologies, such as lightweight access points and

cloud-based wireless solutions, are also discussed.

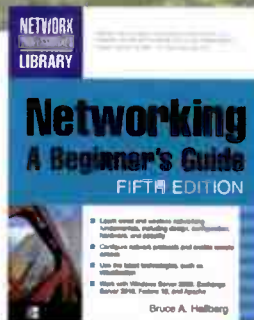
[mhprofessional.com](http://mhprofessional.com)

## Bookshelf reference | McGraw-Hill Professional Networking: A Beginner's Guide, 5th Edition:

By Bruce Hallberg

This introductory handbook covers wired and wireless network design, configuration, hardware, protocols, security, backup, recovery, virtualization and more. After laying the groundwork the book explains, step-by-step, how to install, set up and administer Windows Server 2008, Exchange Server 2010, Fedora 10 and Apache. Learn about network cabling, topologies, hardware, and the OSI Model. Work with network protocols including TCP/IP, UDP, DHCP, HTTP, FTP, SMTP, VoIP and others. Enable remote access through a VPN or other methods. Understand virtualization technologies, and learn how to set up and use VMware Server.

[mhprofessional.com](http://mhprofessional.com)



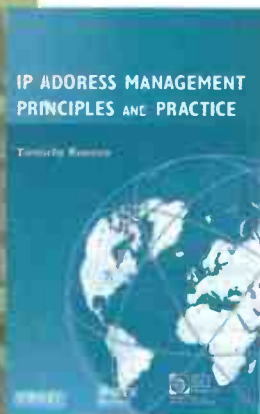
## Bookshelf reference | Wiley-IEEE Press

### IP Address Management Principles and Practice:

By Timothy Rooney

IP address management (IPAM) includes the application of network management disciplines to IP address space and associated network services, namely DHCP (Dynamic Host Configuration Protocol) and DNS (Domain Name System). The consequence of inaccurately configuring DHCP is that end users may not be able to obtain IP addresses to access the network. Without proper DNS configuration, usability of the network will greatly suffer as the name-to-address lookup process may fail. IPAM applies management disciplines to these core services, including configuration, change control, auditing, reporting and so on, and they are necessary given the absolute requirement for properly managing IP space and DHCP and DNS servers.

[wiley.com](http://wiley.com)



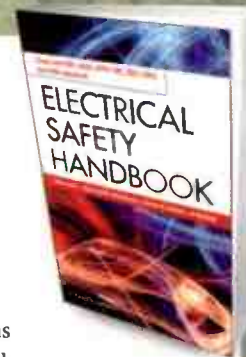
## Bookshelf reference | McGraw-Hill Professional Practical Antenna Handbook,

### 5th Edition:

By Joseph J. Carr,  
George W. Hippisley

Design and build your own antennas with the help of this guide. Updated and revised to provide clear answers to questions frequently asked by hobbyists and electronics technicians, this book blends theoretical concepts with hands-on experience and requires only high school mathematics. The book covers antenna fundamentals, the half-wave dipole, transmission line impedance matching techniques, a Smith chart tutorial, and also explores antenna modeling software and network analyzer add-ons for computers.

[mhprofessional.com](http://mhprofessional.com)



## Digital book | Society of Broadcast Engineers

### SBE Handbook for Radio Operators:

The "SBE Handbook for Radio Operators" can now be purchased through Amazon.com and BarnesAndNoble.com. They can be read using Kindle and Nook capable devices and apps. Purchase of the digital version of either book does not include the corresponding SBE operator certification exam, which can be purchased separately through the SBE website. The combined cost of the digital book and the separate exam is the same as the cost for the traditional paper book that includes the exam. The "SBE Handbook for TV Operators" is also available.

[sbe.org](http://sbe.org)

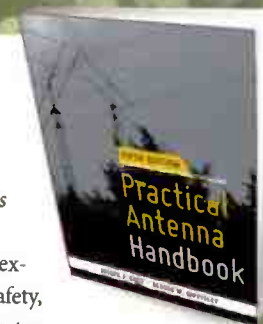
## Bookshelf reference | McGraw-Hill Professional Electrical Safety Handbook,

### 4th Edition:

By John Cadick,  
Mary Capelli-Schellpfeffer, Dennis  
K. Neitzel, Al Winfield

This fourth edition is written by experts in electrical construction safety, operations, maintenance and construction as a practical guide for electrical workers and others exposed to electrical hazards. This easy-to-use, illustrated guide provides vital safety information on every major electrical standard, including NEC, NESC, NFPA, 70E, IEEE 1584, and OSHA. It covers the basic physics of electrical hazards, electrical safety equipment, safety procedures and methods, grounding and bonding of electrical systems and equipment, electrical maintenance and its relationship to safety, regulatory and legal safety requirements and standards, safety management and training, and more.

