

# Radio <sup>TM</sup>

THE RADIO TECHNOLOGY LEADER

## Product Source

**Technologies  
working  
together  
to make it all run**



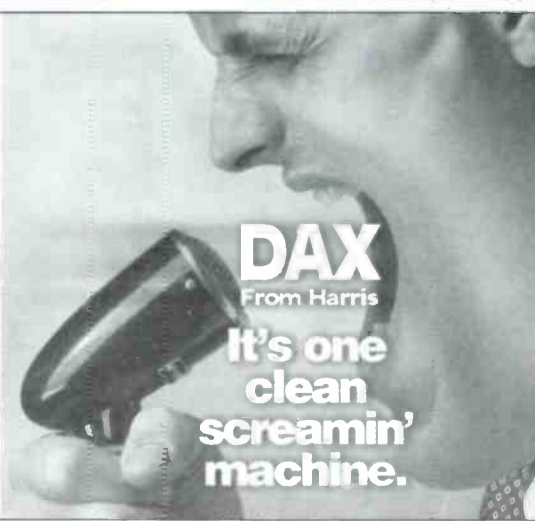
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from HARRIS

**An AM/IBOC transmitter  
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**HARRIS**



**DAX**  
From Harris

**It's one  
clean  
screamin'  
machine.**



## **GENERATION 9 DIGITAL CONTROL SURFACE**

Designed to integrate flawlessly with the Wheatstone BRIDGE digital audio network router, the Generation 9 control surface allows you to easily create large or small platform-based systems that are exceptionally user-friendly and flexible. Wheatstone BRIDGE network cages house all I/O ports and engine cards, and may be wired in tandems within a single equipment room or interconnected to separate remote locations by means of fiberoptic or CAT-5 cables to provide single wire studio integration schemes.

Once configured, the system operates entirely independently of external computers. Configuration itself is intuitive and carried out onsite by means of user-friendly graphic interfaces provided by Wheatstone desktop software. We have gone to great lengths to make these setups easy for your field engineers, allowing expansions and changes to be achieved painlessly. Naturally, the Generation 9 system also takes full advantage of Wheatstone's exclusive VDIP® configuration

software as well, so that studio functions (like mutes, fader and timer starts, tallies, etc.) are easily accomplished right at your desktop. Once set-up is completed the desktop is disconnected; all settings are retained in nonvolatile storage and the entire system runs standalone. Ethernet protocol is built in, providing interface with automation, scheduling, and hardware controllers as you require.

Whether you're planning a small, centrally located studio network or a large, multiple format build-out, the Generation 9 Digital Control Surface can form the basis for a fully integrated, reliable and user-friendly broadcast system that will handle your most demanding requirements *and* be able to change with your varying needs as they arise.

At Wheatstone we have more combined digital design expertise than anyone. **Benefit from our hard work!** Choose **WHEATSTONE—the Digital Audio Leader.**

 **Wheatstone Corporation**

600 Industrial Drive, New Bern, North Carolina, USA 28562  
[www.wheatstone.com](http://www.wheatstone.com) / [sales@wheatstone.com](mailto:sales@wheatstone.com)

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## Reliable Program Audio Over The Internet?

### IntraLink-IP™ Streaming Multiplexer

Create a program audio circuit wherever an Ethernet jack exists with the **IntraLink-IP** streaming multiplexer. The QoS of packet switched networks has improved dramatically signaling the beginning of a new low-cost means of professional audio transport.

**IntraLink-IP** has a Harris exclusive forward correction scheme which takes advantage of these networks. It delivers robust streaming for critical STL/TSL and general purpose broadcast audio transport. Contact your Harris sales representative today.



#### Save money on program circuits with IntraLink-IP.

- Make the Internet into your virtual STL
- Turn low-cost public and private packet switched networks into program audio circuits
- Ethernet jacks, DSL and cable modems become instant RPUs

## The best gear reference you will find

How do you find the gear you need? With more than 150 products, the 2003 *Radio* Product Source is a valuable reference tool for anyone looking for new technology and products for a radio station. Each listing offers a detailed description of the product or service, the company's contact information and most feature a photo of the equipment for your evaluation.

The *Radio* magazine staff worked tirelessly to compile a collection of products and services that offer real solutions to everyday needs, as well as products that would fit various station sizes and budgets. Many of the products featured in this year's Product Source debuted at NAB2003. We have also included a recap of the *Radio* magazine 2003 Pick Hit award recipients from NAB2003 that were announced in June.

We will also distribute this supplement at the upcoming NAB Radio Show and the 115<sup>th</sup> AES convention. We hope to see you at one of these conventions.

The *Radio* magazine staff welcomes your feedback on this annual supplement. Please e-mail your comments and suggestions to [radio@primediabusiness.com](mailto:radio@primediabusiness.com).

*Kari Taylor*

**Kari Taylor,**  
associate editor

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- Acoustical Society of America
- Audio Engineering Society
- Society of Broadcast Engineers
- Member, American Business Media



www.beradio.com

# Radio

THE RADIO TECHNOLOGY LEADER

## Product Source

**Technologies working together to make it all run**

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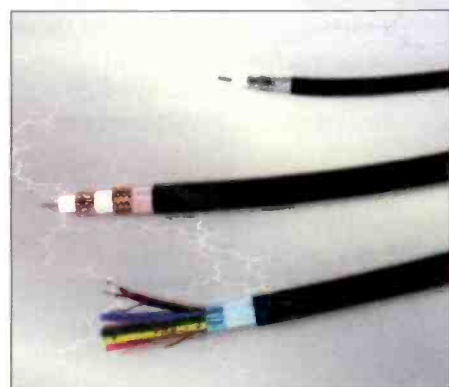
## Software mod monitor Belar



Wizard for Windows: This software consists of two parts: a data acquisition and control module, and a JAVA applet. The data acquisition and control module establishes the connection to the units, provides management of users and allows continuous logging of data to the host computer. The module connects to the remote units using a direct RS-232, modem or with an optional external interface box, a LAN/WAN or Internet. Multiple users can be assigned a unique user name and password. Unit access is further restricted by specifying an observer, operator or supervisor classification. Data may be logged at user defined intervals or 24 hours continuously. The JAVA applet display module provides a virtual front panel interface to all the available units, as well as various graph and histogram displays. Any remote computer that can address the host computers IP or URL with a Java-enabled Web browser, regardless of the computers operating system or hardware, will be able to run the applet.

610-687-5550; fax 610-687-2686; [www.belar.com](http://www.belar.com); [sales@belar.com](mailto:sales@belar.com)

## Burial cables Gepco International



Direct burial cables: Each of the direct burial multipair audio and coax cables features a black polyethylene jacket and water-blocking tape separator applied between the braid shield and outer jacket. The jacket is difficult to puncture and corrosion-resistant, while the water-blocking tape absorbs moisture and prevents wicking in the event that liquids enter into the cable. The cables can be used in any direct burial application, underground or with conduit, or in conduit where standing water occurs.

800-966-0069; fax 847-795-8770  
[www.gepco.com](http://www.gepco.com); [gepco@gepco.com](mailto:gepco@gepco.com)

## Digital carrier power meters Coaxial Dynamics

Digital Wattchman: The Coaxial Dynamics Digital Wattchman rack-mounted station monitor/alarm is similar in function and appearance to the company's 81090 series, except that it is designed for the accurate measurement of complex RF waveforms such as CDMA (Code Division Multiple Access) and DAB signals. It will also function well with AM and FM signals. A digital station monitor/alarm system installation consists of a Digital Wattchman, a dual socket line section and two digital broadcast plug-in elements for monitoring forward and reflected power. The meter is supplied with four 25' cable assemblies for connection to the line section and elements, and a 6' ac power cord. Installation requires inserting the line section and elements into the transmission line, connecting the terminals of the transmitter interlock systems to the proper terminals on the meter and providing ac power.

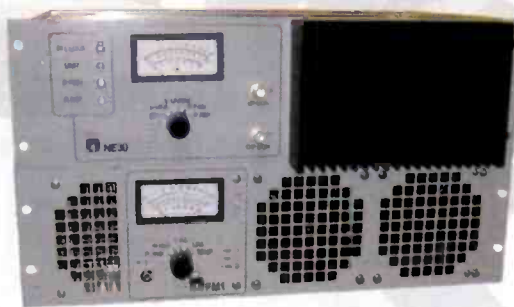
800-COAXIAL; fax 216-267-3142  
[www.coaxial.com](http://www.coaxial.com); [sales@coaxial.com](mailto:sales@coaxial.com)

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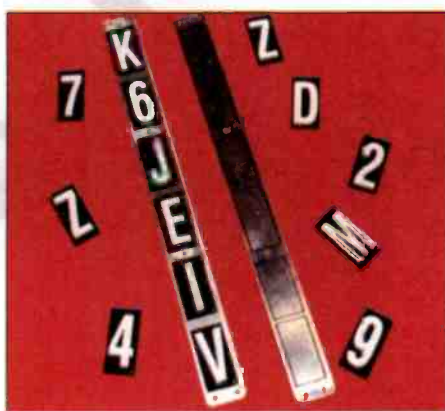
## FM amplifier Nautel

FM1: This 1kW broadband amplifier requires only 3RU standard 19" of rack mount space. Four amplifier pallets, rated in excess of 250W are operated in parallel. Should one fail, the remaining amplifiers continue working to keep the signal on-air at reduced power. Two dc ventilation fans ensure cool, reliable operation. A switch mode power supply unit accommodates a wide ac voltage range from 170V to 260V, without needing transformer tapping or adjustment. The 1kW FM amplifier may be operated in combination with the Nautel NE50 digital FM exciter or the NE30 analog exciter, either as a primary transmitter or a standby system. The FM1 features selectable linear mode operation to accommodate hybrid FM/IBOC transmission using common amplification or fully digital IBOC transmission for separate amplification.

207-947-8200; fax 207-947-3693; [www.nautel.com](http://www.nautel.com); [info@nautel.com](mailto:info@nautel.com)



## Reflective numbers and letters VIP Division



Supersilver: When these characters are illuminated in dim light or darkness, they reflect light so brightly that they appear to be lit from within. In addition, the characters are very visible in daylight, whether bright sunshine or overcast. The 2" numbers and letters, which are made from 15-year rated 3M silver reflective material, are silver on black and come 25 per package. They are useful for tower markers, transformer and pedestal marking.

800-950-4921; fax 800-967-3986  
[www.vipdivision.com](http://www.vipdivision.com)  
[vip@mountainproducts.com](mailto:vip@mountainproducts.com)

## Transmitter reseller Transcom

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

800-441-8454; fax 215-938-7361  
[www.trcorp.com](http://www.trcorp.com); [transcom@amfmv.com](mailto:transcom@amfmv.com)

## Scheduled audio capture NCH Swift Sound

AudioTime: AudioTime allows the user schedule a Windows computer to record or replay audio at certain dates and times, or regular times on certain days of week. It can replay a file while the file is being recorded (to delay the recording) and record or replay multiple files at the same time (if there is more than one sound card installed). Record or replay audio automatically. Schedule certain dates or time of day on specified days of week between commencement and expiration dates. Replay a file while it is still being recorded (to delay a network program, for example) or to record a file while it is still being played. Select sample rates from 8kHz-96kHz in mono or stereo. With this system the user can record multiple files at the same time or replay multiple files at the same time by installing more than one sound card.

[www.nch.com.au](http://www.nch.com.au); [nch@nch.com.au](mailto:nch@nch.com.au)

## Broadcast supplier Bay Country Broadcast Equipment



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

877-722-1031; fax 410-335-3136  
[www.baycountry.com](http://www.baycountry.com); [info@baycountry.com](mailto:info@baycountry.com)

## Microphone preamplifier ATI

MMA800-XLR: The MMA800-XLR features eight mic preamplifiers in a rugged single rack space enclosure with XLR connectors in and out. Each ultra-low noise preamplifier includes a front panel selection of level, high or low gain, phase reverse and low cut filter, as well as LED readouts of signal presence and signal clipping, switchable output level meter, internal switches for input summing into multiple outputs and active balance or transformer balanced outputs.

215-443-0330; fax 215-443-0394  
[www.atiguys.com](http://www.atiguys.com); [sales@atiguys.com](mailto:sales@atiguys.com)

## 10 x 1 audio switcher Conex Electro Systems

AS-101: The AS-101 Audio Switcher allows any one of 10 stereo sources to be switched to the stereo output channel.

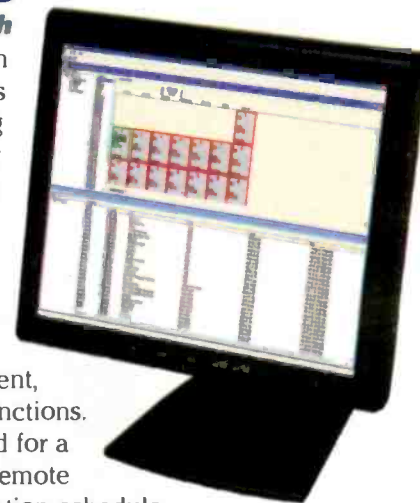
Switching is accomplished by pressing one of the illuminated buttons on the front panel, or remotely via the remote control connector on the rear panel. Several remote control devices may be connected in parallel, and all will indicate the selected channel. Features include: 10 stereo inputs switchable to one stereo output; transformerless balanced inputs and outputs; front panel accessible input and output level controls; inputs individually switch for 10Ω bridging or 600Ω loads; all IC's plug-in for easy repair; seven wire remote control bus for multiple remotes; low noise, low distortion circuitry; front panel and remote control buttons are user legendable; and remote control units are inexpensive and easy to connect.

800-645-1061; fax 360-676-4822  
[www.conex-electro.com](http://www.conex-electro.com); [conex@conex-electro.com](mailto:conex@conex-electro.com)

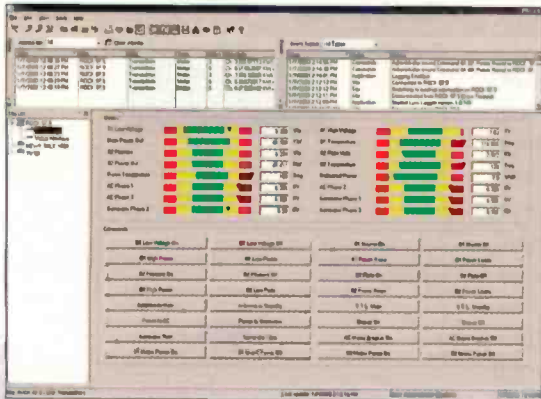
## LAN/WAN add-on module Mediatouch

Imedia Access Server: A LAN/WAN add-on module for Imediatouch, the module allows control of audio assets across all stations. Using a drag and drop interface, operators can copy audio (voicetracks, songs, commercials, IDs) to and from on-air or production studio locations. This system allows the operator to create and view on-air schedules, monitor the on-air status of a remote location, and view TTA information via HTML. Providing a wide area connectivity strategy for radio groups, it features content, scheduling and operational management functions. The system can be designed and configured for a variety of connectivity needs. It also features remote production capabilities, audio transfer verification, schedule transfer confirmation and user security.

888-665-0501; fax 204-783-5805; [www.mediatouch.net](http://www.mediatouch.net); [omt@omt.net](mailto:omt@omt.net)



## Remote control software Burk Technology



**Lynx 4:** Use this software with the GSC3000 and VRC2500 transmitter remote control systems to help maximize the benefit of a remote control system. This software is included with the purchase of a new unit. By offering simple site setup and control, customized logging and a feature set built for flexibility, this product gives the user the power to control his or her site easily and effectively. Access all the sites on one screen with

dockable windows that present all the information logically. Multi-site control is convenient and efficient, with each site selectable from an expandable menu. Switch views from one site to the next with a click, while keeping alarms and events for the entire system in plain sight. The software offers a real-time event list to provide immediate notification and detailed logging of user and site activity. TCP/IP-based modem and COM port sharing, expanded logging and advanced report writing capabilities are also available.

800-255-8090; fax 978-486-0081; www.burk.com; control@burk.com

**Matrix Wireless Module:** Broadcasters can transmit remote audio over a wireless network, without needing a telephone line or a separate wireless phone with this module. The module incorporates a GSM wireless phone, a 2W power booster and the firmware to transmit high-quality audio over GSM networks, all enclosed in a compact housing. An external antenna comes with the module. With its optional battery kit, the Matrix can broadcast in the field for as long as seven hours.

800-237-1776; fax 978-784-1717; www.comrex.com; info@comrex.com



## Portable codec/mixer ATA Audio

**Scoopy:** A reporter model audio codec, the Scoopy packages all four transmission systems (PSTN, ISDN, GSM and INMARSAT) and all the required compatibility protocols into a compact, lightweight case (1.5kg including batteries). The unit is also useful in distribution

(sound is sent from a radio or television station to the transmitter) and contribution (sound is transmitted from the reporting site to the station) applications as a solution for mobility in live news and sports reporting anywhere in the world.

973-288-8009; fax 973-659-9555  
www.aetausa.com; info@aetausa.com



## A Powerful Combination

Customize your power requirements with Nautel Q series solid state FM transmitters.

Not everyone has the same needs. That's why Nautel engineers developed the Q series of transmitters. Each of our solid state 10 and 20kW FM transmitters is designed to integrate seamlessly with another member of the Q family. That means you can have 10, 20, 30 or 40 kW of power through simple combinations of units. Now you have the power to choose.

