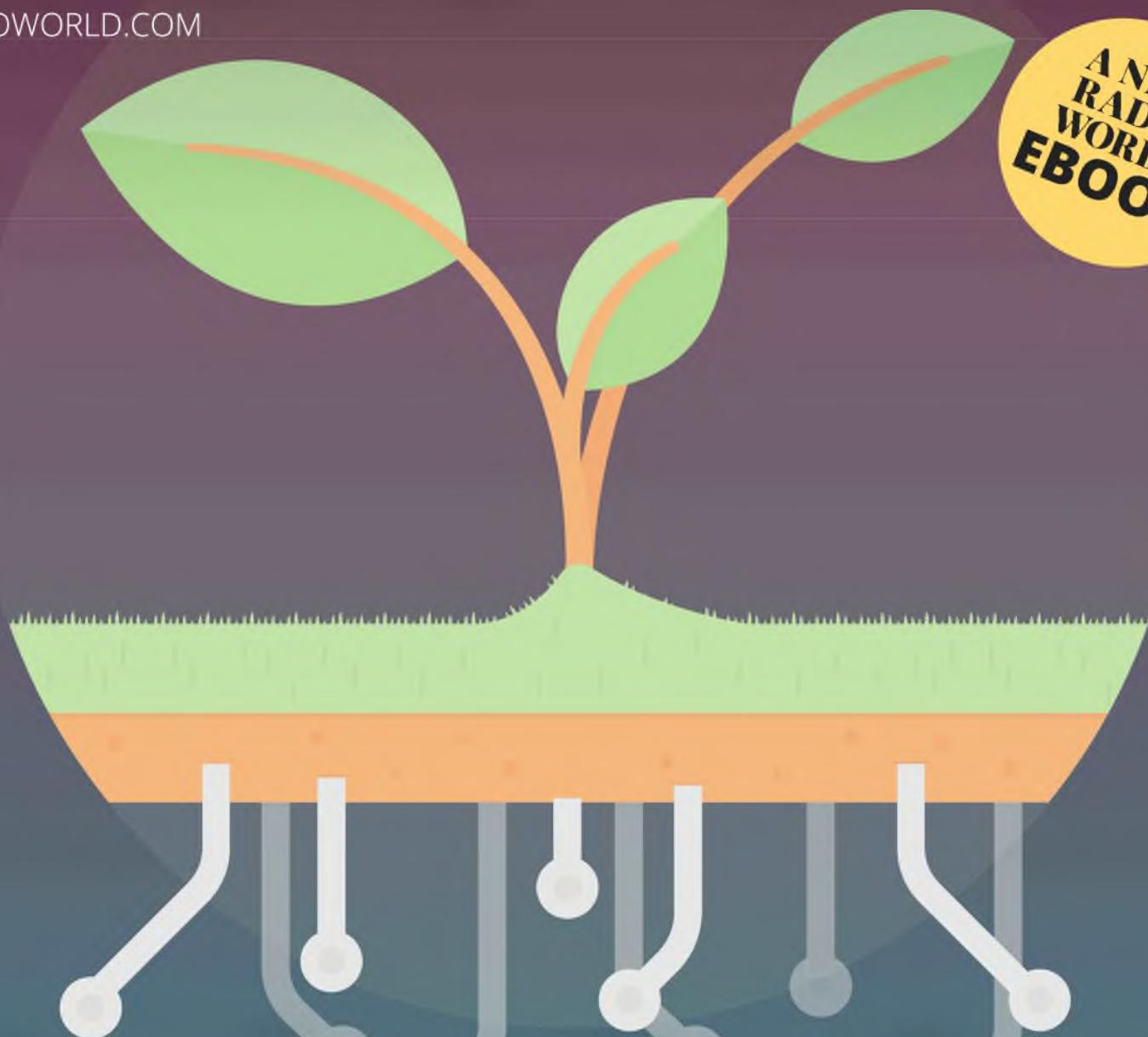


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Spring Product Preview 2024

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A fertile time in radio technology



**Paul
McLane**
Editor in Chief

Each year at this time, the editorial team of Radio World invites our industry's manufacturers and suppliers to tell us about new products and services they are about to feature at the spring NAB Show or that they have introduced over the past few months.

You will find more than 50 of them in the following pages.