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## MARC-15 MODULAR ANALOG CONSOLE

- 15 channels, 30 inputs
- 3 stereo Output buses
- Control room & Studio monitors
- Cat5 cabling for today's infrastructure
- Analog & digital with USB sound card modules
- Dual conferencing Mix minus buses for telephone hybrids



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conductive plastic faders and LED lighted switches for reliability. Socketed ICs for fast on site repair.



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World Radio History

### Acoustic panels | Aural Sonic

**Aural Sonic:** Typical absorbers only absorb in the high and mid frequencies, causing the room to sound unnaturally "dead." Aural Sonic touts specs that show even absorption at all frequencies. At less than 1" thick, Aural Sonic has soundproofing capabilities equivalent to conventional absorbers that are 10x thicker. If applied across an entire wall, it can have soundproofing qualities of a 10" wall. Because Aural Sonic delays reflections, it makes the room seem larger than it is. The delay also creates a considerable enhancement in sound.  
[auralsonic.com](http://auralsonic.com)



### Audio processor | Omnia Audio

**Omnia.11 FM:** Omnia.11 yields a redesigned firmware platform, GUI and adjustments to every algorithm in the system. It was created to provide a solution to distorted audio processing, while still delivering the loud signal required to be competitive. The Density Detector enables the system to properly handle hyper-compressed content, as it keeps Omnia.11 operating on-target. Its ultra-low IMD multiband limiter system, coupled with smart gain reduction algorithms, enables the limiters to sound transparent and natural. The Omnia.11 FM includes all of the power and dynamics of the original FM processor, but without HD/DRM capability for those who have no immediate need for second service processing.  
[omniaaudio.com](http://omniaaudio.com)

### Hot shoe shotgun mic | MXL Microphones

**FR-310:** The MXL FR-310 video microphone mounts onto a camcorder or DSLR camera and shuts out sound from the sides and back, with a pickup pattern that targets sound in front of the camera. Three gain settings pull in the right amount of sound in close-up or long shot situations, while a bass roll-off switch removes low-frequency noise. The integrated wind-screen helps block wind noise, which aids in keeping the sound in the picture. Get up to 500 hours per AAA battery.  
[mxlmics.com](http://mxlmics.com)

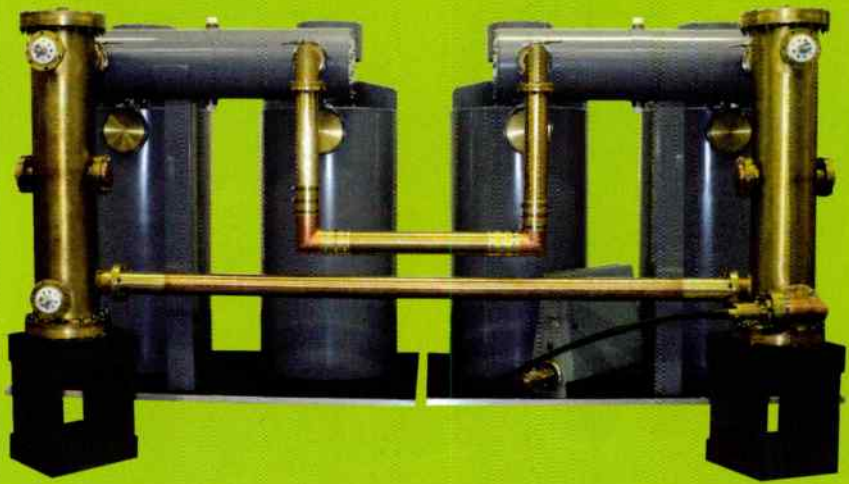
### KVM Extender | Adder Technology

**AdderLink Infinity Dual:** The AdderLink Infinity Dual enables the creation of a flexible infrastructure, allowing a computer and its operator to be separated by almost any distance over a gigabit network without any loss in capabilities, reduction in videoresolution, audio quality or USB latency. It has the capability to run any size matrix with DVI, USB, RS-232 and Audio on all ports, the only limitation is the user's network and how the traffic architecture is configured. As an IP-based matrix switch, AdderLink Infinity Dual provides almost unlimited extension possibilities. This allows the broadcast industry any number of studios and control rooms to be connected, wherever they might be located. Another advantage of the AdderLink Infinity Dual is that it removes the noise and heat associated with a hard drive away from the sensitive broadcasting environment.  
[addertec.com](http://addertec.com)