For over 30 years Nautel has built the best radio transmitters by blending solid state technology and innovative engineering design.

### Q series features

- Redundant Power Amplifiers
- Redundant Power Supplies
- Dual Digital Exciters
- Dual IPA and Power Supplies
- Dual Low Voltage Power Supplies
- 68% overall efficiency

Contact Nautel for more information about the benefits of our full range of solid state AM and FM transmitters.

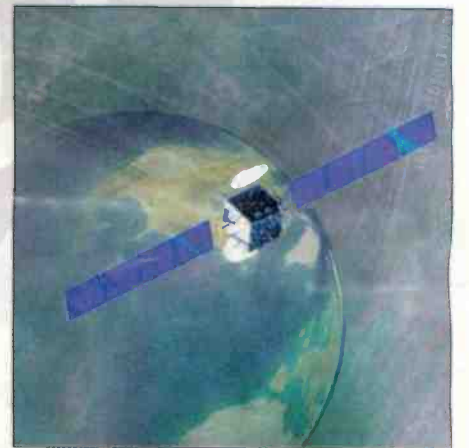


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**Nautel Maine Inc.,** 201 Target Industrial Circle  
Bangor ME, USA 04401  
Phone: +1.207.947.8200 Fax +1.207.947.3693  
Registered ISO 9002  
E-mail: info@nautel.com or visit www.nautel.com

## Satellite delivery NPR Satellite Services



**Audio distribution services:** Providing radio and audio satellite distribution to broadcasters throughout the country for more than 20 years, NPR Satellite Services leases full-time space to radio broadcasters, allowing stations to target specific program distribution hours, spread overhead costs and build audience reach. NPRSS also sells equipment and provides equipment services, such as repairs and access to a pool of loaners, on availability. The company also offers SCPC and MCPC innovation technology, A/D conversion, uplinking from anywhere in the U.S. and frequency coordination. Around-the-clock technical support is provided.

202-513-2626  
www.nprss.org; info@nprss.org

## Music log TM Century

**Perfect Mix:** Perfect Mix custom schedules a radio station's music log and specializes in five music formats: AC, hot AC, CHR, country and oldies. Each format is programmed by a veteran in that format, with expertise in music targeting and in interpreting music research. All logs come ready to be merged into a station's hard drive system or printed out for the control room.

972-406-6800; fax 972-406-6890  
www.tmcenury.com; tnci@TMCenury.com

# FreeDom

from the Studio!

When Dom Deluise drops in weekly on the Carey Brothers' home improvement radio show, On The House, all three sound like they're broadcasting from the same studio. Listeners have no idea that the Careys are in their state-of-the-art studio while Dom is sitting in the comfort of his home, hundreds of miles apart. Since they use Comrex's high-quality, low-delay, Turbo Codecs on ISDN, they do not have to deal with the awkward pauses created by standard MPEG feeds...particularly with multiple hops.

Thanks to the Comrex Remote Broadcast System, Dom and the Careys broadcast top quality audio — with no gaps in their fast-paced banter. Comrex's ingenious Turbo algorithm delivers full fidelity, extremely clean 15kHz audio and only 6 milliseconds delay. With Turbo, you can broadcast from near or far, loud and clear.

Call us today at **800-237-1776** to learn more about the **Nexus**, **Matrix** or **Envoy** Turbo codecs.



**COMREX**

19 Pine Road, Devens, MA 01432 USA

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### Audio network Telos Systems

**Livewire:** Livewire conveys audio and peripheral data streams over standard Ethernet hardware, reducing the infrastructure costs incurred with traditional audio routing methods.



The audio network uses universally-available Ethernet as a universal studio interconnect. A single CAT5 or fiber conveys multiple audio channels, control, program-associated data, VoIP telephone and computer data. This product uses switching Ethernet hubs to guarantee audio quality of service; audio is prioritized and takes precedence over all other data types. This approach results in low latency, enabling real-time monitoring of live audio sources: per-link delay is less than 1ms for high-priority audio signals. A Livewire 100Base-T link can carry 50 bi-directional stereo channels of 48kHz, 24-bit linear PCM audio.

216-241-7225; fax 216-241-4103; [www.telos-systems.com](http://www.telos-systems.com); [info@telos-systems.com](mailto:info@telos-systems.com)

### Satellite communications link

#### Inmarsat

**Global Area Network:** The Inmarsat Global Area Network uses the Inmarsat satellite network to provide virtual global coverage and the Land Earth Stations to interface to the world's telecommunication networks. End-users access the network with a mobile satcom unit (MSU). A range of units is available from various manufacturers. The network offers two services: Mobile ISDN and the newly launched Mobile Packet Data. These high-speed services deliver speeds of up to 64kb/s, rapidly extending local and wide area networks

or providing mobile, easily deployed high-speed connectivity for ISDN remotes. The Mobile ISDN service has two versions. The 64kb/s Unrestricted Digital Information (UDI) is suitable to use with ISDN terminal adapters. The 56kb/s Data service can also be used for data and is mainly provided for the North American market.

442-077-2811-153

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

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purchase tomorrow...**



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# MASTERail

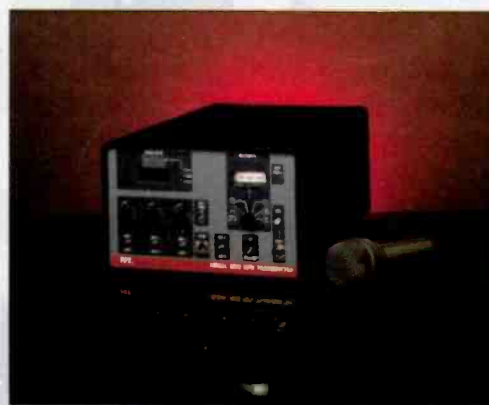
Dynamic Technical Furniture

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**FORECAST**  
consoles

For more information call **1-800-735-2070** or visit us on the web at  
[www.forecast-consoles.com](http://www.forecast-consoles.com)



### Remote pickup equipment

#### TFT

**8888 and 8889 Remote Pick Up:** The re-introduction of this remote pick up equipment mean that it now complies with the FCC's new Part 74 requirement for carriers on 3.125 kHz spacings. The 8888 transmitter offers three audio inputs (high level and low level), three selectable RF output power levels, external processor patching and a built-in test-tone oscillator for easy system level setting. Front panel metering and alarms show unit operation at a glance. Power can be supplied from ac or a 13.8Vdc external battery. The 8889 receiver, also frequency agile, has selectable IF bandwidth, a security command feature, a built-in DTMF input and a repeater transmitter enable circuit.

800-347-3383; fax 408-727-5942; [www.tftinc.com](http://www.tftinc.com); [dparker@tftinc.com](mailto:dparker@tftinc.com)

### Product upgrade

#### Condron

#### Broadcast Engineering



**Call Screener for Windows:** This software package works with all Telos telephone products and the Gentner TS612 telephone system. Fields can be customized by the user, and a flash box can send important messages to the on-air talent. The software can be used with a LAN, WAN or Internet connection for greater versatility. Licenses are available on a per-copy basis or by site license.

602-381-5733; [www.cbsoftware.cc](http://www.cbsoftware.cc)

[chuckcondron@clearchannel.com](mailto:chuckcondron@clearchannel.com)

### Commercial traffic software

#### Broadcast Data Consultants

**Traffic C.O.P. for Windows:** This software for Windows for traffic software includes a complete, fully featured, true Windows, traffic and billing system from order entry to log scheduling to A/R. It offers total password security with the intuitiveness of Windows. Customer support is available: no answering machines. There are no extra charges for updates to the software. They are included in support. The software runs on a computer network and exports to an automation system with full control over cart numbers and copy.

800-275-6204

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

[bdc@broadcastdata.com](mailto:bdc@broadcastdata.com)



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## Wiring break-out-box accessories

### Radio Systems

ASI6000 accessories: Radio Systems and Audio Science have developed the wiring break-out-box accessories for the ASI6000 series multichannel PCI audio cards. Cables are also available to allow the use of the B.O.B. with the ASI4300 series. The rack mount units, available in XLR and RJ-45 versions, allow users convenient and dependable access to all channels of card analog and digital I/O, as well as clocking and sync signals. One simple multipin connector connects the unit to the audio card. A single B.O.B. provides access to all card digital I/O or as many as four analog channels, while multiple B.O.B.s can be ganged when access to all eight stereo analog input and output channels is needed.

856-467-8000; fax 856-467-3044; www.radiosystems.com; sales@radiosystems.com



## PDA audio recorder

### Pocketrec

Pocketrec: Pocketrec represents a new generation in portable digital audio recording and editing that integrates all steps in the workflow of electronic newsgathering into one continuous process. Pocketrec uses industry standard PDAs (PocketPC). The PDA expands the Pocket PC, turning it into a fully featured portable digital audio workstation providing the journalist with a rich set of professional tools on the Pocket PC that replace their need for other gear. A few of the benefits of the Pocketrec are: due to its size and weight a complete kit with all the required tools of the trade are greatly reduced. An average of seven pounds of equipment weight can be completely eliminated; the platform is a single unit, meaning that no additional high-end audio card or separate recorder is required for the field reporter to perform a quality job; other applications running on a standard Pocket PC that many reporters already carry for notes, emails, contacts, Internet access; standard accessories are available for and integration of other media that can be used and attached to filings; and integrated multi-media content management, meaning that the journalist has an easy to use tool with search facilities to manage their content.



571-218-7766; fax 703-281-1074  
www.pocketrec.com  
hardware@pocketrec.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 in making an operation as efficient and cost effective as possible.

800-300-0733; fax 231-924-7812  
www.mooretronix.com; rmoorejr@aol.com

## Screening software

### Telos Systems

Name	Comments	Phone No.	Status
Bob	Publicist / Event / Eventy apt	555-1488	06:03
Theresa	Publicist / Eventy apt	555-1488	04:57
Theresa	Publicist / Eventy apt	555-1488	04:47
Theresa	Publicist / Eventy apt	555-1488	03:32
Theresa	Publicist / Eventy apt	555-1488	04:39
Theresa	Publicist / Eventy apt	555-1488	08:34
Theresa	Publicist / Eventy apt	555-1488	00:18
Theresa	Publicist / Eventy apt	555-1488	04:33
Theresa	Publicist / Eventy apt	555-1488	00:16
Theresa	Publicist / Eventy apt	555-1488	00:18

Assistant Producer v3.5: Assistant Producer v3.5 works with Telos Series 2101 and Twox12TalkshowSystems. Using this call screener, talkshow hosts can command as many as 24 callers at a time with Series 2101, and as many as 12 callers when using Twox12. Assistant Producer integrates many conveniences that help make communication between the producer and talent seamless, such as Caller ID support, a caller database to assist in analyzing caller profiles, Instant Chat windows and on-screen dialing for outgoing calls. Assistant Producer v3.5 smoothes talk show production with exclusive TelosStatusSymbols—a unique icon-based visual call management system that informs users of line and caller status with just a glance. Talk shows can easily be produced while out of the studio, thanks to this product's ability to remotely produce programs using an Ethernet LAN or WAN connection.

216-241-7225; fax 216-241-4103  
www.telos-systems.com  
info@telos-systems.com

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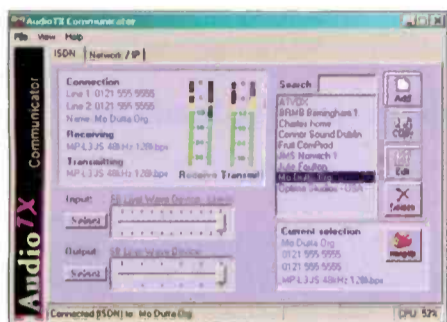
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SYSTEMS, INC.

The AudioTX product range from MDOUK offers software products that enable live audio transmission and distribution over a variety of transport paths, including ISDN, LAN, WAN, private IP circuits, T1/E1, Internet and wireless networks.

**AudioTX Communicator brings ISDN Codec functionality to PCs and Laptops & STL/Audio Connections over IP Networks and the Internet**



The AudioTX Communicator software is a highly cost-effective and flexible way to transform a standard PC or Laptop into both an ISDN Audio Codec - compatible with existing manufacturers' ISDN codec devices - and an IP Network based audio transmission system. The software uses standard soundcards - from a cheap Soundblaster to professional audio boards - and ISDN cards costing less than €75 Euro (\$47, \$65).

For ISDN codec operation, Communicator is compatible with CDQ Prima, Telos Zephyr, GlenSound, Dialog, Philips and other well known models. It provides mono or stereo connections in full broadcast quality, using MPEG Layer 2 or 3, G.722 and G.711 at 64/128kbits.

Communicator also connects over IP networks - for studio and transmission links (STL), news reporting or remote broadcasts. It can use a standard LAN/WAN network, larger ATM networks, leased lines, wireless networks, and even connect over the internet using ADSL, DSL, T1/E1, Cable Modem or other high-speed connection at up to 384kbits compressed or uncompressed (linear) audio at up to 1.5 Mbits.

Users of the product include Nick Gamett, Northern England correspondent for the BBC's news and sport network, BBC Radio 5 Live. Nick says, "Much of my work is live reporting. Being able to just have this installed on my Laptop makes life so much easier - and it's both cheaper and more portable than the current codecs that I end up having to carry around on a story."

**AudioTX Multiplex System - Broadcast multiple live audio channels over an existing LAN or IP Network... any computer on the network can tune in!**



AudioTX Multiplex is a superior replacement for Audio Ringmain, Monitor Select or Source Select applications in broadcast buildings and installations.

Using this new system, a Server PC takes in multiple, live, audio sources and 'Broadcasts' these across an existing network - say a company LAN or WAN.

Any PC on the network can then run the small and stylish 'Receiver' bar - which allows the user to select and listen to any channel. The PC can, of course, continue to be used as normal.

Using AudioTX Multiplex means that every member of staff - from management, to production staff and journalists, can have instant personal access to your multi-source monitoring system.

The system offers a substantial number of obvious key advantages over existing multi-pair or RF modulated coax-based solutions. In today's broadcast environment, every member of staff and every desk has a PC and with AudioTX Multiplex, that also means instant access to your ringmain. Adding a new audio channel, modifying an existing one, or even changing the transmission quality of a particular channel takes just moments.

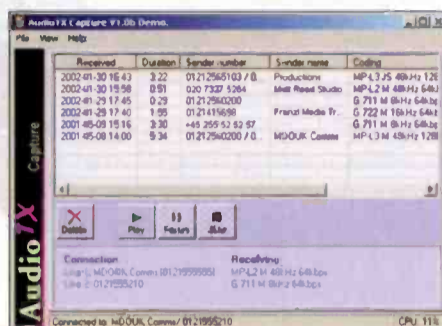
The AudioTX Multiplex Receiver application is a small and stylish 'Bar' (about 1cm high by 8cm wide), with simple channel select, mute, volume and audio level meters; it can also be run in 'Tray mode' with just a small icon visible next to the system clock.

The AudioTX Multiplex Server uses standard sound cards - we can supply the system with professional quality sound cards, and even ones that allow for up to 48 stereo or 96 mono audio sources to be connected. AudioTX Multiplex servers can be distributed throughout different buildings within an organization making use of your existing WAN infrastructure and we are happy to advise on such larger installations.

AudioTX Multiplex uses Multicast technology, so regardless of how many people are listen-

ing to a channel, it is only broadcast once on your network. This makes it very efficient with minimal impact on a network. Audio can be broadcast as MP3 or MP2 compressed channels, or linear (uncompressed).

**AudioTX Capture - Takes incoming audio from ISDN codecs automatically and unattended**



AudioTX Capture is an excellent time-saving innovation for radio stations, broadcasters and production studios, reporters and anyone who uses an ISDN codec to send and receive audio.

At present, when news reports, commercials or pre-produced audio are sent to a radio station over ISDN, someone has to be present in the studio and take the feed. With AudioTX Capture, the sender just dials the ISDN number of the Capture system with their current ISDN Codec and it answers with a polite greeting before recording the audio digitally. The audio is then stored in an on-screen inbox or can be instantly emailed to one or more people in the organization or copied to a location on the network.

AudioTX Capture is compatible with all major ISDN codecs like CDQ Prima, Telos Zephyr, GlenSound, Dialog, Philips and, of course, MDO UK's own AudioTX Communicator ISDN codec software product. The software installs on a standard PC, requiring only an ISDN card (price approx \$47 UK, \$75 US, €80 Euro). The price of the software is \$1290 UK, \$1870 US, €2060 Euro.

Further information on all AudioTX Products, plus freely downloadable evaluation versions are available at [www.audiotx.com](http://www.audiotx.com) or contact MDOUK on +44 (0)121 256 0200, e-mail [sales@audiotx.com](mailto:sales@audiotx.com).

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- Requires no additional cabling - uses your existing computer network.
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- Broadcast quality, low delay audio - can be transmitted as MP2, MP3 or uncompressed.



**The AudioTX Multiplex Server runs on one or more PCs and Broadcasts multiple channels of live audio.** Each PC can broadcast up to 30 channels.

---

**Install the AudioTX Multiplex Receiver on all of your office, newsroom and even studio PCs.** And they can tune into any channel quickly and simply.

www.audiotxmultiplex.com

(FREE TRIAL VERSION AVAILABLE FOR DOWNLOAD)

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## Prophet Systems Innovations

NexGen "increases operation efficiency" and "allows our staff to be more productive."