There are new FM broadcast antennas, cloud-based media asset management systems, streaming tools, codecs and audio processors. There are EAS firmware, tally lights and remote facility management systems as well as RF switching, new microphones and a range of tools that apply artificial intelligence to the radio workplace.

I hope you find it useful and that you will support these companies, in particular the sponsors who make this ebook possible.

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A NEW RADIO WORLD EBOOK

Spring Product Preview 2024

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RCS • StreamGuys • Telos Alliance • WorldCast Systems

FUTURE
MARCH 2024

TFLHOP Is New FM Antenna From Bext

The TFLHOP from Bext Corp. is a horizontally polarized antenna featuring an omnidirectional pattern, constructed from stainless steel. It can be finely tuned to ensure a low VSWR within the 88–108 MHz FM band.



"With a robust power input of up to 5 kW per bay, the TFLHOP can be configured into a 12-bay array, capable of handling a total power output of up to 60 kW," Bext states.

The TFLHOP includes an optional mini radome to provide an additional layer of protection, designed to shield the feed point from the adverse effects of harsh icy conditions, assuring a consistently stable VSWR and optimal performance in challenging environments.

"In an effort to address the challenge of rising freight costs, Bext also employs a strategic design approach, ensuring that all of its antenna arrays are designed for compact shipping, thereby not only enhancing ease of handling and installation but also significantly reducing associated shipping expenses."

Bext says the new antenna exceeds industry standards. Null fill, beam tilt and customized wave spacing at no additional cost. The company provides live engineer phone support for help during and after installation.

Info: www.bext.com



WebDAD From ENCO Gets More Powerful

ENCO's DAD automation system with built-in WebDAD functionality will be on display at the NAB Show, and the software company will highlight several updates.

DAD interface is customizable and interoperable, supporting a variety of workflows. Users can share content across stations with localized playlists for each market, insert different content and ads for each OTA and web feed, and break away for local commercials, liners and jingles, then rejoin. The design is scalable so a system can be designed to fit the user's operations.

ENCO's WebDAD platform allows users to manage and control studio-based DAD systems remotely, uploading content, modifying playlists and voice-tracking.

The WebDAD architecture has been revamped for an improved user experience, including layout changes that enable intuitive operation and streamline workflows. New at the NAB Show, WebDAD will add the DAD Presenter on-air interface, giving users the functionality they're used to in the studio where DAD resides. Other features include more granular control over user permissions, and added support for third-party accessibility that simplifies usability.

WebDAD will also add ENCO's AITrack solution, which generates and inserts voice tracks between songs. Users can adjust the length of each automated voice track, including song intros, stations IDs, localized news and weather, and use AITrack's synthetic voice engines to produce natural-sounding content between songs. ENCO says AITrack is easy to roll out for WebDAD.

Info: www.enco.com

4

AudioScience Expands Its Dante Line

Now shipping from AudioScience is the ASI5751 card for professional audio applications, the latest addition to its Dante series lineup.

The card is equipped with 32 Dante inputs and outputs on a high-speed 1000Mbit Ethernet interface, facilitating high channel count connectivity.

It can handle 32 mono or 16 stereo streams of PCM playback and recording, providing flexibility in playback and recording, and is driven by a robust Texas Instruments TMS320DM8147 DSP.

"Designed to accommodate a wide user base, the ASI5751 is compatible with both Windows and Linux software drivers, ensuring flexibility in your choice of operating systems," AudioScience said in its announcement. Audio reproduction is assured with 24-bit PCM precision with sample rates of 48 kHz.

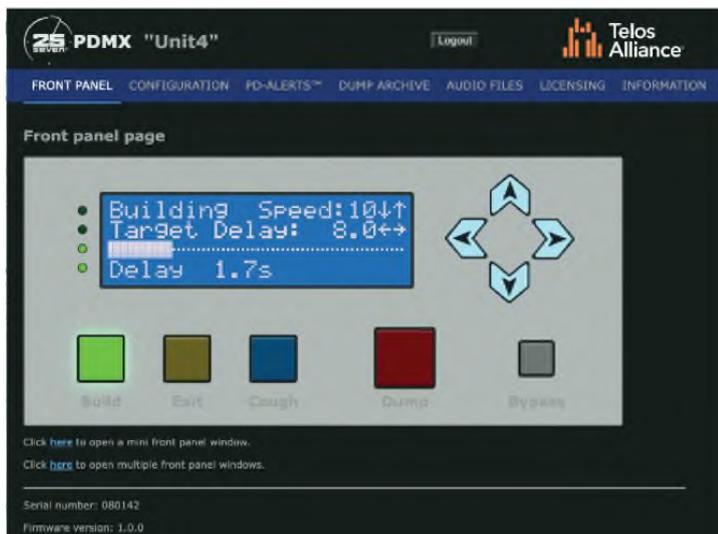
Up to eight cards can be used in a single system.