### All pass FM analog/HD Radio diplexer | ERI-Electronics Research

**788 Series:** This high-level diplexer efficiently combines analog and digital. The system's analog insertion loss is -0.35dB or less and the digital loss is -1.4dB or less. In addition, the group delay performance is readily correctable by currently available FM transmitters. Group delay of the analog signal is less than 350 nanoseconds and the digital delay is less than 600 nanoseconds. The 788 is rated for up to 30kW analog and up to 5kW digital input power. The diplexer gives FM radio stations currently operating a -20dBc IBOC power level with a 10dB hybrid injector the opportunity to increase digital power without having to invest in a new transmitter.  
[ERlinc.com](http://ERlinc.com)



### Broadcast receiver | Crown Broadcast

**RFBA-1, RFBA-1MA:** An AM/FM/WR broadcast receiver specifically designed to fill multiple needs, the RFBA-1 comes standard with three receivers built into a 1RU chassis. The RFBA-1 is configurable to accommodate any mix of FM and AM stations plus NOAA Weather Radio. It is a simple-to-deploy, highly sensitive, fully DSP-based monitor system. Being fully frequency agile in all receivers via display meets receiving needs for use as a translator receiver, EAS monitor or on-air monitor. The RFBA-1MA offers full DSP-based modulation monitoring for all three receivers. The unit can be fully controlled via Ethernet connection. Other features include PC-based user interface, programmable output relay, firmware updates via USB port, RDS encoder and decoder. Upgrades to allow for modulation monitor, ability to increase single tuner to receive two weather radio signals and potential future ability to stream audio via Ethernet.  
[crownbroadcast.com](http://crownbroadcast.com)

# Why does Axia outsell every other IP console? We've got connections.

Did you know that there are over 2,500 Axia consoles on the air? That's more than all other AoIP consoles — combined. Is it because our ads are so irresistible? Our marketing guys think so... but, no. It's because broadcasters know that a network's value increases with the number of devices that talk to it. And nobody connects to more IP-Audio devices than Axia.

With this huge installed base of broadcast studios around the world, we've attracted dozens of partner companies, all offering Livewire™-compatible products. A device with a Livewire port is instantly available to any other device on the network. So, if you're shopping for IP consoles, be sure you ask: "How many partners do you have?" Because a network that only plays with itself isn't very well-connected... is it?



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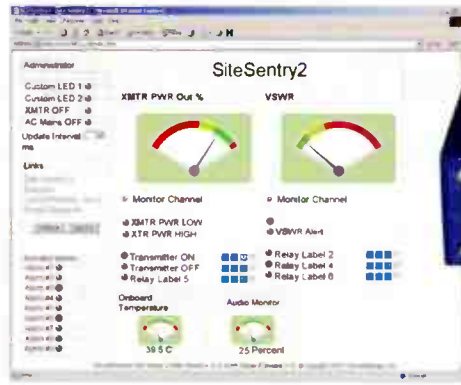
[www.AxiaAudio.com/Partners](http://www.AxiaAudio.com/Partners)





**Transmitter support service | Nautel**

**Phone Home:** This service helps Nautel NX, NV, NVL and VS-series transmitter users track, diagnose and repair problems, sometimes even before a failure. The Advanced User Interface (AUI) uses a firewall-friendly Remote Monitoring Database to send data from the transmitter to Nautel to track parameters. Parameter data can be tracked and displayed over time. A live mode shows the last 30 minutes of data. The software can directly access the transmitter AUI to obtain readings as well.  
[nautel.com](http://nautel.com)



**Two-channel remote and monitor | Circuitwerkes SiteSentry2:** This two-channel, Web-based remote control can take 10-bit analog readings and also provides

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

**Audio/video synchronizer | Singular Software**

**PluralEyes 3.0:** Designed to sync audio and video within various video editing programs, PluralEyes 3.0 visually displays the sync process and media clip locations as it unfolds. The software eliminates the task of manually sliding audio and video to match in the editing process. The visual workspace highlights the progress of the sync, which provides more useful information and more control. Version 3.0 performs the function faster than previous editions. The process allows multiple video feeds to be combined without the need for timecode. The software works with Final Cut Pro, Media Composer, Premiere Pro, Vegas Pro and Edius.  
[singularsoftware.com](http://singularsoftware.com)

# The Metamorphosis Continues

**GSelector 4**  
 Advanced Scheduling



### IP audio distribution | Barix

**Instreamer:** The latest Instreamer offers big audio improvements at a lower cost in a greener, more energy-efficient package. The device retains its familiar compact, bulletproof design and feature set while bringing reliable, high-quality IP audio encoding. New features include a digital signage processor, support for constant bit-rate monitoring, power consumption and supply optimization with a mini USB switch-mode power supply, and network alarms via SNMP traps.