**Jim Clark**  
KBYI, Brigham Young  
University-Idaho

"I know when I go home at night our three stations will remain on-air. There are no worries."

**Bob Jamieson**  
KCNQ, KQAB & KVLI-  
Kernville

"The technology is excellent, the system is stable and efficient, and the support is outstanding."

**Bob Croft**  
KDUV-Visalia

"NexGen is doing exactly what we expected. We're extremely pleased."

**Clint Barrick**  
KOHM  
Texas Tech University

"A chief enticement on buying NexGen was Prophet's support staff. They're very, very good. In fact, superb. We're working well together, and I'm confident NexGen is the answer to our many specialized requirements."

**Gordon Carter**  
WFMT-Chicago



*"A beginner to the industry, I found NexGen easy to learn. The flexibility really makes the system work for you."*

Amy Flaherty

KNOM volunteer Amy Flaherty joined the station in June 2002. She deejays the morning show and produces feature interview programs.

Congratulations to KNOM, a 2003 Crystal Award recipient.

### Prophet Systems Innovations

**NexGen 2 Studio Suite, the revolutionary "all in one" radio system designed with you in mind.**

Prophet Systems has integrated all our software packages into one ultra powerful software suite, NexGen 2 Studio Suite. NexGen 2 is the product of our many years of experience, and our well deserved reputation for thinking outside of the box. NexGen 2 utilizes the same classic Prophet feature-rich software, but it's packaged into hardware that maximizes your investment of money and time like never before!



*"In today's economy, we all have to stretch our dollars and our time. Large, complex solutions are too costly and too time consuming for the realities of modern radio. But everyone still needs all the features and redundancy possible, because off-air is simply not an option. NexGen 2 Studio Suite is all about convenience, and getting the most for your money."*

Kevin Lockhart  
President of Prophet Systems

Choose from four affordable Studio solutions, each designed to handle your specific needs.

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Cost-effective solutions for the standalone AM, FM or LPFM. Ideal for remote or home-based voice tracking and music scheduling.

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Designed for mostly automated, satellite or voice tracked stations.

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**Studio 44 ~ \$9,700**

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**Audio router**  
**SPL - Sound Performance Lab**



SPL router: This device provides routing for as many as eight stereo or mono processors or speaker pairs. It includes an on-board headphone amp and is useful in a small studio or as a monitor router. All connections are balanced audio.

866-4SPL-USA; fax 805-435-7455; www.spl-usa.com; info@spl-usa.com

**Transmission consultants**  
**LBA Technology**

AM equipment and services: Since 1963, Lawrence Behr Associates has provided consulting services to the telecommunications and wireless industry. The company offers its services in the areas of cellular, PCS, SMR, broadcasting, wireless cable and integrated broadband systems. The staff includes specialists in RF engineering, antenna design, AM detuning, facility shielding, zoning and litigation support, EMI resolution, radio frequency environment studies, project management, site acquisition and FCC regulations.

800-522-4464; fax 252-752-9155; www.lbagroup.com; lbagrp@lbagroup.com

**Broadcast audio processor**  
**Aphex Systems**



2020 Mk III: The 2020 Mk III comes with digital audio I/O. The digital input uses the two-channel AES/EBU standard. The XLR connector has a three-pin EMI-suppressed connection with pin 1 attached to the chassis ground and pins 2 and 3 transformer-balanced and floating. The sampling rate can be input clock-slaved or independently selected at 32,44.1, or 48KHz. All processing is handled at 20-bit word lengths. The technical advances of the product include: new dual-band optical pre-emphasis limiter, new Ultra Clean overshoot-compensated lowpass filters, dual output stereo generator with RBDS interface, improved baseband spectral purity, dual mono and stereo capability and improved remote control.

818-767-2929; fax 818-767-2641; www.aphex.com; sales@aphex.com

**Digital/analog AM transmitters**

**Harris**

DAX-5/6: The first in a dynamic family of 1kW to 6kW AM transmitters designed for analog and IBOC applications. The design of this



transmitter family provides exceptional linearity and wide bandwidth to deliver a clean analog sound. This design also provides a highly accurate reproduction of the IBOC signal at all power levels.

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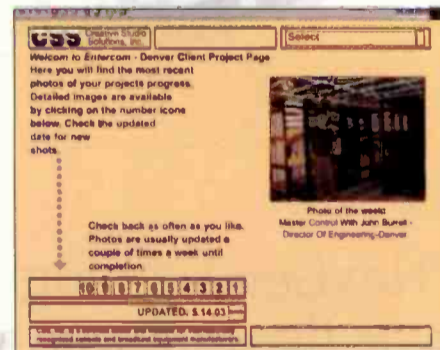
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Online Project Updates: Available through the CSS' website, this service monitors the progress of a project. Clients receive a password that provides exclusive online access to the project site. The client site is updated weekly and includes photographs, text, project timeline updates and other information pertinent to the project. Because much of the CSS work is pre-assembled in the CSS facility, clients can check on progress before local work begins. Entercom Denver was the first client to use this service. Reports and data can be customized to each client's needs.

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**BROADCAST TOOLS® new**  
**"Rack-Ables"**

The upgraded SS 2.1/TERM III & BNC III switcher/routers are improved with new front panel switches. They may be used as a desktop device, and are equipped with mounting holes for wall mount installation or may be installed on the new RA-1 "Rack-Able" 1RU mounting shelf.

The new "Rack-Able" SS 4.1 III switcher replaces the popular SS 3.1 while adding a fourth stereo input channel and front panel control. We've kept the best of the SS 3.1 features and added a few more.

The new Silence Monitor III improves on the features of the original SSM, with front-panel control, removable screw terminals, "Plug & Play" installation, built-in program switcher, restore timing delay, aural alarm and relays for most remote functions. Now rackable!

The new SS 8.1 II switcher replaces the popular 6x1 with the addition of two more stereo input channels and GPI, while keeping the price the same! The SS 8.1 II may be desktop, wall mounted or installed on the new "Rack-Able" mounting shelf.

The new RA-1 (1-RU rack shelf) provides mounting for three tri-rack or two half-rack "Rack-Able" configured products. The RA-1 is pre-drilled for flush and recessed product mounting.

The RA-1 is furnished with filler panels and mounting hardware.

Look for additional  
"Rack-Able" products soon.



SS 2.1 III

SS 4.1 III

SILENCE MONITOR III

SS 8.1 II

RA-1 with FP-II Filler Panel

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phantom-powered tube microphone



**30** | *series*

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The new **AT3060** tube microphone offers the convenience and easy setup of a standard studio condenser by operating exclusively on 48V phantom power – so there's no dedicated power supply requiring you to reconfigure your boom arm with special cables. An all-new large-diaphragm cardioid capsule, with the warm sound of a vintage tube mic, has been specially tailored to keep proximity effect and P-pop under control. Meticulously crafted in a rugged, compact housing, the **AT3060** is set in a low-profile shock mount for easy copy reading.

Top it all off with the exceptional quality and consistency you count on from Audio-Technica, and the result is, quite simply, something special, for a lot less than you'd expect.



## Audio logger/skimmer LakeSoft



Eskimmer 4.2

Appliance System: Version 4.3 of the Eskimmer Appliance System allows high-quality recordings of on-air signals, performances or communications, and allows playback over its Webskimmer interface via a LAN, WAN or the Internet. Easy-to-use controls allow a user to listen to audio from down the hall or across continents. Encoding on the fly allows audio that is still being recorded to be immediately accessible for playback and verification. E-mailing a recorded audio cut to a consultant or colleague takes seconds rather than days via conventional shipping methods.

866-599-5253; fax 541-967-8721; www.lakesoft.com; info@lakesoft.com

## Wire stand Rack-A-Tiers

Rack-A-Tiers: A multi-purpose wire stand that will hold most common wire spools up to 30", the stand is available as a set of two. They are easy to set up and to transport to any work location. In addition to holding wire spools, the two OVO notches on the top make an excellent pipe vise to hold rod and pipe from 1/4" to 4" diameter. They also make a convenient saw horse or small workbench to help get work off the ground. Made of durable plastic that will hold up for many years of use.

888-939-9991; www.rack-a-tiers.com; ken@rack-a-tiers.com



## Audio switcher/mixer Sine Systems



ACU-1: An 8x1 audio switcher/mixer, this product offers extensive control capabilities via RS-232 data. The simple ASCII command structure allows for rapid development of powerful "one-off" customized automation systems. The system also incorporates silence sensors, parallel logic inputs, control relays, clock/calendar and temperature-sensing capabilities. Front-panel indicators include left and right VU meters, channel selection indicators and left and right silence alarm status indicators. Rear-panel screw terminals are mounted on removable connector boards for easy installation and removal.

615-228-3500; fax 615-227-2367; www.sinesystems.com; info@sinesys.com

## EAS receiver Dayton Industrial



AFC3: The company's line of receivers is designed for professional or EAS monitoring. Three receivers for NOAA, AM, FM or public service band are housed in a 1RU case. The AFC3 contains a front-panel audio selector switch, mounted small speaker and headset outputs controlled by a volume control. Also mounted on the front panel are LED indicators that indicate carrier and modulation activity for each receiver. An alert indicator and test/reset switch is mounted on the front panel for those receivers that use alert tone detectors, such as the weather and public-service monitors. The rear panel contains outputs for the receivers. The receiver uses an included 12V power source.

941-351-4454; fax 941-351-6081; www.daytonindustrial.com; sales@daytonindustrial.com

# HD Radio

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Many have realized the benefits of going HD Radio with BE, as orders for new equipment and system designs have poured in since last year. Entercom, Clear Channel, Greater Media, Crawford Broadcasting, Beasley Broadcast Group, WJLD-AM (first non-experimental AM station to broadcast HD Radio), and many more have chosen BE to help them prepare for the future—the HD Radio future.

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— Bob Demuth, Vice President and Chief Technology Officer  
Beasley Broadcast Group, Inc.

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## Digital Matchbox Henry Engineering

**Digimatch 2x6:** This digital Matchbox converts between S/PDIF and AES/EBU digital audiosignals. It also functions as a digital audio distribution amplifier with inputs for AES/EBU and S/PDIF signals. Its six outputs can drive AES/EBU and S/PDIF equipment. This product is 1/3 rack width and includes a built-in ac power supply, so no wall warts are needed.

626-355-3656; fax 626-355-0077; www.henryeng.com; info@henryeng.com



## Content delivery system Pristine Systems

**CDS32 Pro:** A content delivery system for Windows 2000 or XP platforms, this system offers live assist, satellite automation, music-on-hard-drive, remote control access and unlimited walk-away time. It supports all traffic and music scheduling software, but also includes a spot set editor and music scheduler. This delivery system is a replacement for cart machines. It operates manually or uses script automation for additional features. The Satellite Automation systems offer all the features of the Live Assist system plus satellite automation functions. It can also automate multiple satellite networks. The Music Log system is designed to operate live or automated. It features in-context voice tracking for live sound.

310-831-2234; fax 310-831-6287  
www.pristinesys.com; sales@pristinesys.com

## Mic boom riser RAM Broadcast Systems

**MBR-12:** Features of this mic boom riser include a hollow center to hide mic cable, a bolted shaft to base, no screws are required and an aluminum construction. This product is useful for Corian-type bases and fits most mic booms. XLR adapters are optional.



800-779-7575  
fax 847-487-2440  
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## Satellite time ABC Radio Satellite Services

**Distribution Services:** ABC delivers branded and independent syndicated programs, sporting events, live concerts, premieres and press releases via satellite to thousands of radio stations and millions of listeners coast-to-coast. The company offers a variety of products and services. Distribution is achieved on AMC-8 via Star-Guide III, the primary satellite and system for U.S. commercial radio distribution. It offers three types of channels: joint stereo (192kb or 128kb), 20kHz dual channel mono (96kb) and 10.2kHz dual channel mono (64kb). This system is a gateway to the New York Technical Operating Center from Dallas, Los Angeles and Washington, DC. It offers record and playback services. Talk radio ready studios are available in New York, Los Angeles and Washington, DC.

212-456-5801; fax 212-456-5807  
www.abcsatelliteservices.com  
ck.bower@abc.com

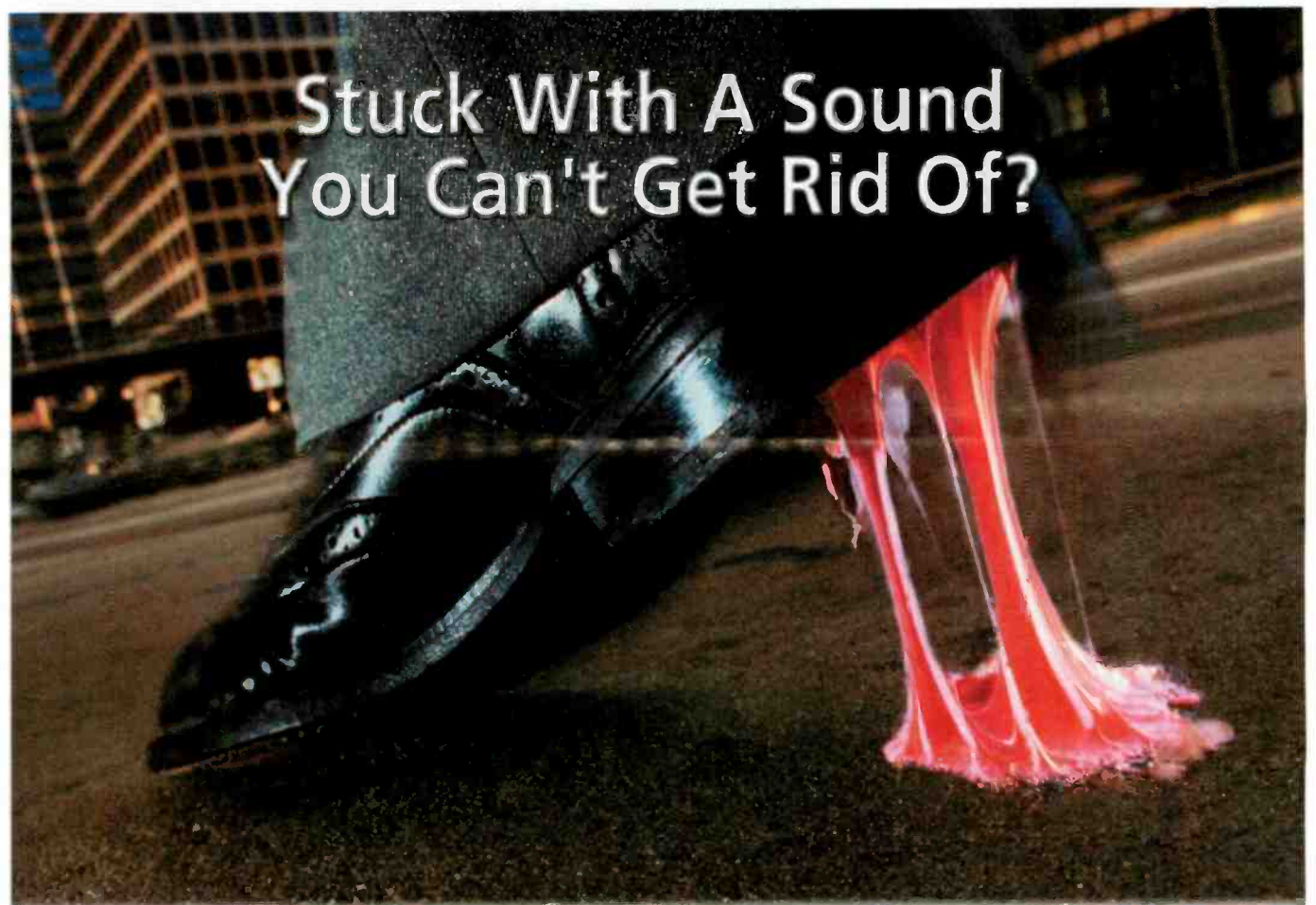
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## Console Forecast Consoles



**Masterail:** Forecast's designers and engineers spent more than two years on extensive R and D. The system had to be completely thought-out before the rollout. The Masterail system is available in a Modular Component console style and an Imagemaster workstation. All devices mount universally anywhere along the rail and are completely independent of each other, as well as the rest of the structure. This feature allows both console types to be completely reconfigured, repurposed and re-used, quickly, easily and inexpensively, now and anytime in the future. The system incorporates modern materials, precision laser-fabricated parts and superior third-party accessories.

800-735-2070; fax 631-253-0277  
forecast-consoles.com; info@forecast-consoles.com



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818-767-2929 Fax: 818-767-2641 www.aphex.com  
Apex is a registered trademark of Apex Systems

## Silence eliminator

### Danager Audio Works

**Plan B:** Combining the functions of an audio loss detector, a CD/MP3 player and a talking remote control system, the Plan B provides a backup system to eliminate dead air caused by equipment failure or human error. On detection of an interruption of user-set duration, the unit switches its built-in disc player online and then dials three telephone numbers in sequence until it makes contact. A pre-recorded voice reports the unit's status, then lets the user control the Plan B and any external equipment connected to the unit's three auxiliary relays or status inputs. The user can also listen to the incoming audio or the disc audio over the phone. The unit can play audio CDs and MP3 CDs to provide as long as eight hours of backup programming. The drive can play cuts in sequence or random order, and it can be set for looping playback. External inputs can be digital (up to 24bit/96kHz) or analog. All signals are looped through the unit via gold contact relays. Other features include an alarm siren with external mute, a tabulating failure memory and a safety switch to prevent accidental activation. It occupies 2RU.