The ASI5751 is now available for purchase. AudioScience will exhibit at the spring NAB Show.

Info: www.audioscience.com



Telos Shows New 25-Seven PDMX



New from Telos Alliance is the 25-Seven PDMX Program Delay Manager.

25-Seven PDM products provide seamless removal of objectionable content from live programming. PDMX brings this essential functionality into the virtual realm.

“A software implementation of the industry-standard PDM II Program Delay Manager, PDMX incorporates all the features and functions broadcasters have come to depend upon, optimized for pure AoIP and virtualized production environments,” the company says.

“Flexibly designed to match client deployment preferences, PDMX can be hosted on-premises using a COTS server, on cloud-based platforms like AWS, or on the new Telos Alliance AP-3000 hardware platform.”

Features to ensure program integrity include up to 99 seconds of stereo audio delay, a unique “dump” function that selectively removes objectionable content, and a feature called Overkill that allows for seamless insertion of show-specific fill files to maintain uninterrupted broadcast flow.

Also standard is the PD-Alert system, which automatically notifies station personnel via email and provides time-stamped audio files for review whenever the Dump function is activated.

“Multiple methods of delay construction are offered, from pre-rolling to time expansion or playback of locally stored audio files, ensuring precise control over content delivery,” Telos states.

It says PDMX’s audio algorithms ensure artifact-free audio even during buffer construction, and support synchronization with metadata and GPIO closures for enhanced broadcast management.

PDMX offers Livewire+AE567 connectivity and includes up to 20 Livewire GPIOs and LWRP protocol support for native integration with Axia Pathfinder.

Info: www.telosalliance.com

StreamGuys Reflector EVO Cloud Service With Barix

The Reflector EVO Cloud Service for enterprise-level audio contribution and distribution is now only available through StreamGuys, which will provide sales, service hosting and 24/7 technical support.

StreamGuys said it has strengthened several features that position Reflector EVO as a reliable enterprise solution for STL, studio-to-studio networking and syndicated program delivery, the latter of which can be done more cost-efficiently with EVO versus satellite. It is available as a monthly SaaS.

“StreamGuys has configured the network for improved redundancy, with primary and backup streams to optimize resiliency,” it said.

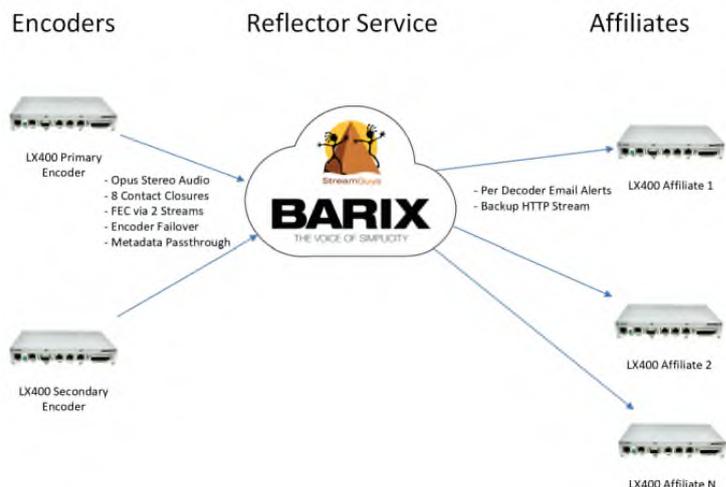
“Streams are encoded through Barix AoIP hardware codecs and sent into the EVO cloud. Along the way, lost packets are recovered and reassembled within these redundant paths, ensuring that streams are intact upon reaching the Barix decoding hardware. This assures a high level of service and consistent uptime in all applications.”

For syndicated program delivery, contact closures in the Barix hardware provide network affiliates with timed triggers for local ad breaks.

Also new for NAB, StreamGuys has improved alerting applications that allow networks to target alerts, ensuring that important notifications are prioritized for affected affiliates.