[barix.com](http://barix.com)



### AM/FM broadcast monitor | Davicom

**FMBM:** This AM/FM broadcast monitor offers a number of advanced features in a compact package. Remotely controllable through Davicom's MAC line of intelligent site monitoring systems, the FMBM can also be manually configured and operated.

It features: synthesized tuning, non-volatile configuration storage, on-site monitoring of transmitter power, off-air monitoring of receive signal strength, FM deviation measurement and alarms, carrier frequency measurement and alarms, RDS/RBDS decoding, balanced audio output on back panel and headphone output on front, all alarm levels are settable by the user, locally or remotely, full remote control and monitoring through any Davicom MAC with USB interface, alarm contacts for stereo absence, high/low deviation, low power, carrier frequency, and drift. Designed for full and easy integration into the MAC's powerful control and monitoring structure, the FMBM gives the benefit of remotely monitoring the key RF parameters of an AM or FM transmitter to ensure regulatory compliance.



[davicom.com](http://davicom.com)

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### RBDS subcarrier generator | OMB America

**RDS 5000:** The RDS 5000 implements a radio digital data system to be used in FM stations. The most advanced technology is used in the design of this new transmission system, really useful for all radio stations. The RDS 5000 is easy to program and install, and it is able to transmit 50 words of eight characters each. It provides other parameters like time, data; TP, TA and M/S remote controlled functions; PTY (type of program management) and radio text management. The RDS doesn't disturb the audio signal. All necessary software is included.

[omb.com/en](http://omb.com/en)

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### RF adapters | Myat

**Transitions to 7-16 DIN:** These RF adapters provide an easy transition from male or female 7-16 DIN to 3-1/8", 4-1/16" or 6-1/8" connector. The sturdy aluminum construction includes handles around the DIN connector, which aid insertion and removal and also protect the connector when not in use. The inner conductor is silver plated for better conductivity and feature PTFE insulators.

[myat.com](http://myat.com)





Interactive mic arm |  
Kumotek Robotics

**RoboBoom:** Setting talent in front of a mic before going live is easy. Once the show begins, they tend to move around, and they move away from their mics. RoboBoom was designed to realign with the talent.

A sensor identifies the speaker's face and tracks the movement. Servo motors keep the mic aimed at the speaker to maintain better mic placement as the speaker moves. The boom can also be remotely controlled, which is useful for video shoots to reorient the microphone.

[kumotek.com](http://kumotek.com)

**Automation system | OMT Technologies**

**iMediaTouch v4.2:** In addition to full support of 32- and 64-bit versions of Windows 7, the iMediaTouch V4.2 release has significant feature enhancements. iMediaTouch OnAir now provides "quick links" to a variety of social networking sites, auto ducking for Liner EOM adjust, and a new audio library screen added to the blade section. Other feature additions include a new quick access library view in Log tools, Info and Backsell tabs with social networking links added to Voice Tracking, and a "Show Profiles" feature for iMediaImport that allows fully automated ingest of Internet delivered show content.

OMT has also introduced new features in our iMediaArchive product designed for large radio groups and NPR stations looking to house very large SQL-based audio libraries. iMediaArchive provides Web browser-based enhanced customizable Boolean search capabilities within the database supporting such fields as composer(s), soloist(s), conductor(s), chorus, master genre and so on. iMediaTouchArchive users can now access audio content from within the iMediaArchive library screen and insert the files right into the MediaTouchOnAir log. Users can also create, edit, delete and save play lists within iMediaArchive and then insert those play lists to any position in the iMediaTouch OnAir log.  
[omt.net](http://omt.net)

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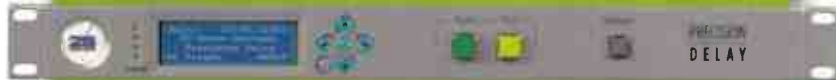
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**Audio Delay processor | 25-Seven System**

**Precision Delay:** Precision Delay addresses a range of radio applications, such as drift between analog and HD Radio transmission signals; broadcast repeater synchronization; and delaying programs across time zones. It uses delay status readings from compatible Belar and Audemat modulation monitors to automatically adjust delay of the analog broadcast signal for synchronization with the HD Radio signal.