888-892-8346; fax 250-763-2902; [www.danager.com](http://www.danager.com); [info@danagger.com](mailto:info@danagger.com)



## Audio control surface

### Sierra Automated Systems

**Rubicon:** A stand-alone control surface, the Rubicon integrates seamlessly into the SAS 32KD Digital Audio Network for its mixing, switching, level control and effects. Completely modular, extensively customizable and fully programmable, this control surface is for a medium- or large- market facility.

818-840-6749; fax 818-840-6751; [www.sasaudio.com](http://www.sasaudio.com); [sales@sasaudio.com](mailto:sales@sasaudio.com)



## Digital audio playout system

### Scott Studios

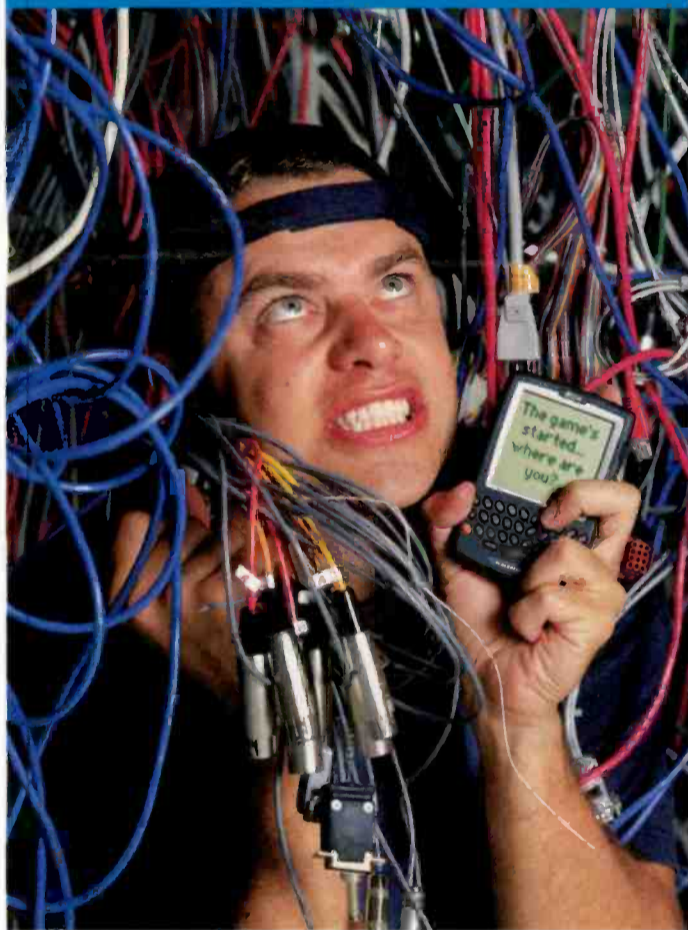
**SS32X and VT32X:** Introducing a new air studio digital audio playout system with HP/Dell and other generic computers, and non-proprietary sound cards from Sound Blaster Live and up. This system comes with software codecs so ordinary sound cards can play Fraunhofer MPEG Layer-3 (MP3), MPEG 1 Layer II, apt-X, WMA (Windows Media Audio), uncompressed PCM and WAV recordings, GSM, ADPCM, DSP and others, VOX (Dialogic ADPCM), OGG Vorbis, MPC (MusicPack), G.726, G.723, G.721, AIFF (Apple), AU (Unix), Siprolab Telecom ACELPnet, Indeo, CCITT G.711, MS GSM 6.10 DSP group TrueSpeech, MSG.723.1 and ALF2 CD Audio.

800-SCOTT-77; fax 972-620-8811

[www.scottstudios.com](http://www.scottstudios.com); [info@scottstudios.com](mailto:info@scottstudios.com)

## Trapped at the station?

## You need iMediaTouch.



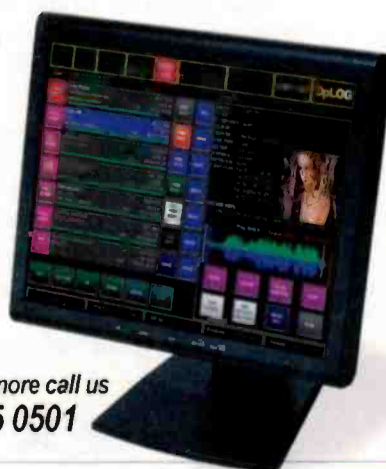
## Is your digital audio delivery system keeping you from the big game?

Since 1984, over 500 radio stations around the world have trusted iMediaTouch broadcast automation software. With a host of award winning features designed to save both time and resources without breaking the bank, the iMediaTouch digital audio delivery system is easy to use and dependable time after time.

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## Single-tube

### FM transmitter

#### Broadcast Electronics



**FM-25T:** Use this transmitter as a single 25kW transmitter or combine it for as much as 50kW output power. Features of this product include a folded halfwave cavity that eliminates the need for a plate blocking capacitor and sliding contacts; a remote transmitter diagnostic system for complete remote monitoring and logging of all transmitter operations; proportional VSWR foldback for continuous operation into loads up to three to one VSWR; and a 500W solid state IPA that can be used as a standby transmitter. Filament regulation is included in each unit.

217-224-9600; fax 217-224-9607

[www.bdcast.com](http://www.bdcast.com); [bdcast@bdcast.com](mailto:bdcast@bdcast.com)

## Modular audio console

### Autogram

**Pacemaker II Model PM228:** This model features a modern styling and color with wood end trim, an exclusive bimodular concept, all dc control and screw-type plug-in connectors. Uses similar switches and the same Penny & Giles pots as the original Pacemaker. The console offers as many as 60 stereo inputs. The modular design allows the user to start with the number of modules needed and expand as needed.

800-327-6901; fax 972-423-6334

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

[sales@autogramcorp.com](mailto:sales@autogramcorp.com)

## Ringer relay Circuitwerkes

Telco-6: This product accepts as many as six independent telephone lines. Each incoming ring closes the associated relay and each relay has two sets of form C contacts. Relays stay steady during rings. All interface connection on screw terminals. The metal enclosure can be wall or table mounted. An optional, low cost, rack mount (1RU) is available. All interface connections are on standard screw terminals.

352-335-6555; fax 352-380-0230; www.circuitwerkes.com; info@circuitwerkes.com



## Switcher/router Broadcast Tools

SS 4.1 III: The SS 4.1 III passively switches or routes a variety of electrical signals to a destination or vice-versa. The unit selects any one of four stereo inputs to a single stereo output. The router/switcher provides passive switching through gold contact relays. The passive switching means that the unit can route a signal in either direction. Due to the passive nature of the switching, any input level and impedance can be used. Inputs may be balanced or unbalanced, while output levels, impedance, distortion, noise and balancing will match that of the selected input. Additional features include: a selection of any active source at power-up, last source selected, audio mute, step input, control logic, open collector and multidrop serial port. Removable screw terminals are provided for most connections.

877-250-5575; fax 360-854-9479; www.broadcasttools.com; bti@broadcasttools.com



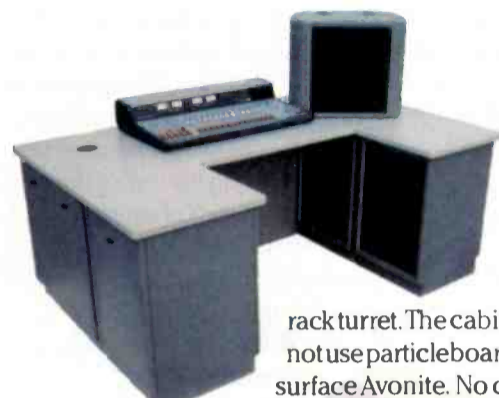
## Lightning prevention systems Cortana

Stati-Cat line: A full line of lightning prevention devices for a wide range of installations, models include the CN-4 crow's nest dissipater that fits around a tower beacon and has more than 700 points. The SC-1 is mounted at regular intervals along a tower. The SC-4 is similar to the SC-1, but with a different mounting configuration. The Static Kitty was designed for smaller STL towers.

505-325-5336; fax 505-326-2337; www.cortanacorporation.com; cortana@cyberport.com

## Studio furniture Mager Systems

Sound Choice Furniture: This new series of stock studio furniture offers high quality materials throughout. Vented cabinets have curved corners and countertop edges are rounded. A standard color choice is available. Various riser heights are available for the rack turret. The cabinets are 19-ply, 1 1/2" thick plywood and do not use particleboard or melamine. The countertops are solid-surface Avonite. No cabinet assembly is required. All surfaces



are fully sealed with no

laminates to crack, chip or peel.

623-780-0045; fax 623-780-9860

www.magersystems.com

mager@magersystems.com

## Tube and solid-state transmitters Superior Broadcast

FM Transmitter Line: The 120W PM120 and 300W PM300 solid-state transmitters are rack-mount units with frequency agile tuning in 10kHz steps across the FM band. The KAFM series, available in 2.5kW and 3kW models, use a single tube design and occupy a space that is only 22" x 30" in a package that is 5' tall. The 5kW and 10kW models stand 6.5' tall. All the tube transmitters use a single-tube grounded-grid design for low-cost, dependable operation. They also feature a solid-state, digitally synthesized, high-performance exciter and IPA.

800-279-3326; fax 800-644-5958

www.superiorbroadcast.com

jjoynt@superiorbroadcast.com

## Electronic components catalog Mouser Electronics



2003 catalog: The catalog includes electronic products such as semiconductors, passive components, electromechanical devices, wire/cable connectors, potentiometers and power supplies. These products are provided by more than 200 leading suppliers, including AMEK, Kemet, Murata, Nichicon, Phoenix Contact, Seiko, ST-Microelectronics and Vishay. View, subscribe or download the complete catalog at the company's website. Secure online ordering.

800-992-9943; fax 817-483-6899

www.mouser.com; sales@mouser.com

www.beradio.com

# The Best Selection TV & Radio antenna systems

## FM Educational Circular Polarization Antennas

Model	No. Bays	Max. Input Power	Price
EP-1	1	500 W	\$250
EP-2	2	800 W	\$650
EP-3	3	800 W	\$950
EP-4	4	800 W	\$1,250
EP2-4	4	2,000 W	\$1,750
EP3-5	5	3,000 W	\$2,250
EP3-6	6	3,000 W	\$2,700

## FM Low Power Circular Polarization Antennas

Model	No. Bays	Max. Input Power	Price
GP-1	1	1,500 W	\$350
GP-2	2	3,000 W	\$1,350
GP-3	3	4,500 W	\$1,800
GP-4	4	6,000 W	\$2,500
GP-5	5	6,000 W	\$2,900
GP-6	6	8,000 W	\$3,500

## FM Medium Power Circular Polarization Antennas

Model	No. Bays	Max. Input Power	Price
SGP-1	1	3,000 W	\$650
SGP-2	2	6,000 W	\$2,450
SGP-3	3	8,000 W	\$3,500
SGP-4	4	8,000 W	\$4,300
SGP-5	5	8,000 W	\$5,100
SGP-6	6	8,000 W	\$5,900
SGP-6R	6	15,000 W	\$6,500

Please Contact the OMB America Sales Department for other antenna systems configurations



AMERICA  
3100 HW 72 rd. Arroyo Unit 112  
Miami, Florida 33179  
Ph: 305 477-0970 - 305 477-0974 (t lines)  
Fax: 305 477-0619  
Internet: http://www.omb.com  
e-mail: sales@omb.com

## Digital audio router Audioarts Engineering



ADR-32: Based on Wheatstone's Bridge router technology, the ADR-32 provides routing for small

and medium installations. Various cards can be installed to accommodate any combination of AES digital or 24-bit A-to-D analog input cards as well as a combination of analog and digital output cards. Crosstalk is eliminated because all signals are routed entirely in the digital domain. The ADR has a built-in monitor speaker and support RS-485 and Ethernet hardware controllers. It comes with X-Point software that allows the system to be quickly configured. Settings can be protected if necessary to prevent unwanted or accidental selection. The router integrates with all Wheatstone consoles and third-party automation systems.

252-638-7000; fax 252-637-1285; www.wheatstone.com; sales@wheatstone.com

## CD/cassette combination deck

### Denon Electronics

DN-T625: This CD/cassette combination deck offers professional compact disc playback features

and updated cassette recording and playback functions. The unit provides a coaxial S/PDIF digital output, flexible routing and multiple external control options. With the addition of RS-232C control, the unit becomes a full integration source product that can be controlled by remote systems. Dolby B/C noise reduction, XLR inputs and switchable XLR outputs are included. The CD player features single and continuous playback modes, program play and three repeat modes for continuous playback and random mode playback. An 11 key direct track select keypad and rotary track select knob are provided for direct track access and programmability, while frame search and back cue functions dial in on select program passages. The unit is also able to display CD encoded text



through the use of a highly visible fluorescent-tube display. Pitch change of +/-12 percent is available for playback and the CD player also features a full 10 seconds of Shock Proof Memory for stability.

973-396-0810; fax 973-396-7459

www.denon.com

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arrakis systems inc. www.arrakis-systems.com [970] 461-0730

## Power generator

### Catalyst Power

Pinnacle 50: This product combines Catalyst integrated hardware, software, Catalyst Smart Gate Web-based remote monitoring and control, operations, maintenance and service into one cohesive package for one monthly fee. The Pinnacle 50 consists of a 50kW natural-gas engine generator and an automatic parallel switch-on intelligent control system—all packaged in a space efficient outdoor container integrated with Smart Gate Web-based remote monitoring. The Pinnacle Plus 50 includes a battery backed uninterrupted power supply for businesses that need high-quality, reliable power for critical load support.

760-448-2800; www.catalystpower.com

alavorgna@catalystpower.com

## Facility monitoring

### Harris



Recon: Recon is a new suite of remote control and facility-monitoring products for radio and TV broadcasters. Designed to communicate with broadcast, network and facility control equipment, Recon uses Internet Protocol to connect stations with local and remote transmitters. Because the system is a Windows-based software program, transmitters can be monitored and controlled from a personal computer. By using the serial interfaces already on most transmitters, this product allows for remote control and monitoring of transmitters that up until now could not use traditional remote controls. Also, Recon can work with almost any brand of transmitter. It can handle an unlimited number of status, analysis and control channels. It is Web-enabled, monitors SNMP, is capable of remote operation and handles EAS logging.

800-622-0022; fax 513-459-3890

www.harris.com; broadcast@harris.com

## CircuitWerkes Telephone Solutions



### AC-12 Telephone Autocoupler Bay

The AC-12 rack-mounted coupler bay is the best way to eliminate a wall or cabinet full of yesterday's couplers. Our unique dual audio busses eliminate the tedious and messy wiring associated with mass feeds. Each card can also individually either send or receive telco audio, making it perfect for IFBs, etc. Best of all, a loaded AC-12 lists for under \$175 per coupler.

For complete information about all of our products, including downloadable tech manuals, brochures and pricing for all of our products, visit our website at [www.circuitwerkes.com](http://www.circuitwerkes.com).

CircuitWerkes Inc. - 2805 NW 6th Street, Gainesville, Florida 32609 USA 352-335-6555



### HC-3 Advanced Telephone Autocoupler

The HC-3 is ideal for a variety of tasks like listen lines, concert lines & remote broadcasting. The HC-3 automatically answers on a user set ring number and disconnects at the end of the call. Its dry relay contacts can interface to remote recorders, tally lights, etc. Remote connections include: aux. relay closure, pickup-enable, remote pickup trigger, call end sink, & Ring / Online sink. Optional ComboLok provides password security.



### TELCO-6 Ringer Relay

Calls come in, you get relay outputs. It's that simple. Accepts up to six independent telephone lines. Each incoming ring closes the associated relay. Each relay has two sets of form "c" contacts. Relays stay steady on during rings. All interface connections on screw terminals.

## Automatic switcher Henry Engineering

**Superelay:** The Superelay is an automatic switcher used to operate on the air warning lights when a microphone is turned on. It can control a load of up to 200W, and it also provides six relay outputs for utility use. It is suitable for use wherever ac or multiple low-voltage circuits need to be switched with a common control input. The unit is rack-mountable in 1/3 rack width by 1RU high. As many as three units can be mounted in a 1RU rack shelf. The unit features plug-in Euroblock connectors, a built-in warning light flasher and a built-in ac power supply.

626-355-3656; fax 626-355-0077; www.henryeng.com; info@henryeng.com



## Digital converter

### Benchmark

**DAC1:** The DAC1 is a two-channel, 24-bit/96kHz D/A audio converter. The unit is perhaps one of the more significant recent advances in digital audio conversion technology. It provides some of the finest analog conversion through 96kHz, and will play back 192kHz with a 48kHz analog bandwidth. THD+N is a low -106dB (0.0005 percent) measured at 0dBFS, at any playback frequency, at any sample rate, with any degree of input jitter. The distortion free output helps the listener to hear detail that was previously masked by jitter induced artifacts and distortion.

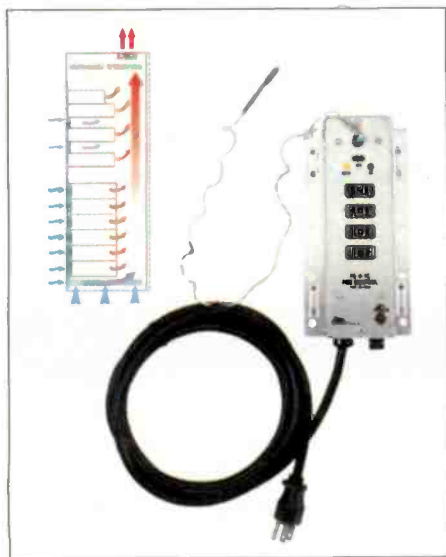
800-262-4675; fax 315-437-8119

www.benchmarkmedia.com; info@benchmarkmedia.com



## Thermostatic fan control Middle Atlantic Products

**FC-4:** Providing broadcast engineers with the tools to maintain optimal temperatures inside equipment racks, Middle Atlantic Products introduced this thermostatic fan control to its line of thermal management solutions. Using a design by which fan speed operates in direct proportion to the



internal enclosure temperature, the UL-listed system saves energy and eliminates needless wear while protecting the expensive and sensitive equipment mounted within. Available to mount within a MPR Modular Power Raceway or as a stand-alone unit, a single FC-4 can control as many as four 120V fans.

973-839-1011; fax 973-839-1976

www.middleatlantic.com

sales@middleatlantic.com

## Cable packaging Belden



**Belcoil:** This packaging is being extended to several parts of the Belden line. It is useful when there is limited storage space. The packaging can save space by 50 percent or more over traditional spooled or box packaging. It provides quick and easy setup and dispensing of cable. Additional advantages include a more convenient package size for carrying and transporting. The clear plastic wrap dispenser makes the cables weather, tear and crush resistant while enabling the installer to identify cable colors at a glance and quickly gauge how much remains in the package.

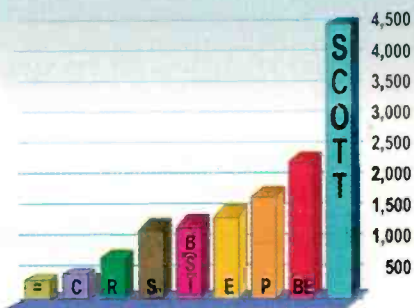
800-BELDEN1; fax 765-983-5294

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www.beradio.com

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Scott sells the most because we work closely with our customers. We send a Scott training technician to visit every new client. We learn what our stations do and how they want to do it. We fine-tune our system to do the job right for them. Then we stay as close as their phones, 24/7.



Here are K-Love's national morning personalities Jon and Sheri Rivers with recording artist Jaci Velasquez. K-Love uses dozens of Scott SS32 systems and plans to add hundreds more at affiliates.

Scott Studios listens. We learn from our client stations. We give them new features they want in free software updates.

**1-888-GET-SCOTT**



WBBY FM and WHPT FM (thru glass) at Cox's six stations in Tampa. Cox uses 60 Maestro and 3 Scott systems in 16 of their 18 markets.

Twenty-four of the top 25 radio groups have bought new Scott Studios systems recently.



Citadel has nearly 200 stations running Scott systems. SS32 is shown from WGFX FM, Nashville.



Journal's four stations in Knoxville use SS32.

When group broadcasters standardize on one digital system, nearly all choose Scott.



Group owner Radio One uses 62 Scott and Computer Concepts' systems in 22 major markets.

We're happy that SS32's best features were ideas from our customers.

**Not Proprietary!**

Something new we're doing with SS32X is to play MP3, WAVE, MPEG and Cart Chunk recordings made by Cool Edit, Vegas and other PC production software. SS32X and VT32X Voice Tracker works with Compaq, HP, Dell and other non-proprietary computers with generic sound cards including Sound Blaster.

You benefit from the success and experience of more broadcasters when you get Scott. It's our toll-free phone: 1-888-GET-SCOTT. Or, get info now from www.scott-studios.com.

# Scott Studios

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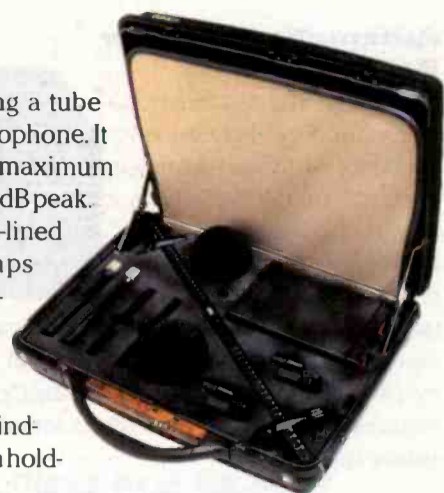
www.tftinc.com e-mail: info@tftinc.com  
2243 Ringwood Ave. San Jose, CA 95131 fax: (408) 432-9218

# Product Source

## Stereo mic kit DPA Microphones

3532: Based on the 4041 microphone using a tube preamp, the mic is a large diameter (1") microphone. It features an exceptionally low noise floor of maximum 7dB(A) and an SPL handling capability of 144dB peak. Each pair of microphones comes in a foam-lined briefcase (KE3532) with tube preamps (MMP4000-T), and omnidirectional 1" cartridges (MMC4041). The mic stereo mic kit also includes the following accessories: a two channel high voltage mic amp (HMA4000), two 30' microphone cables (DAO4110), two wind-screens (DUA0040) and one stereo boom with holders (UA0836).

+45 4814 2828; fax +45 4814 2700; www.dpamicrophones.com; info@dpamicrophones.com



## Coax connectors

### Andrew

OnePiece connectors: Designed for use with the Heliax LDF5-50B 7/8" coaxial cable, these connectors speed installation, ensure attachment consistency and provide outstanding electrical characteristics. Connectors are tuned to provide return loss performance of 35dB in frequency bands up to 2.2GHz. Male and female connectors are available in 7/16 DIN and type-N interfaces. Andrew OnePiece connectors are water-proof when mated or unmated.

800-DIAL-4-RF; fax 708-349-5444

www.andrew.com; rose.wolski@andrew.com



## Digital headphone amplifier

### Sonifex

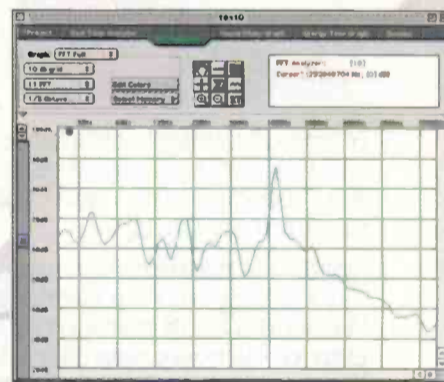


RB-DHD6: A digital headphone amplifier, it occupies 1RU and features AES/EBU and S/PDIF digital inputs. The amplifier produces six separately buffered headphone outputs, each with their own volume control. It can accept 24-bit/96kHz digital signals.

207-773-2424; fax 207-773-2422; www.independentaudio.com; info@independentaudio.com

## Software application

### Terrasonde



Terralink: Designed as a laptop or desktop tool that extends the power of the Audio Toolbox, Terralink allows users to view test results in real-time on a Mac or PC. Terralink also provides a memory-management system that allows organizing Toolbox memories into project files, displaying and printing them and storing them on the computer's hard disk. They can also be e-mailed to other Toolbox owners and stored back into a Toolbox.

888-433-2821; fax 303-545-6066

www.terrasonde.com; info@terrasonde.com

## Desktop duplication and publishing systems Mediaform

Scribe EC series: This series of media duplicators provides multiple configurations. The company states that endless configurations (EC) are possible. As a modular system, Scribe EC users can purchase the configuration that meets their current duplication and printing needs, while offering scalability to accommodate future upgrades. The PC-based Scribe EC provides an intuitive operation interface and relay mode to duplicate and print multiple master files without user intervention. The CD-R systems also feature Mediaform's Smart Drive technology, which provides copy protection and an electronic watermarking features that allows users to trace the legitimacy of CDs produced from the system. The Scribe EC is available with one, two or four 40x CD-R or 2x DVD-R drives and, depending on the configuration selected, provides up to a 600-disc capacity.

800-220-1215; fax 610-458-9554

www.mediaform.com; info@mediaform.com

## Composite baseband processing

### Hyatt Audio

Comproc 2.0: Unlike the brutality of composite clippers and limiters, the Comproc 2.0 integrates a fast acting compressor, which, besides its speed, uses a high-bandwidth VCA architecture that introduces no distortion whatsoever, even at maximum gain. With feed-forward compressor architecture and computer optimized timing circuits, the unit permits faster attack speeds and a program dependent release behavior, resulting in a more natural compressor sound. The system uses a clipper only for the fastest transients, therefore stereo separation is 60dB or more.

719-241-6225; fax 719-254-7445





## Signal analyzer/recorder Bext

Coverage Doctor: The Coverage Doctor has incorporated new and improved options and features, including GPS interaction to allow mapping of field signal strength. The system is an FM broadcast signal analyzer and recorder with readout of FM radio signal parameters, including multipath, field strength, depth of modulation, pilot injection, SCA and RBDS. It will remember the readings for later printout or storage and analysis. Users can place the unit in a car, ride around the coverage area, and at the end of the test period query the unit for data from all the areas that were monitored.

619-239-8462; fax 619-239-8474; [www.bext.com](http://www.bext.com); [sales@bext.com](mailto:sales@bext.com)

## Audio monitor DK-Audio

PT0600M-LS: This audio monitor, which provides a visual display of levels and stereo characteristics, adds stereo monitor loudspeakers to its function. A rotary volume on/off switch controls sound volume and a headphone jack provides a connection for quiet monitoring. Connections are standard XLR connections on the back and accept two analog inputs, three digital AES/EBU inputs and two analog and two digital outputs.

+45 4485 0255; fax +45 4485 0250  
[www.dk-audio.com](http://www.dk-audio.com); [info@dk-audio.com](mailto:info@dk-audio.com)

## Large ribbon microphone Audio Engineering Associates

R84: Using the same ribbon pickup element as the company's R44, this mic includes an integral cushion mount/stand adapter, an attached three-meter star-quad mic cable, and a custom soft case. It features a figure-eight pickup pattern that becomes tighter at higher frequencies. Frequency response is 20Hz to 20kHz ( $\pm 6$ dB).

626-798-9128  
fax 626-798-2378  
[www.wesdooley.com](http://www.wesdooley.com)  
[stereoms@aol.com](mailto:stereoms@aol.com)



## Shock-proof microphone clips On-Stage Stands



MY-300 Series: The clip secures a microphone with 35 pounds of pressure, while the  $\frac{3}{4}$  by  $1\frac{1}{2}$  contact rubber ring at the clip's base absorbs vibrations and circulates them. The mic is isolated from all the other equipment when secured by the clip, keeping the sound clean and vibration free. All units include a lifetime guarantee. It is available as either the MY-325 with a 25mm opening for wired microphones or the MY-330, a wider 30mm for wireless mics.

(800) 289-8889; [www.musicpeopleinc.com](http://www.musicpeopleinc.com)

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

## NTP Time Servers ESE



E-104, E-289, E-299, E911: This line of network time protocol time servers (NTP) provide a method of putting time information onto a network. Each of the four NTP time servers provides accurate and synchronized time throughout a network. The concept is as simple as plugging the time server into the network, configuring the time server and allowing any client on the network to request time from the time server. This time server is equipped with an internal GPS receiver as its time reference providing the user with a source of Stratum 1 accuracy. ES-289, ES-299 and ES-911/NTP receive their time reference from external sources of time code. They are time code translators, each receiving time code and outputting NTP. The ES-289 accepts SMPTE/EBU time code or Time Code while the ES-299 references either IRIG (A, B or E), NASA 36, XR3 or 2137 time code (AM or TTL). ES-911/NTP accepts ASCII time code in any of the formats that follow: NENA (Format 0, 1 or 2), ESE (Format A) or NMEA 0183.

310-322-2136; fax 310-322-8127; [www.e-se-web.com](http://www.e-se-web.com); [ESE@ese-web.com](mailto:ESE@ese-web.com)

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[sales@ataaudio.com](mailto:sales@ataaudio.com)

## Multi-station tuner Audio Design Associates (ADA)



**Quadritune:** This modular tuner can be equipped to receive as many as four radio stations simultaneously. Modules are available for AM, FM, weather and XM Satellite Radio frequencies. Units can be controlled with the company's ADA Bus technology through RS-232. It can be ordered in a desktop case or a 2RU version. As many as seven chassis may be cascaded for 27 independently controlled tuners. An additional option to an active quad antenna splitter/combiner for the AM/FM/WX tuners and an active quad splitter for the XM Satellite Radio modules, allowing a single antenna feed for all four tuners. An IBOC module is being designed for later release.

800-HD-AUDIO; fax 914-946-9620; [www.ada-usa.com](http://www.ada-usa.com); [literature@ada-usa.com](mailto:literature@ada-usa.com)

## Audio processor for the Internet Omnia Audio

**Omnia A/X:** Placing the power of an Omnia audio processor into a PC-card package, the Omnia A/X is useful for Webcasts and other computer-based audio delivery. Omnia A/X runs on Windows-based PCs and works with Windows Media, Real and MP3 encoders. Processing functions include wideband AGC, a three-band combined AGC/limiter, high frequency EQ and an adjustable-bandwidth low pass filter. A look-ahead final limiter prevents clipping.

216-241-3343; fax 216-241-4103

[www.omniaaudio.com](http://www.omniaaudio.com); [info@omniaaudio.com](mailto:info@omniaaudio.com)



## CD/cassette combination deck Denon Electronics

**DN-T645:** This combination CD/cassette deck saves space and provides two useful audio components. The CD player features MP3 playback, single and continuous playback modes, program play and three repeat modes. Direct track select and rotary track select provide fast access to cuts. Pitch change of up to +/-12 percent is also available. The cassette record and playback functions feature Dolby B/C noise reduction and Dolby HX-Pro. The record input source is switchable between internal CD (with CD deck synchronized recording) and external line input (XLR balanced or RCA unbalanced), and can be combined with the integrated mic input section. Playback speed of cassette material may also be altered



up to +/-12 percent. The DN-T645's operational controls are accessible via the front panel, or through several supported remote control interface options including serial RS-232C/422A, stereo mini jack, fader start and command control via a parallel GPI remote port.

973-396-0810; fax 973-396-7459; [www.denon.com](http://www.denon.com)

## Interleaved antenna system

### Dielectric

**HDR series:** When considering cost, efficiency and coverage concerns as well as tower space availability, some FM broadcasters will seek to interleave their digital antenna with a new or existing analog antenna. The HDR series of antennas provides flexibility while maintaining high isolation between the digital and analog system. Two circularly-polarized antenna

arrays are interleaved at halfway intervals on a supporting structure. Each antenna array is comprised of the same number of elements, and is fed by a separate transmission line connected to the appropriate transmitter. By interleaving the digital left hand polarized bays with the analog right hand polarized bays, coupling between the antenna systems is greatly reduced. Only a small, low cost circulator is needed at the output of the IBOC transmitter to absorb the small amount of coupled energy to achieve the necessary isolation between transmission systems.

800-341-9678; fax 207-655-7120

[www.dielectric.com](http://www.dielectric.com)  
[dcsales@dielectric.com](mailto:dcsales@dielectric.com)

## Remote communication device Anomaly/Phone Jam



**Phone Jam:** This interactive communication device and rehearsal tool provides telephone connectivity for remote recording sessions. Providing an extended frequency response via an analog telephone line, provides a clear communications path during a session. The unit is rack mountable and comes with five 1/4" jacks, one XLR microphone jack, RCA jacks for speakers, a headphone jack and three telephone lines.

323-871-1163; fax 323-871-1303

[www.phone-jam.com](http://www.phone-jam.com)

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### Power isolator Alpha-Core

BP30: This balanced symmetrical power supply eliminates the noise and hum caused by unbalanced ac power lines. When used, common mode noise and reactive components are reduced by at least 60dB. The Alpha-Core

BP30 Power Supply can handle a continuous power of 1,000W (8.4A) with input and output voltages of 120V for 60Hz operation. A 240V, 60Hz version is also available. There are four duplex grounded receptacles providing eight separate outlets. There is a 15A time-delay fuse. The transformer uses a toroidal core construction. The transformer design includes a static shield between primary and secondary windings to reduce the capacitive coupling and a built-in thermal cut-off, activated at 105° C.

800-836-5920; fax 203-384-8120; www.alpha-core.com



### Integrated PA system AKG

Max Modular: This integrated mixer, amplifier and speaker system is designed for use in small mobile sound systems for public address, paging or background music applications. It features a powered 8" two-way speaker and an integrated three-channel mixer with a phantom-powered microphone input, a wireless receiver input and stereo line inputs. The unit can run on ac or on batteries for as long as 14 hours. Max Modular also has an integrated slot for an AKG half-rack WMS 80 or WMS40 wireless receiver, which includes a dc power supply connection. There are two line outputs that can be used for recording or to cascade the signal to additional Max Modular systems. The unit is housed in a wood enclosure and has a metal stand mount built in. The built-in amplifier delivers 60W peak and can drive the system to 114dB SPL output. There is a two-band equalizer.

615-620-3800; fax 615-620-3875; www.akgusa.com; akgusa@harman.com

### 1/4" plug Amphenol

T-series phone plug: The T-Series is a premium 1/4" phone plug from Amphenol Australia. The T-Series offers superior cable clamping pressure with an awesome grip. It features a stylized shell design with ergonomic grip, a robust diecast shell in satin nickel or black, gold or silver contact plating, mono or stereo configuration and optional heavy-duty metal backshell. The cable clamp options fit 3.5mm to 6.5mm or 6.5mm to 8.5mm sizes.