In addition to the blend issue, some stations choose not to delay their analog signals during local sports events, so listeners can hear the analog signal in real-time with the game. Not only does Precision Delay provide both the inaudible exit from delay and precise post-game resynchronization with the HD Radio signal required by "ballgame mode," it does so while leaving PPM watermarking intact, so stations don't have to sacrifice ratings during the delay transition. Serial data over IP or RS-232, as well as contact closures, can also be delayed insync with audio.

25-seven.com



**Equipment sales and service | Progressive Concepts**

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

progressive-concepts.com

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### Studio furniture | Graham Studios

**Radius Curve:** Radius Curve features robust 6mm "Waterfall" table top trim, with 3mm PVC trim on vertical panels. More seating options are created with the addition of a new smaller utility cabinet and three adjustable metal legs. The multiple interview and co-host areas are created with radius cuts of as much as 180 inches. These large curves are integral to the basic table top and add to the overall appearance of the studio. Radius Curve is available in stand-up or sit-down in 12 configurations that can be modified to suit. All configurations are shipped flat pack or fully assembled.  
[graham-studios.com](http://graham-studios.com)

### Automation control system | Gefen

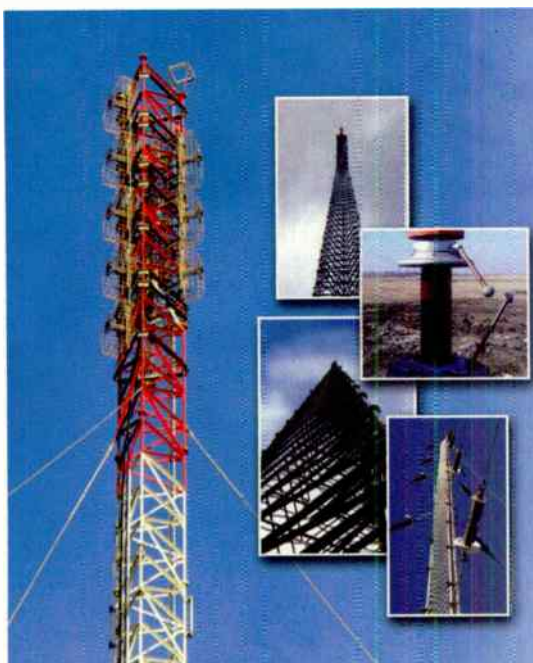
**ToolBox Mini PACS:** The Mini Professional Automation Control System (Mini PACS) is used to control audio and video devices using IP over a network. It allows control of one RS-232 serial-controlled device, three IR-controlled devices, and two relay contacts. The Web user interface allows IR and two-way RS-232 commands to be sent by the Mini PACS to the connected devices to execute the desired functions. The IR and RS-232 ports can be configured, allowing the Mini PACS to be compatible with most audio and video devices. It can learn, store, and manage IR commands from other manufacturers' remotes. Two normally-open relays allow control of screens, blinds or draperies.  
[gefen.com](http://gefen.com)

### Interactive social message tool | Broadcast Electronics

**DJ Wall:** Providing DJs with a central Web location to receive and respond to listener feedback, DJ Wall is aggregated from various social networking and communication channels. Users can aggregate messages from listeners on SMS, Twitter, Facebook, MySpace, AIM, Google Talk, MSN, Yahoo and phone/voice; integrate local SMS and voice-enabled phone numbers into the social networking experience; poll listeners live and receive immediate results from all the social network channels. Poll results are "automagically" updated in real-time right in a station's wall. Users can also publish recorded and "star" messages to a central public feed for easy access by listeners, and centralize status updates for all listeners on all the social networks and devices of their choice.  
[bdcast.com](http://bdcast.com)

### 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 in 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 greater 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.  
[superiorelectric.com](http://superiorelectric.com)



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**Analog mixer | Allen & Heath**

**ZED60-14FX:** This compact analog mixer is a companion to the ZED60-10FX, employing the same high quality 60mm faders but with the addition of an extra four mono/mic channels. Two of the eight mono channels have high impedance jack inputs that can take a normal line level or a low-level input from a guitar pickup. These inputs have been crafted to recreate the sound of a classic tube preamp in a combo or head amp for incredible definition and warmth. Two stereo inputs are provided for MP3/CD players or keyboards.