877-267-4366; fax 203-265-8516  
www.amphenol.com; aphinfo@amphenol.com



### Bandpass filter Communications & Energy Corporation

CEC-448: Designed for use with C-band satellite downlinks, the CEC-448 is an anti-radar bandpass filter for 3.7GHz to 4.2GHz. Bandpass bandwidths and sideband suppression are both customer specified. Insertion loss is less than 1dB. Units are constructed from aluminum with welded, sealed tuners and junctures for a superior moisture barrier. All gaskets and hardware are provided for complete installation and preferred continuity.

800-882-1587; fax 315-452-0732; www.cefilter.com; eng@cefilter.com

### Codec preconditioner Harris



Neustar: Powered by Neural Audio, Neustar offers increased flexibility by working in the front (studio) and back end (transmission site) of the air chain and by offering compatibility with a larger range of digital formats including HD Radio AM/FM, DVD, DAB, DRM and the Internet. This received a *Radio* magazine Pick Hits Honorable mention at NAB 2003.

800-622-0022; fax 513-459-3890; www.harris.com; broadcast@harris.com

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Email dtharp@san.rr.com

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Cell 731.695.1714  
Email bernieob@earthlink.net

#### MID-SOUTH

**Bob Mayben**  
Voice 877.391.2650  
Fax 256.543.0535  
Email bobmayben@usa.net

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**Tyler Callis**  
Cell 817.312.6338  
Email tylercallis@integrity.com

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**Mary Schnelle**  
Voice 1.800.245.4307  
Fax 513.583.1343  
Email mschnelle@maryschnelle.com

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Wiring Solution is used exclusively throughout MRN's new remote broadcast facility.

This impressive, new 53' double slide-out/double deck remote vehicle is equipped with 3 digital studios, ISDN, POTS and Data Links and multiple track-side broadcaster pick-ups. The mobile facility will begin service this May, providing live race coverage to MRN's 700+ affiliate network.

Jim Moody, Chief Engineer of MRN, selected StudioHub+ for the vehicle wiring because of its analog and digital compatibility and easy re-wiring ability.



StudioHub+

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www.radiosystems.com

## Professional microphones

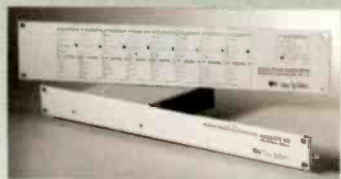
### Beck Associates

**B-2 Pro:** This hand-assembled, dual-diaphragm condenser microphone features a shock-mounted 1" gold-sputtered dual-diaphragm capsule, selectable cardioid, omnidirectional or figure-eight directivity pattern, low-cut filter and shielding against high-frequency interference. The B-2 PRO was designed for vocal use. The +48V phantom-powered microphone provides a frequency response of 20Hz to 20kHz. Other features include a switchable high-pass filter and a 10dB pad. It will accept a maximum SPL of 149dB and uses

extremely low-noise transformerless FET circuitry. The case is a satin nickel-plated brass and it includes a hard case with suspension mount and windscreen.

888-422-8600; fax 512-670-4390  
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## Automation system

### Arrakis



**Digilink-Xtra:** With all the features of the company's Digilink-Free, this version uses off-the-shelf PC sound cards. It can be used live on air with a jingle array and six-cart stack or in full automation. The built-in scheduler features a one-week rotating schedule. Manual or timed audio recording can be built into a schedule. The system supports two sound cards, allowing users to preview audio files during on-air use. This also allows the system to operate on air while a schedule is built from the same computer.

970-461-0730; fax 970-663-1010  
www.arrakis-systems.com  
sales@arrakis-systems.com

## Solid-state retrofit

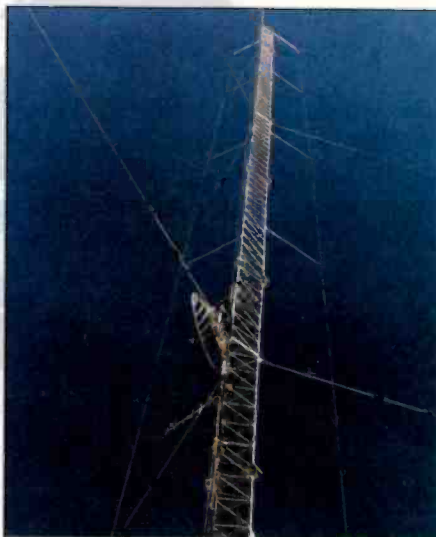
### Continental Electronics

**Dual IPA upgrade:** This upgrade provides parallel dual redundancy so that if a module fails in the IPA, the station stays on the air. It also offers an improvement in AM noise. Using two combined modules, the system isolates the IPA from the PA grid at warm up. The upgrade greatly reduces the cost of repairs in the unlikely event of module failure, and modules can be repaired in the field using common parts. Better bandwidth, and AM noise performance improves FM stereo and SCA performance. Stations can install the IPA upgrade kit. The kit includes full installation and operation instructions.

800-733-5011; fax 214-381-3250  
www.contelec.com; sales@contelec.com

## AM antenna systems

### Nott



**Folded unipole antenna:** One of the advantages claimed for the folded unipole is its broad bandwidth. It can provide a higher value of resistance than a conventional series-fed antenna when the antenna must be electrically short, i.e., less than 1/4 wavelength (90°) in height. For antennas around 60° in height, an adequate resistance can be obtained with a unipole, but the bandwidth is usually narrow. There are modifications that can be applied to broaden it, but it is normally not ideal.

800-443-0966; fax 505-325-1142  
www.notttd.com; ron@notttd.com

## Rack-mixer

### Behringer



**EuroRack Pro RX1602:** This compact mixer features 16 inputs with low-noise preamps. The compact, 1RU design can be used as eight stereo inputs with dedicated balance and level control. It includes a monitor/FX send control for each section with global master send control for flexible monitoring, recording, effects or mix-minus applications. Illuminated double-function mute buttons with additional clip indication provide input source/level information, and a set of 2x7-digit LED main level meters for the left and right main mix signal help provide overall indications. Outputs are provided on 1/4" TRS connectors. A headphone jack is also included.

877-672-0816; fax 425-673-7647; www.behringer.com; support@behringer.de

## Portable digital mixer

### Klotz Digital

**Voice:** Based on the Vadis platform, this system offers the user high-quality 24-bit audio with isolated splits, adjustable peak indication and configurability on the unit or at the VADIS frame, giving broadcasters more flexibility. The unit delivers multiple channels of digital audio in a live broadcast application. The system uses a digital control bus, enabling monitoring and control of several units.

678-966-9900; fax 678-966-9903  
www.klotzdigital.com; sales@klotzdigital.com



## Quad gate PreSonus Audio Electronics



**GTX44:** This four-channel frequency-dependent gate/expander uses digital sidechain processing while maintaining a high quality analog signal path. The gate features high- and low-pass filters coupled with a sidechain monitor. Engaging the sidechain monitor allows the operator to monitor the filters that simplifies the isolation of sources and reduces false triggering. The gate parameters also include variable attack, release, hold time and range. Downward expansion is accomplished by using a variable ratio control. Adjacent channels of the GTX44 can be linked via a link button. In addition, the gate provides ducking on each channel. The back panel includes +4/-10 input-level switches, key input, balanced XLR I/O and a single TRS unbalanced I/O for each channel.

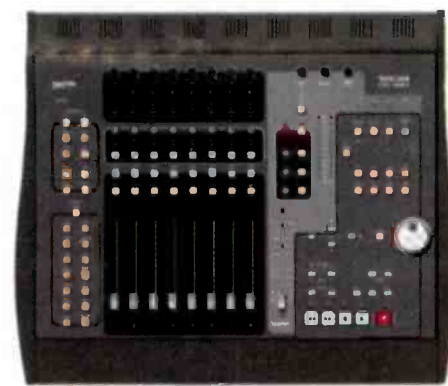
800-750-0323; fax 225-926-8347; www.presonus.com; presonus@presonus.com

## Radio Automation System BeOSRADIO

**Tunetracker 2:** Offering professional features, this automation system is targeted at small commercial, non-commercial, LPFM, alternative radio station venues and broadcast classes. The system includes Tunetracker 2 automation, which can be configured for fully automated or live-assist programming, Infinite Walkaway for unattended operation, Internet/intranet streaming using MP3 and Ogg Vorbis, and special automation events allowing for time-corrects, time-sensitive fades and live radio network joins. The system supports and transitions between WAV, AIFF, MP3, MP2, ADPCM in mono and stereo, at every bit-rate supported by the sound card. A full output log file is created for each day's broadcast, containing exact start times for each event that played, and the option to log composer information for BMI reporting purposes.

920-835-5678; fax 920-835-4463  
www.beosradio.com

## DAW control surface Tascam/Teac Professional



**FW-1884:** This DAW control surface and audio/MIDI interface uses the FireWire high-speed data transfer protocol for communication. It includes eight 100mm, motorized, touch-sensitive channel faders, one master fader and controls for pan, solo, mute and select functions on each channel. Tactile control for four bands of parametric EQ, a weighted jog wheel and a variety of shortcut keys for various software applications are also included. The FE-8 is an eight-channel fader expansion for the FW-1884. In addition to its faders, dedicated controls and assignable shortcut keys, the FW-1884 provides eight balanced XLR analog mic/line inputs with high-quality mic preamps, phantom power and inserts on every channel. Using 24-bit/96kHz A/D and D/A converters, the FW-1884 offers full 96kHz operation on all analog I/O channels with compatible DAW software. Phantom power is switchable in groups of four channels.

323-726-0303; fax 323-727-7635  
www.tascam.com; tascamlit@tascam.com

www.beradio.com

## Control and sensing system LakeSoft

**Airemote:** This multitask control and sensing system features various input and output options that can be customized. Any combination of input and output cards can be installed in the 12 modular slots of the main chassis. As many as 64 chassis can be linked together to create a maximum capacity of 768 cards. Connections are made to each card via standard connectors. Most cards use Amphenol connectors to allow for ease of installation directly to punch blocks. The Airemote supports the English, Spanish, French, Chinese, Hungarian, Dutch and Croatian languages. It is compatible with most existing remote controls and integrates easily allowing for expansion. In addition, RBDS encoders, automation systems, IBOC transmitters, backup playback units, audio processors and more can be interfaced via serial or TCP/IP to the unit.



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## Analog mixing console Audioarts Engineering



R-90: Useful for multi-studio installations with easy countertop installation, this console's plug-in modular design houses as many as 23 input channels with dual caller support, two studios, two headphones, control room, built-in cue speaker, clock and timer, VU meter pairs, two stereo and two mono master outputs. The console's hinged meter bridge provides instant access to I/O ports and logic programming.

252-638-7000; fax 252-637-1285; www.wheatstone.com; sales@wheatstone.com

## Dual six-inch active studio monitor Mackie Designs



HR626: The 140W active studio monitor uses the D'Appolito driver alignment design, which provides bottom end coupled with pinpoint low-level accuracy of the mid range. Additionally, its symmetrical left-right sound field provides the geometric shape required for center channel applications in 5.1 and 7.1 surround systems. The speaker uses a high-frequency waveguide-loaded 1" dome tweeter for crisp, evenly dispersed highs, along with dual 6.7" low frequency drivers that provide extended low-frequency response while preserving the

speed and accuracy of a single 6" design. The dual 6.7" drivers work in partnership with Mackie's rear-firing passive transducer, to provide bass extension to 40Hz. This product features a bi-amplified, active speaker system that incorporates dual FR Series amplifiers to provide 100W to the woofer and 40W to the tweeter. Inputs include 1/4" XLR balanced and RCA unbalanced. Rear panel controls consist of sensitivity, an 80Hz high-pass filter, -2/0/+2dB high frequency shelving filter, acoustic space control for optimizing bass output in various room placements, and the auto on switch. The front panel provides a standby and mute switch along with power and overload LEDs.

800-898-3211; fax 425-487-4337; www.mackie.com; productinfo@mackie.com

## Graphic equalizers Inter-M Americas

GEQ-1231D and 2231d: The GEQ-1231D (1RU), designated as the single-channel model, and the GEQ-2231D (2RU), which is the dual-channel model, are DSP-based units that feature analog-style faders on their front panels. Providing users with a dynamic range greater than 100dB, each is operable within an extended bandwidth of 10Hz to 30.5kHz, and is equipped with premium AD/DA converters, balanced XLR connectors, 24-bit/64kHz resolution, peak limiting, low and high-cut filters and a full 31 bands of graphic equalization.

610-874-8870; fax 610-874-8890; www.inter-m.net; info@inter-m.net



M3: This compact, portable audio mixer combines rugged construction, high quality components and an ergonomic layout. The mixer features three low-noise, transformer-balanced inputs each with three-way switchable low-cut filters, pan switches and soft-touch knobs. The output section combines monitoring abilities including left to both ears, stereo, right to both ears, mono, MS decode and pre-fader listen of all three inputs. Additionally, the M3 mixer incorporates two dual-isolated secondary output transformers for isolated feeds.

661-295-9395; fax 661-295-8398; www.professionalsound.com



## Near-field monitor PMC Loudspeaker

DB1: This mini monitor has an effective line length of 1.5m in a compact, heavily damped cabinet. It features a dynamic range capability, low distortion and wide frequency response of 50Hz to 25kHz. Power capability is up to 150W. It also features a low-frequency doped 140mm cast magnesium frame chassis woofer and aluminum alloy, phase corrected, Ferrofluid-cooled tweeter. Input connections are two pairs of 4mm binding posts. It is available in cherry, oak, black ash and black finishes. Other finishes are available on special order. The unit measures 11.4" x 6.1" x 9.21" and weighs just under 10 lbs.

705-742-5325; fax 705-742-0882

www.pmccloudspeaker.com  
sales@promonitor.co.uk

## Two-channel mic preamplifier True Systems



P2 analog: This two-channel microphone preamplifier offers outstanding sonic performance for critical recording, on-air and sound reinforcement. Features include a selectable M-S decoder, active direct inputs with impedance modification capability, dual gain range selection and multi-frequency high pass filter. In addition, the unit features a stereo phase correlation display that assists in optimizing microphone placement for stereo recording. All signal switching is done via high-reliability gold-contact relays to maintain an extremely short signal path and eliminate distortion and noise added by commonly used solid-state switches.

520-721-2735; fax 520-722-4057  
www.micpreamp.com

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## Modular Sound Isolation Studios

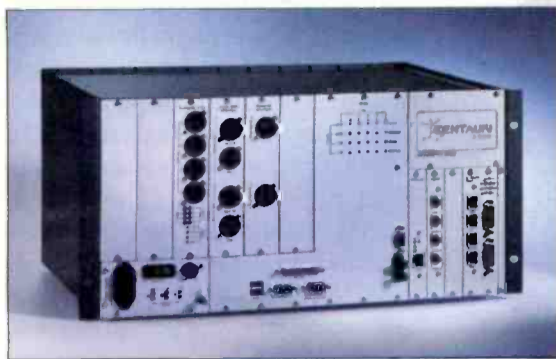


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FAX: 512/444-2282  
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## T-1 multiplexer Mayah Communications



**Centauri 3500:** The 3000 is a stand-alone bi-directional T-1-based studio transmitter link supporting bi-directional, 15kHz uncompressed stereo audio, IP addressable Ethernet data link, parallel remote I/O control and remote PC configuration and support. Using a mix of available modules, as many as 24 audio channels can be transmitted or four ISDN BRI codecs can be used. The codec modules support Layer 2, Layer 3, AAC and G.722. Flexible alarm handling and management via IP add to the control functions.

+49 0 811-55-17-0; fax +49 0 811-55-17-55; [www.mayah.com](http://www.mayah.com); [info@mayah.com](mailto:info@mayah.com)

## DSP controlled amplifiers



**Electro-Voice Precision Series:** These professional amplifiers offer remote control and supervision of as many as 250 amplifiers via

one or multiple PCs. DSP controlled precision amplifiers combine performance with remote control and system supervision capabilities. Central supervision and control of all amplifiers and connected loudspeakers is achieved with signal processing (filter, delay, level, dynamics). The DSP Controlled Amplifiers also display the acoustical response of loudspeakers in real-time (RACE). Integration with life-safety systems and control of external equipment is seamless. The P3000 RL is the flagship of the series, and provides 2 x 1,300W into 4Ω and 2 x 1,800W into 2Ω. The digital version of the P3000 features all Speakon NL4 connectors on speaker outs.

800-392-3497; fax 952-887-5588; [www.electrovoice.com](http://www.electrovoice.com); [pro.sound@telex.com](mailto:pro.sound@telex.com)

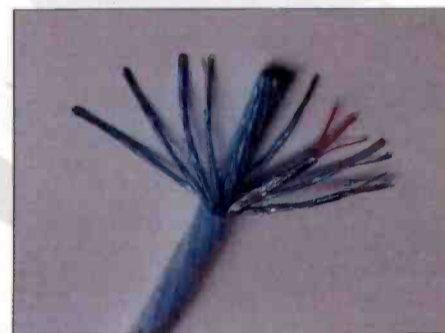
## Spectrum analyzer IFR Systems

**2397:** Designed for wireless infrastructure and production testing, the 2397 can also be used for satellite systems and ground stations and other general purpose RF and microwave applications. This spectrum analyzer can be configured with options similar to those available for other members of the 239X spectrum analyzer family. Hardware options include a tracking generator, ac and dc power supply high stability timebase and quasi-peak detector. Software options include Distance to Fault, Marker Label Edit and EMC for pre-compliance testing. The unit's range extends from 9kHz to 3GHz, and up to 26.5GHz in the 2395 spectrum analyzer. The 2397 weighs 20lbs. The marker system simplifies troubleshooting by allowing nine markers to be displayed on the screen at any time. A marker table displays the frequency and level of each marker selected, thus allowing multiple signals to be evaluated simultaneously.