[allen-heath.com/US](http://allen-heath.com/US)

**Multichannel AES switch/convertor | Digital Alert Systems**

**R198:** R198 converts an incoming analog source to digital AES audio and distributes it to four different AES switches. It enables users to convert a stereo analog signal into AES and switch it in and out of four other AES program streams. In a 1RU chassis, the R198 features a built-in Web server and therefore can be configured and operated from any standard Web browser on any standard platform. Once the system is configured, each channel switch is controllable over a standard TCP/IP network connection or via GPIs, making it easy to use over a network or directly interfaced with other broadcast equipment such as automation and older EAS equipment.

[digitalalertsystems.com](http://digitalalertsystems.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.

[bsiusa.com](http://bsiusa.com)

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**Modular audio console | Wheatstone**

**LX-24:** Low-profile design and a table-top form factor allow the LX-24 to fit into almost any studio situation, requiring no holes or cut-outs in the furniture. The meter bridge features

three sets of bright, ultra-high resolution LED meters, as well as LED talkbacks for auxiliary levels and pan control. A digital clock/timer is also included. Each fader provides access to four stereo buses, plus four pre-fader aux sends, a stereo cue bus, and four mix-minuses. An LED source name display, an A/B source selector, and two programmable soft buttons are also available, and a set button provides access to assignable controls in the master section.

[wheatstone.com](http://wheatstone.com)

**2012 PICK HIT Radio**



**Digital audio workstation | Presonus Audio Electronics**

**Studio One Free:** This entry-level version of Presonus' DAW for Mac and Windows is intended for beginners who don't yet need the advanced features in Studio One Artist, Producer and Professional. Studio One Free provides all of the recording and editing features needed for basic music production – and as its name implies, it's free. Once users have downloaded the application, they can use it immediately; no Internet connection or user account is required, no product key is involved, and Studio One Free will not time out. This new version features single-window work environment, content browser with search, powerful drag-and-drop functions, control link MIDI mapping, sidechain routing, automatic delay compensation, real-time audio timestretching and resampling, unlimited audio and Instrument (MIDI) tracks, unlimited effects channels, and unlimited channel inserts and sends.

[presonus.com](http://presonus.com)

**Broadcast audio processor | Inovonics**

**David IV:** This processor for FM and FM/HD Radio broadcasting features an all-digital, DSP-based design. Comprehensive audio processing includes gain-riding AGC, five bands of dynamics compression and equalization, stereo enhancement and sub-bass augmentation, plus Inovonics' PIPP limiter. Processing is integrated with a high-performance stereocoder (stereo-gen) that includes active and metered RDS combining. The David IV can accept analog and AES-digital inputs, and has two separate composite/MPX outputs in addition to both analog and AES-digital line outputs. The line outputs can be configured for either FM or digital radio transmission characteristics. It may be set up and controlled using the front-panel graphic display and jog wheel, or connected directly to a network for full TCP/IP control over all parameters with a PC and supplied software.

[inovonicsbroadcast.com](http://inovonicsbroadcast.com)



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### Analog, digital translator | Armstrong Transmitter

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



### Rackmount fan panels |

#### Lowell Manufacturing Company

**Model Series FW, FT:** These built-in thermostat options for 19" panels feature whisper-quiet or turbo fans. It is actually built right into the cord, activating and deactivating fans when ambient temperatures reach pre-set points. The thermostat automatically turns fans on when the ambient temperature hits 86 degrees F, and off when the temperature is 72 degrees F. This power-saving feature ensures efficient fan operation, while saving rack space. Model Series FW (whisper) features a 4.7" diameter, 50cfm airflow rating, 28dB noise rating, and requires 5.5W of power. Model Series FT (turbo) features a single 10" diameter fan (19" E.I.A. 7U panel) has 550cfm airflow rating and 50.8dB noise rating, requiring 61W of power. The package includes front/rear fan guards and cord.  
[lowellmfg.com](http://lowellmfg.com)



### Handheld mic with cable | Audix

**f50CBL, f50SCBL:** The f50 (and its partner, the f50S, which adds an on-off switch) is the star of the Fusion Series, and Audix has added two package options to this popular mic by offering an XLR mic cable. The new designations are the f50CBL and f50SCBL. The mic features a cardioid polar pattern and a die-cast zinc body and steel mesh grill and includes a stand adapter and vinyl carrying pouch.  
[audixusa.com](http://audixusa.com)