800-835-2352; fax 316-522-2328; [www.ifrsys.com](http://www.ifrsys.com); [info@ifrsys.com](mailto:info@ifrsys.com)



## Audio snake cables Nemal Electronics



**SN1624PL:** This is a multichannel plenum-rated cable. Available in constructions of two to 24 pairs, all cables are UL-CL2P rated. SN1624PL contains 16 individually shielded and jacketed pairs with an overall jacket. The digital versions, (24XPL series), are also available in two to 24 pairs with color-coded conductors and no inner jackets. The new cables facilitate rapid and neat installation of systems requiring multiple audio pairs, and the discrete numbered individual jackets provide for easy and positive identification. Outer jackets are available in natural (standard) or other colors by special order. It can be ordered on 1,000' rolls or terminated to a customer's specifications.

800-522-2253; fax 305-895-8178  
[www.nemal.com](http://www.nemal.com); [info@nemal.com](mailto:info@nemal.com)

## Mic/line interface amps ATI

**MLA800-XLR:** The design specs of this 1RU eight-channel line amplifier are similar to the MMA800-XLR, including a switchable output-level meter and internal switches for input summing to multiple outputs. It is available with active-balanced or transformer-balanced outputs. The unit is available in four models. All units have internal power supplies. Each amplifier includes front panel selection of level, high or low gain, phase reverse and low-cut filter as well as LED readouts of signal presence and signal clipping.

215-443-0330; fax 215-443-0394  
[www.atiguys.com](http://www.atiguys.com); [sales@atiguys.com](mailto:sales@atiguys.com)



## Monitoring products Statmon Technologies

**Remote control communications system:** Working with Harris, Statmon has developed a suite of facility monitoring tools for network and facility systems. Using IP to connect station control rooms with both local and remote transmitters provides a Web-enabled Windows-based software program to provide remote transmitter monitoring from

anywhere. The unit interfaces with the serial connection found on many newer transmitters. The system can handle a fully scaleable number of status, analysis and control channels. It is Web-enabled, monitors SNMP, is capable of remote operation, and includes EAS logging.

310-440-8053; fax 310-278-6585; [www.statmon.com](http://www.statmon.com); [info@statmon.com](mailto:info@statmon.com)

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## Power controller Pulizzi Engineering



IPC3402-2756: This high-current, 24A rated power controller saves rack space by offering 24A of power in 1RU. This eliminates the need for multiple power sources and concentrates the input at one high current source. The controller offers power control via Ethernet and direct serial communication ports for remote power control of critical systems. These integrated power control features allow the user to remotely reboot locked equipment or control system power from anywhere in the world with an Internet connection. Additional features such as power up/down sequencing limit inrush problems and provide user-configurable sequencing. This product uses the same Telnet and Web browser interfaces that other Pulizzi power controllers use. This allows the system to be connected to other power controllers for control of as many as 80 outlets at one IP address or using one single phone line. This unit also features local on and off control of each outlet for onsite maintenance.

800-870-2248; fax 714-641-9062; [www.pulizzi.com](http://www.pulizzi.com); [sales@pulizzi.com](mailto:sales@pulizzi.com)



## Audio software Backbone Networks

Radio Pro Version 2: Version 2.0 builds on the Backbone Radio Pro with several operating features such as standard rotation, image display, transfer and display of clip annotation, MPEG4 encoding and streaming and clickable URLs on the free Quick Time player. Standard rotation permits station operators to automatically generate fresh radio playlists based on specified characteristics of the streaming audio clips, such as genre, priority and tempo. Each clip can be assigned to other time-based criteria, including start and stop time and date, time-of-day play and the rate at which priority of play decreases. Users create program playlist templates, which include a modifiable set of broadcast rules, such as those cited by the RIAA. Templates distinguish between clip types, whether songs, commercials or station identification, and automatically insert the semi-randomized clips that conform to the specified criteria.

508-753-5665; fax 508-752-1520; [www.backbone.com](http://www.backbone.com); [info@backboneaudio.com](mailto:info@backboneaudio.com)

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[www.beyerdynamic.com](http://www.beyerdynamic.com); [salesUSA@beyerdynamic.com](mailto:salesUSA@beyerdynamic.com)

## Headphones Beyerdynamic



## Analog phase-alignment tool Little Labs



IBP (in-between phase): The IBP eliminates the hollow sound when combining out-of-phase and partially out-of-phase audio signals. This tool allows engineers to put an audio signal in phase, when the mixing console's polarity button will not. Regardless of the audio source, audio signals will be put in phase quickly and easily. The product combines real-time, line-level phase control with audiophile quality. Additionally, its selectable instrument input stage uses the super-fidelity circuitry of the Multi Z DI and PCP Instrument Distro. The unit can be used as a direct box as well, providing easy adjustment between a direct and miked signal.

323-851-6860; fax 323-851-6860; [www.littellabs.com](http://www.littellabs.com)

## Digital broadcast console Otari

DB-10: The console's digital audio I/O (four AES/EBU inputs, two S/PDIF inputs, two AES/EBU outputs, one S/PDIF output) supports 32kHz-96kHz sampling. The console offers 10 input-channel faders. Channels five through 10 are provided with an A/B input switching function. The four channels of microphone inputs are always connected to channels one through four. The remaining two line input channels, six stereo analog input channels, four AES/EBU input channels and two S/PDIF input channels can be routed to the A/B inputs of channels five through 10. The console can store these setups in its internal memory: 99 snapshots, nine projects (console settings) and 20 compressor presets. By connecting the console to an external PC via RS-232, snapshots and projects can be saved and loaded. With the password-protect function, certain items in the menu system are accessible to only specified users. There are two user levels, and the console differentiates the users by the password used to log in. Also, specified buttons can be locked out to prevent misoperation. If the digital system should malfunction, pressing the EMG button connects one mic path and one stereo line path to the program bus to feed the minimum audio signals to the main output.

800-877-0577; fax 615-255-9070; [www.otari.com](http://www.otari.com); [sales@otari.com](mailto:sales@otari.com)





**Digital mixing console**  
**Soundcraft USA/BSS Audio**

**328XD:** This is the digital version of the company's 328 production mixer. It features dynamics processing on every channel, group and mix path. It can function as a straightforward mixing console or be integrated to control DAWs and other equipment. The dynamics feature set includes a gate and compressor/limiter on every channel; configurable direct outputs, two high-resolution Lexicon effects processors, the ability to route effects to groups for recording and total status recall at power-up. Output formats include ADAT, TDIF, S/PDIF and AES/EBU.

615-399-2199; fax 615-367-9046; [www.soundcraft.com](http://www.soundcraft.com); [info@soundcraft.com](mailto:info@soundcraft.com)

**Digital composite link**  
**Moseley Associates**

**Starlink Composite STL:** This STL provides a composite audio link with an RS-232 data channel. The system's S/N ratio is -85dB with 0.03 percent distortion. Stereo separation is greater than 65dB and provides a 20dB system gain advantage over analog composite STLs. The user can select 23 or 64 QAM with 16-bit linear audio. All modules are compatible with the SL9003Q. The front panel provides full metering and diagnostics.



805-968-9621; fax 805-685-9638; [www.moseleysb.com](http://www.moseleysb.com); [info@moseleysb.com](mailto:info@moseleysb.com)

**Rack-mount mixers**  
**Crest Audio**



**XR-20 and XR-24:** These compact rack-mount mixers can be used in a wide range of applications including fixed installation, live sound reinforcement, project studio, production facilities and broadcast. Features include a combination of 12 mono and four stereo inputs (a total of 20 inputs), all with mic preamps and switched 48V phantom power capability. Each input channel offers four-band EQ with 18dB-per-octave high-pass filters on the mono input channels. Additionally, recording and studio-type features are included, such as insert points on all inputs, subgroups, aux outs and left, right and mono outputs. There are six aux buses, which are selectable pre- or post-fader in pairs. The XR-20s main outputs use XLR-type jacks and are switchable between mic and line. The XR-24 includes the same features as the XR-20 in a more production-oriented package featuring eight mono and eight stereo input channels—all feature mic preamps with 48V phantom power. This provides the flexibility for mixing eight stereo devices in with eight mono mic or line level signals.

201-909-8700; fax 201-909-8744; [www.crestaudio.com](http://www.crestaudio.com)

**Mono STL**

**Marti Electronics**

**STL-20M:** The new STL-20M transmitter and SR-20M receiver take advantage of a frequency-synthesized and power amplifier design to increase output power to 20W for long-range studio-to-transmitter links. The STL-20M transmitter/SR-20 receiver is Marti's second STL system to be introduced with the new design, following the introduction of Marti's STL-20C composite STL transmitter and SR-20C receiver. Audio frequency response is flat to 20kHz with less than 0.2 percent distortion. The transmitter is equipped with a wide-band amplifier that allows for front panel adjustment of transmitter power output.

817-735-8134; fax 817-735-9340; [www.martielelectronics.com](http://www.martielelectronics.com); [sales@martielelectronics.com](mailto:sales@martielelectronics.com)



**Monitors**  
**Wohler**

**AMP1 Audio Monitor:** Available in a variety of configurations, the Amp1 series provides monitoring of two to 20 channels of audio with a stereo output. Some versions offer level metering and phase indication. Each has a self-powered audio monitor and occupies 1RU. Audio is focused in an ultra near field (1' to 3') working environment, providing a higher volume directly focused at the operator while reducing overall ambient sound and adjacent bay crosstalk. A headphone jack is provided, which automatically mutes the speakers. Output limiter circuits are incorporated to protect the speakers, and magnetic shielding allows placement immediately adjacent to video monitors with no color impurities.

888-5 WOHLER; fax 650-589-1355  
[www.wohler.com](http://www.wohler.com); [sales@wohler.com](mailto:sales@wohler.com)

**Digital asset management**  
**FastChannel Network**



**Asset Channel:** This digital asset management system offers systematic archiving of trafficked spots. This system's features include: all spots are viewable online and instantly downloadable via the Internet, all spots can be ordered for off-line delivery on DVD, on-demand spot retrieval and online retrieval request, and the user can search by keyword or code. Other options include customizable sorting, indefinite storage capability and a large storage capacity. This service supports all popular formats including MPEG2 4:2:2 and MP3 audio.

866-321-FAST; fax 781-898-6501  
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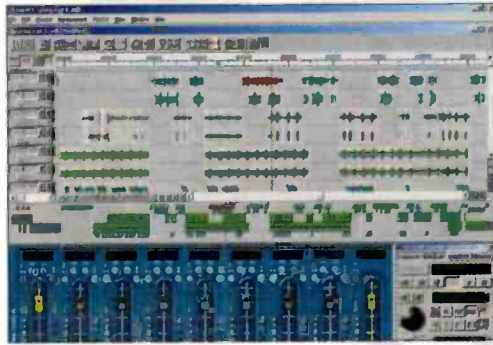




## Operating software

### Sadie

Version 5 System software: In conjunction with the announcement of a new range of workstation products, Sadie introduced Version 5 System software as the core operating system at the heart of its products. The existing user interface has undergone a number of enhancements including some major changes to the cosmetic appearance of the mixer and playlist. New features include the provision of enhanced real-time DirectX support to enable users to access the vast range of third party software plug-in applications from companies such as Waves, TC Electronic and Antares. Standard Windows functions are now fully supported.



615-327-1140; fax 615-327-1699; www.sadie.com; sales@sadie.com

## Furniture system

### Spacewise Broadcast Furniture

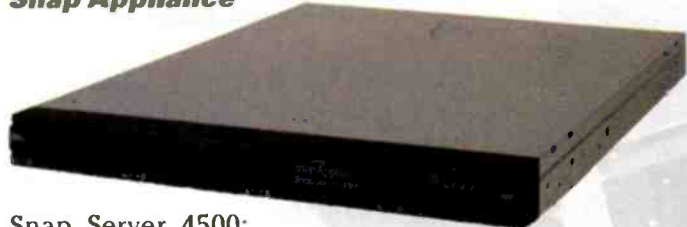
DAVES: This furniture system was developed as an affordable and versatile alternative to editing and production equipment support. The components are made of quality wood. The system is shipped 90 percent assembled. Surfaces are covered with name-brand laminates in a variety of colors. The traditional system includes five modular furniture components including a top counter unit that can house a PC with dual monitors and has an overbridge. All edges are wood trim. The furniture offers wire and cable management and passive ventilation.



800-775-3660; fax 480-704-6149; www.spacewise.com; info@spacewise.com

## Network-attached storage

### Snap Appliance



#### Snap Server 4500:

This network-attached storage device occupies 1RU and provides cross-platform file sharing and backup. Powered by a Pentium 4 processor, the 4500 supports Active Directory Service (ADS), UNIX Network Information Service (NIS), Simple Network Management Protocol (SNMP) and either network or local backup for simple management in any environment.

888-343-SNAP

www.snapappliance.com; sales@snapappliance.com

## Audio dynamics controller

### TC Electronic

PT Level Pilot: The P2 is a set and forget leveler and limiter. The P2 Level Pilot comes factory loaded with a host of international standard presets ensuring compliance to audio standards, maximum loudness, spectral balance and total level control. The presets can be used as is or tuned by a user. PC software provides detailed access to all parameters for editing and creating tailor-made presets. Settings can easily be cloned to other P2's. Custom defined multiple level lock functions and editing is possible.

805-373-1828; fax 805-379-2648

www.tcelectronic.com; info@tcelectronic.com

## Call director

### Broadcast Tools



#### TS-6 Teleswitch 6:

This six-line telephone call director works with standard telephone lines, a standard telephone set and almost any telephone hybrid. It is sold with a controller and one work surface. An additional work surface may be added to the system. If full call screening is not required, a second hybrid may be connected. The Teleswitch 6 is supplied with one desk-top switch console and a 1RU controller, three additional switch consoles may be added to the system. Free Windows call screener software is available for download.

877-250-5575; fax 360-854-9479

www.broadcasttools.com; bti@broadcasttools.com

## 3.3V-compliant PCI audio cards

### Digigram

PCX822v2, PCX442, LCM440v2, VX822: Added to the expanding line of sound cards that comply with the new 3.3V PCI bus standard, the PCX822v2, PCX442, LCM440v2 and VX822 provide multi-channel I/O for professional applications. The updated cards replace these existing cards: PCX822np, PCX440np, LCM440 and VX820. The new designs offer performance that equals or exceeds performance of the cards they replace.

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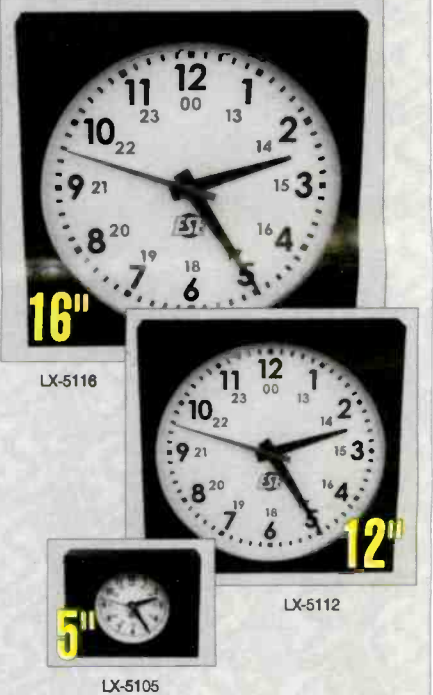
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310-322-2136 • FAX 310-322-8127  
142 SIERRA ST., EL SEGUNDO, CA 90245 USA

## Digital audio codec Musicam USA

**Netstar:** This codec allows users to send and receive real-time audio, contact closures and ancillary data.



The codec is self-contained in a 2RU chassis. Stereo analog and AES/EBU inputs and outputs are standard. This codec can send and receive bi-directional audio via IP, ISDN and all types of dedicated data circuits. This product contains all of the popular coding algorithms, including G.711, G.722, MPEG 1 and 2 Layer II, and MPEG 1 and 2 Layer III for compatibility with older codecs. In addition, it provides MPEG2 AAC and MPEG4 AAC low-delay encoding for high audio performance at lower bit-rates. Featuring four large, bright LEDVU meters and a large menu display, this codec is a flexible headphone monitoring system that allows users monitor send audio, receive audio or a blend of the two. The blend function is well suited to voice talents, who often need to monitor both ends of a session.

732-739-5600; fax 732-739-1818; www.musicamusa.com; sales@musicamusa.com

## AM/FM IBOC signal generators Broadcast Electronics

**FSi-10 and ASi-10:** This third generation IBOC signal generator takes advantage of the ability of the Fxi60 to accept a direct digital input and provide a combined analog FM and FM IBOC signal. All operating parameters are programmable from the front panel VGA touch screen. The generator accepts AES/EBU input and provides all signal conditioning needed for the analog and the digital portions of the signals for use in a high or low level combined system. Its output directly feeds the Fxi60 or Fxi250 digital FM exciter when fitted with the IBOC input option card. When configured properly, the AM version of this unit, the ASi-10, will also act as the digital signal generator for your AM IBOC system. The phase and amplitude output are fed directly into a solid state AM transmitter and with the addition of the proper audio processing, a station is ready to begin broadcasting digital AM.



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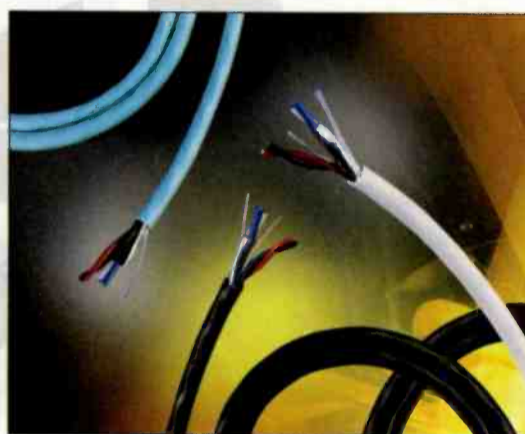
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Web Site: http://www.coaxial.com



## Composite data/power cables Belden

**Brilliance Multi-Media Touch Panel Control cable:** These composite data/power cables are appropriate for analog or digital system controllers and are recommended for all aspects of building management, including: PC, A/V and Internet integration; remote monitoring and control of building systems and security surveillance; equipment self-monitoring and maintenance alert; A/V system pre-programming; home theatre and entertainment systems; ambient lighting/window shade automation; lighting system controllers; and energy, environmental and climate control programming. The 1502R and 1502P two-pair composite cables are designed to be flexible. The data pairs offer noise immunity and are engineered and tested for 100Ω impedance. The signal and control pairs are rated at 300V and have a temperature rating of 75°C. Each cable consists of a shielded data pair and an unshielded signal/control pair. The data pair in the riser-rated 1502R construction is comprised of two 22AWG seven-strand tinned copper conductors insulated with foamed polyethylene (FPE) and shielded with a Beldfoil tape and a drain wire. The power pair has two 18AWG 16-strand tinned copper conductors insulated with a flame-retardant PVC. The data pair is color-coded blue and white; the power pair is color-coded black and red. The overall PVC jacket is available in black, white or aqua.

800-BELDEN1; fax 765-983-5294; www.belden.com; info@belden.com

## USB audio/MIDI interface Tascam/Teac Professional

**US-122:** The interface is designed as an affordable solution for musicians and recordists who need to send audio and MIDI to and from computers. It is a Mac and Windows compatible USB audio and MIDI interface. It features two XLR-based, phantom-powered mic inputs with analog inserts that allow hardware devices (compressors) to be placed into the recording signal chain. Two line-level inputs on balanced 1/4" TRS jacks are included, and are switchable to guitar-level for direct instrument recording. Its two line-level outputs provide control for levels, and a dedicated headphone output is also included. The interface also offers 16 channels of MIDI I/O for use with synthesizers and other MIDI equipment.

323-726-0303; fax 323-727-7635; www.tascam.com; tascamlit@tascam.com



## Remote transmitter Marti Electronics



**SRPT-30:** This wide-band, dual-frequency RPU transmitter can cover several VHF bands. Previous dual-frequency crystal-controlled designs were limited to frequency sets that were less than 2MHz apart. The transmitter uses an RF synthesizer design that allows frequency pairs to be up to 50MHz apart depending on the operating band. This design allows greater flexibility in a station's RPU system and precludes the need for multiple transmitters for spread frequencies. The SRPT-30 replaces the RPT-30 remote transmitter and provides a 20W to 30W output depending on the band selected.

817-735-8134; fax 817-735-9340

www.martielelectronics.com; sales@martielelectronics.com

## Data patchbays Switchcraft

**NPB 556:** With the increased need to route data within a facility, the NPB 556 provides a familiar patchbay feel to accommodate various uses. The unit features features 8, 16, 24 or 32 TT-style jacks on the front panel with a nine-pin D-sub or PPT back plane. All versions use low-capacitance internal wiring for maximum performance of transferring data. All standard units are available 1RU or 2RU sizes and are housed in a rugged, black epoxy-finished steel frame chassis. The standard RS data jackfield series offers multiple combinations of ports, rack heights and back panel terminations that can be used in applications that require flexible data patching. Custom ports and rack height combinations can be supplied.

773-792-2700; fax 773-792-2129

www.switchcraft.com; sales@switchcraft.com

## Audio Router System Z-Systems

**Z-256.256R Digital Detangler:** This product enables recording studios and post facilities studios to seamlessly integrate and reconfigure their digital audio workplace. The unit accommodates as many as 256 stereo/two-channel inputs routing in any combination to a total of 256 outputs. Asynchronous sources and destinations can be 24-bit AES/EBU or S/PDIF format, at sampling rates to 192kHz, and beyond. I/O crosspoint assignments can be selected via a dedicated serial port, using the firm's dedicated hardware remote or networked MacOS and Windows control software. The system is modular in increments of 16x16.

352-371-0990; fax 352-371-0093; www.z-sys.com; z-sys@z-sys.com



## Compact production mixer Sound Devices

**302:** Developed specifically for field production audio applications, this mixer is useful for production companies wanting to take control of their audio. A compact and cost-effective battery-powered professional audio mixer, the key features include: large, 40-segment sunlight-viewable output level meters, channel-selectable microphone powering (48/12V phantom and T:power), three microphone inputs with Lundahl input transformers, input limiters and software-selectable output limiters and headphone monitoring, including PFLs and MS stereo matrix.

608-524-0625; fax 608-524-0655; www.sounddevices.com; info@sounddevices.com



## Backup and storage media EMTEC Pro Media



**LTO Ultrium Tape:** Designed for digital audio backup and storage, four tape sizes accommodate various levels of projects. This product can store as much as 200GB of compressed data on a single tape. The tape formulation and shell are developed to the strict tolerances from the company's experience with the computer industry. Using a 1/2" metal pigment tape, it offers fast data transfer rates and a minimum storage life of at least 30 years. Data transfer rates between 10MB/s to 40MB/s are possible.

888-295-5551; fax 661-295-5554; www.emtec-usa.com



## AM/FM tuner Rolls Corporation

**TU78:** This tuner features 75Ω FM and 300Ω AM antenna inputs, stereo line-level RCA outputs, a variable tuning control and an AM, FM stereo and FM mono band select switch. An LED indicates when a station is locked, another indicates a stereo signal is present at the outputs. FM sensitivity T 30dB is less than 10uV. AM sensitivity at 20dB is less than 1mV/m. The unit operates on a 12Vdc power supply. The compact size makes it ideal for remotes, house PA or EAS decoder feeds.

801-263-9053; fax 801-263-9068; www.rolls.com; rollsrfx@rolls.com

## Hand-held condenser microphone Electro-Voice



**RE510:** The mic is a super-cardioid hand-held condenser mic that adapts to different applications. It features great sound via a broad smooth bandwidth, low distortion, and a wide dynamic range. The flexibility to adapt to different applications comes thanks to a low-frequency boost switch, which makes it possible to configure the mic as a classic sounding live vocal microphone or as a high performance studio microphone. In the roll-off configuration, the low end of the RE510 is tailored to compensate for proximity effect while the upper-mid frequencies offer a clear and natural response.

When the mic is configured for studio mode, the low-end response is lifted so that the RE510 becomes a versatile instrument microphone, or it can be used when a performer needs to add warmth to his voice. The wide bandwidth and high SPL handling capability makes it equally at home micing an acoustic guitar, electric guitar amplifier, cymbals or even a kick drum. The configuration switch for changing from vocal to instrument mode is securely located beneath the ball screen and can't be changed inadvertently. Design features include a Warm Grip handle for reduced handling noise and a comfortable feel, a multistage pop-filter to virtually eliminate breath noise and a Memraflex grille for rugged durability.

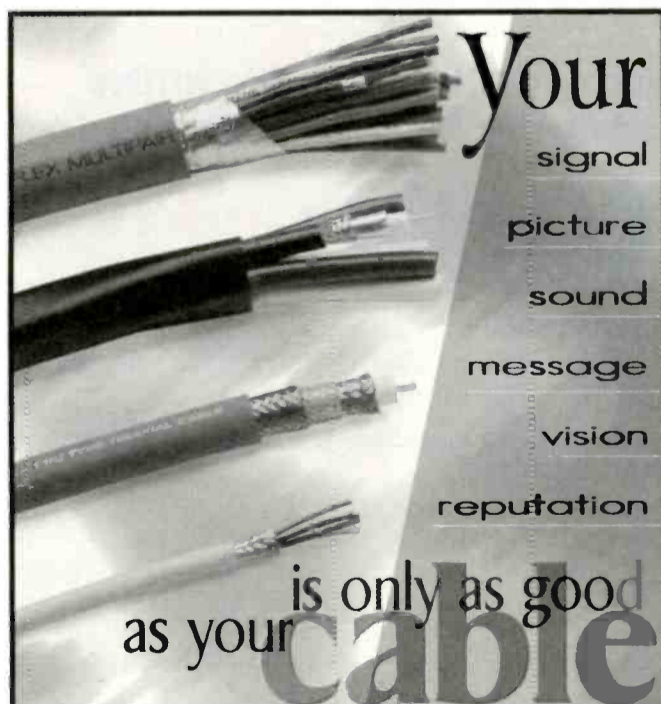
800-392-3497; fax 952-887-5588

www.electrovoice.com; pro.sound@telex.com

## Profanity delay MDO UK

**Arse! Delay:** Offering as long as 30 seconds of broadcast-quality stereo delay and a whole range of new features, this profanity delay system is functional and simple to use. During a live program, the operator can control the entire system with just two buttons. This all-software PC accessory offers several features. The large, full-color display on the PC screen provides status information on the current level of delay, audio levels, mode and user options. Countdown clocks to cue points are also shown clearly on the screen. The system can be controlled with a mouse, using user-defined keyboard hotkeys, or using external keypads, which can be built into existing control surfaces in studio areas. Delay can be built in one of several ways: Using the delay-build function, which seamlessly builds the delay over a period of a few minutes with a dual-mode technology that is tailored for use in speech-only program segments, or for music and speech mixed segments. Alternatively, for a quicker build, this product can play filler audio direct from the PC's hard disk while the delay is gathered.

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## Telephone hybrid Sonifex Ltd



**HY-03:** Replacing the HY02, the HY-03 is an analog telephone hybrid that features fully automatic operation adapting to varying line conditions with automatic signal limiting, local and remote line hold switching, integrated auto-answer after a pre-determined number of rings, a balanced mic/line input, low impedance balanced output with output gain adjustment, line limiter, bandpass filter and output noise gate with preset threshold providing low distortion and clear audio. It also can provide an output mix of the caller and the mic/line input signals for situations where both sides of the conversation need to be recorded.

207-773-2424; fax 207-773-2422; [www.independentaudio.com](http://www.independentaudio.com); [info@independentaudio.com](mailto:info@independentaudio.com)

## Digital audio processor Orban

**Optimod 8400HD FM:** This on-air processor provides dual outputs from a single control setup. The two outputs can be used to feed an analog transmitter with the necessary pre-emphasis and a digital transmission path without pre-emphasis. Audio path elements include AGC, stereo enhancement, equalization and multiband compression/limiting. Ver. 2.0 software adds low-delay processing on all presets, plus improved DSP algorithms that increase punch and presence. Existing 8400s can be upgraded with both ver. 2.0 software and the IBOC capability.

510-351-3500; fax 510-351-0500; [www.orban.com](http://www.orban.com); [custserv@orban.com](mailto:custserv@orban.com)



## RF terminators Altronic Research

**Omegaline 6606 and 6612:** These are convection-cooled terminators for 50 Ω coaxial transmission line systems. Manufacturers of transmitters, microwave components and power tubes, as well as transmitting stations can be assured of ideal dummy load conditions during designing, testing, adjusting and aligning of transmitters or components. The rugged, precision-designed configuration of the 6600 series provides reliability, serviceability, safety, convenience and economy well-suited for today's modern RF application. The terminators are useful for IBOC applications, ac power is not required and silver contacts on special film resistors eliminate resistor failure.

800-482-5623; fax 870-449-6000; [www.altronic.com](http://www.altronic.com); [info@altronic.com](mailto:info@altronic.com)

## Safety system Will-Burt

**D-TEC Emergency Bypass System:** This product allows operators to override the company's D-TEC ac field detection system during rare occurrences of communication malfunctions or false trips. Benefits of the system include operator safety and enhanced success in delivering live transmissions from the field. The safety system provides ac field detection, object proximity detection, tilt sensor detection and above the mast illumination. D-TEC also features a built-in anticollision system that automatically stops mast extension, providing added protection for the operator and equipment from overhead hazards. The system features a spring-loaded key switch and two spring-loaded push button switches that are located in different positions. This ensures that two persons evaluate an area for a safe mast extension before the system is activated. Once activated, an audible siren turns on followed by an English and Spanish verbal warning announcement stating that the operators are about to override a safety system.

330-682-7015; fax 330-684-1190; [www.willburt.com](http://www.willburt.com); [mastlite@willburt.com](mailto:mastlite@willburt.com)



## Sample rate and format converter Behringer

**Ultramatch Pro SRC2496:** A successor of the Ultramatch SRC2000, the SR2496 features full 24-bit/96kHz compatibility and a full A/D and D/A conversion option. This unit converts digital audio signals between devices with different sample rates, formats or interfaces, disables SCMS for 1:1 digital copies and removes dropouts or jitter from digital media. Simultaneously operable outputs offer a signal splitter function. I/O formats include AES/EBU and S/PDIF (coaxial and optical connectors). Input sample rates from 30kHz to 100kHz can be converted to output sample rates of 32kHz, 44.1kHz, 48kHz, 88.2kHz or 96kHz with selectable 16-, 20- or 24-bit output resolution. Universal sample rate synchronization via wordclock or digital input is guaranteed, and parallel A/D and D/A conversion is possible with identical sample rates.

877-672-0816; fax 425-673-7647; [www.behringer.com](http://www.behringer.com); [support@behringer.de](mailto:support@behringer.de)



## Eight-channel mic preamp LA Audio

**ASP008:** This compact, 1RU unit features

eight high-quality mic preamplifiers, developed from the mic preamp design used in the ASP8024 recording console and the Aztec Live Performance console. All channels include XLR input, 48V phantom power, switchable input impedance, 25Hz to 250Hz high-pass filter, phase reverse and line input selection. Channels one and two also



feature a 20dB attenuator and a high impedance instrument/DI input on a front-panel jack. LEDs provide indication of signal present and overload. A digital output option is available in addition to the standard balanced analog outputs.  
+44 20 8418 0778; fax +44 20 8418 0624  
[www.laaudio.co.uk](http://www.laaudio.co.uk); [sales@laaudio.co.uk](mailto:sales@laaudio.co.uk)

## Line of FM transmitters Crown Broadcast

**FMX:** Featuring digital monitoring and control plus a remote management option, these transmitters make managing and monitoring transmitter performance easier. One control knob and an easy-to-read display allow for full management. Select from menus to make readings or adjustments. The Remote Management System allows the user to use his phone to stay apprised of transmitter performance and make changes to essential performance parameters. The RMS will call the user if there is a significant fault. The user can also monitor other remote site functions such as HVAC, tower lighting, STL status and security status via digital, analog and relay-type connections. These transmitters are currently available in power levels of 30W, 100W, 250W, 1kW and 2kW.

800-262-8919

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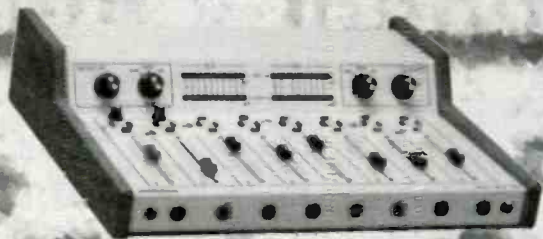
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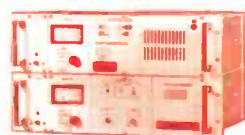


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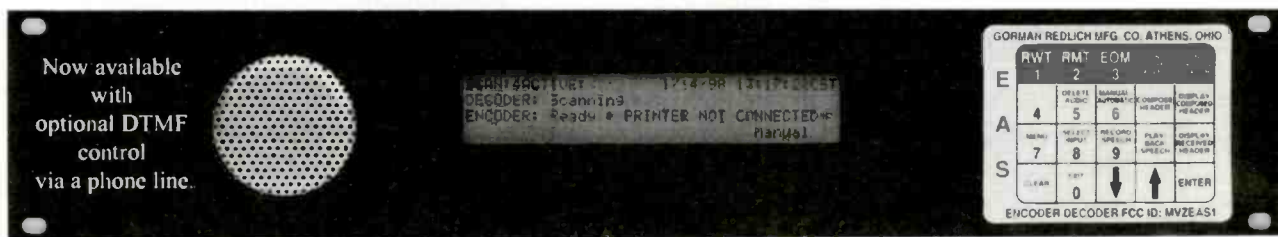
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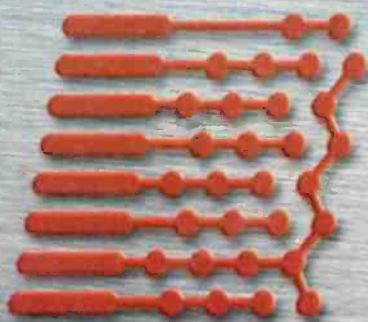


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