### AoIP interface | Axia Audio

**xNodes:** Axia xNodes are a family of audio interfaces that convert traditional analog and digital audio signals into the Livewire IP-audio streams used by Axia AoIP networks. xNodes can configure themselves, fit in 1RU with optional wall-mount kits, feature fanless power supplies and consume 14W of power. They can also draw power over Ethernet from a network switch or the power injector included. They also feature dual Livewire ports and a redundant power plan, work with both stereo and mono signals, have RJ-45 ports for each I/O and locking DB-25 connectors. There are five models available.  
[axiaaudio.com](http://axiaaudio.com)



### iPhone processing app | Aphex

**Audio Xciter:** The Audio Xciter is an audio app that puts audio processing power on an iOS device. Audio Xciter analyzes and enhances an audio signal on the device in real time. An Android version will also be released. The free version of the app allows 15 minutes of enhanced playback per day. The Audio Xciter Basic version removes the time restriction and the Audio Xciter Studio version allows users to fine-tune the Xciter DSP settings. The app can be purchased through iTunes for iOS and the Android Store and Amazon.com for Android. A portion of the proceeds from the sale of Audio Xciter will go to Respect the Music, Aphex's foundation supporting music and arts education.  
[aphex.com](http://aphex.com)

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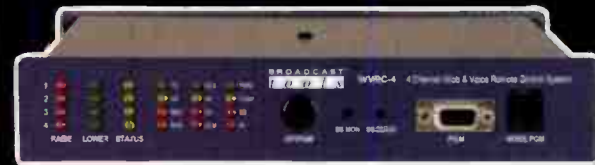


## AC Power Sentinel® 2

An ideal solution for remote reboot and many other remote power control applications.

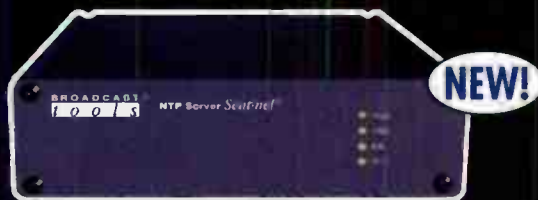
## AC Power Sentinel® 2 Plus

Same as AC Power Sentinel® 2 with additional features.



## WVRC-4

Provides a half-rack solution for web based and/or recordable voice response dial-up transmitter site control.



## NTP Server Sentinel®

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## Switcher Sentinel® 3 »Web

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## SITE Sentinel® 4

Provides a cost-effective, one third-rack solution for web based site remote control.



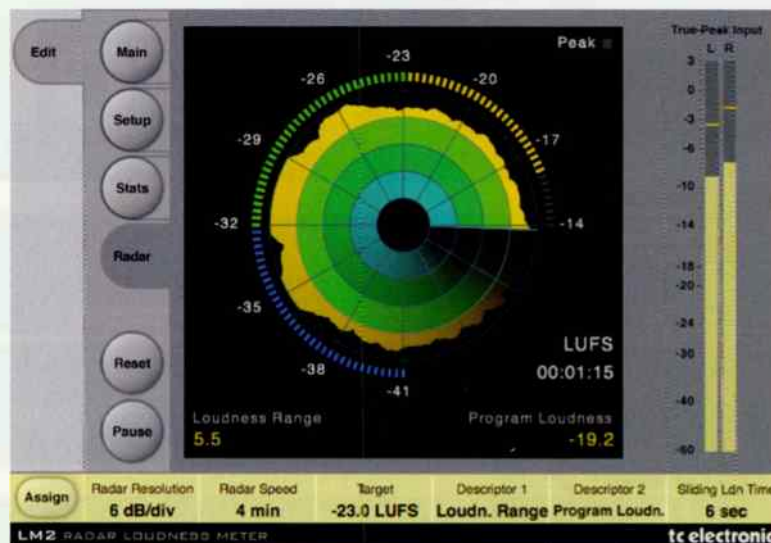
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### Plug-in | TC Electronic

**LM2 Radar Loudness Meter:** This LM2 plug-in features TC's Radar Display that provides a quick, yet detailed overview of the loudness landscape of any stereo audio signal. The main radar view shows loudness history, while the outer ring displays momentary short-term loudness. Finally, True-peak Levels are shown in real-time on the right side of the user interface, completing the overview. There are two versatile descriptors that can be set to reflect a variety of parameters like Loudness Range (LRA) and Program Loudness. Each revolution of the radar can be set from 1 minute to 24 hours, which means that LM2 will log

loudness data for up to 24 hours continuously.  
[tcelectronic.com](http://tcelectronic.com)



### Relaunched mic line | AKG

**Project Studio Line:** Nearly 20 years after the launch of the C3000, AKG has relaunched the Project Studio Line. The revamped Project Studio Line's C4500 BC is specially designed for on-air broadcast purposes. The mic is designed with a cardioid pickup and an edge-terminated large diaphragm condenser capsule. It features low noise and 165dB maximum SPL. The C3000 features a switchable attenuation pad and low-cut filter that enable high SPL up to 150dB and eliminates proximity effects. The C2000 small-diaphragm condenser sounds like a real large-diaphragm microphone but at a more affordable price. Its low-noise electronics ensure low distortion and a high dynamic range. The C4000's high-performance, multi-pattern, large-diaphragm design provides exceptionally high headroom and low self-noise.

[akg.com](http://akg.com)

### Dry reed switch | Veetronix

**06 series switches:** The 06 series is manufactured with the same technology as their existing switches with an hermetically sealed dry reed. It offers a smooth feel and extended reliability. Mounted on 1/2" centers, the switch can be non-illuminated or LED illuminated. Keycaps are available in .485" and .585" with the relegendable, concave style in various colors.

[veetronix.com](http://veetronix.com)

### Power sensor | Bird Technologies Group

**7020 Series:** This sensor is an economical, plug-and-play solution for power measurement needs. The 7020 determines and reports forward and reflected true average power and VSWR over a wide frequency range of 350MHz to 4GHz. It also never requires field calibration, only requires factory calibration once per year and is traceable to National Institute of Standards and Technology (NIST).

[bird-technologies.com](http://bird-technologies.com)

### Portable broadcast kit | PTEK

**Radio Station in a Box (RIAB):** The Radio Station in a Box (RIAB) contains all the equipment to have a stereo FM radio station up and running in a matter of minutes. This portable system can be used for natural disaster sites or as a back-up for a transmitter site – even in remote locations. The system is pre-wired and ready to go. Simply install the antenna on the highest point of the building, run the coax to the transmitter, hook up the ac power (either local or generator), and it's on the air. Using a laptop as the audio source gives greater flexibility. Programming with the optional radio automation software could not be simpler. Built-in wireless (where available) gives the option of broadcasting any streaming Internet audio source. Or, just put in a CD to play tracks and use the microphone for announcements. System includes: FM broadcast transmitter, BSI Simian Radio automation, desktop mic, 5/8 3dB gain antenna, coax cable with connectors, 220Vac input 50-60Hz, FCC-certified for LPM, and housed in 4RU shock-proof rack case.

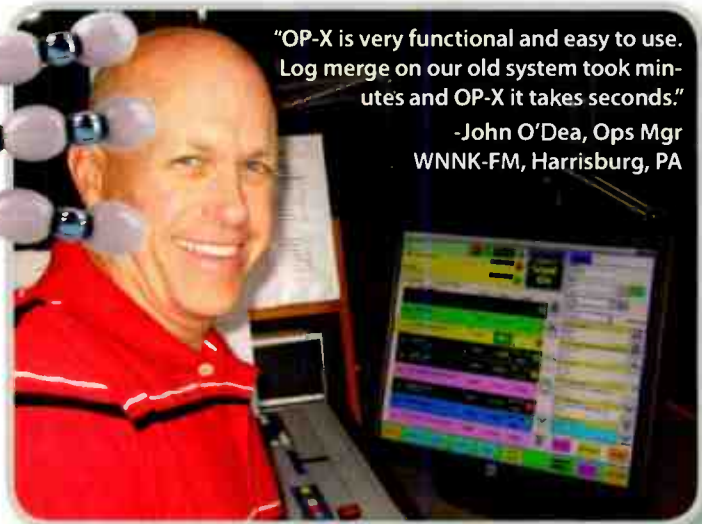
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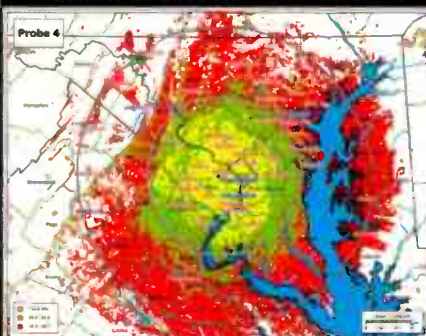
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