The Barix hardware has been updated to offer high-efficiency compression options alongside uncompressed PCM streaming for premium and legacy compression options. Opus support provides the highest audio quality and bandwidth conservation, with support for constant and variable bitrates. Opus supports a range of bitrates (6 kbps to 510 kbps) for interactive speech and music transmission over the internet. Customers can manually configure encoding quality and the audio delay level of the receiving decoder between three and 30 seconds

Info: www.streamguys.com



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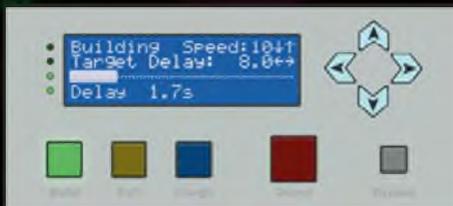
- Telos Alliance loves making connections. After all, we invented Livewire®, the first AoIP networking protocol designed specifically for broadcasters. Networking is in our DNA.

Visit us at NAB 2024 in the Central Hall, Booth #C1808 to see our newest innovations, all designed to help you do more, create imaginatively, and connect better with listeners and viewers. Because when it comes to networking, nobody connects like we do.



Axia Quasar™

NEW! V3.0 Who says you can't have style and substance too? Quasar XR and SR AoIP mixing consoles have earned five major awards for outstanding design and function. Sophisticated workflow features include powerful DSP audio shaping tools, touch-sensitive faders, encoders and user buttons, channel strip metering, and a big, beautiful touchscreen control center that gives talent the ultimate interactive mixing experience. Completely programmable, with multi-layer operation and motorized faders for Quasar XR, and storage for up to 4,000 Show Profile snapshots. New v3.0 software adds even more control and capabilities.



25-Seven PDMX*

NEW! There's nothing worse than !@#\$\$ on the air. That's why smart broadcasters rely on 25-Seven® program delay managers to seamlessly remove objectionable content. The new PDMX Program Delay Manager virtualizes this essential tool. Host on-premises on a COTS server, on cloud platforms like AWS, or on the new Telos Alliance® AP-3000 hardware platform. PDMX delivers all the features of the renowned 25-Seven PDM II to any PC, tablet or smartphone with an HTML-5 web browser. Perfect for remote production, live on-site interviews, talent working at home, producer workstations - anywhere you need instant control of your broadcast content.



Telos Infinity®

NEW! v2.5 The Telos Infinity® family of matrix-free IP-connected intercom products - including hardware panels, belt packs, headsets, and the Infinity VIP cloud-based intercom system - keeps producers and talent connected no matter where they are thanks to native AES67 and ST 2110-30 support, Livewire+ AoIP, and interoperability with third-party analog, AES, SDI, and MADI systems. v2.5 enables remote control of Infinity VIP Virtual Intercom Panels from desktop or rackmount Infinity hardware panels, and improves VIP's four-wire Cloud-to-Cloud and Cloud-to-Ground interconnectivity via the VIP Infinity Link VoIP codec, which now supports NDI V5.5, variable bitrate OPUS, and Unicast AES67.



Omnia® Forza FM and Forza HDS

NEW! Forza FM brings superior Omnia audio processing for FM to the virtual realm. Featuring all-new wideband and multiband AGCs and limiters optimized for FM, the Frank Foti-designed Silvio clipper from Omnia.11, an integrated stereo generator, and Kantar and Nielsen watermarking options, Forza FM is the processor you've been waiting for. **Forza HDS** for HD/DRM/DAB and streaming delivers audio streams that are second to none, with AGCs and multiband limiters optimized for streaming, Sensus® codec conditioning, and an integrated LUFS target-driven ITU-R BS.1770 loudness controller to help meet streaming platform loudness requirements. Both deliver a powerful, polished audio signature that grabs listeners by the ears - and doesn't let go.



Axia® Altus

The award-winning Altus Virtual Mixing Console brings the power and features of a traditional console to desktop and laptop computers, tablets, and smartphones. Available in sizes from 4 to 24 faders, Altus provides intuitive touch-based mixing, integration with Telos® VX Broadcast VoIP phone systems, and contribution and monitoring of audio via WebRTC for distributed and remote workforces. Ideal for temporary studios, remote facilities, sports announce booths, OB vans, disaster recovery centers, and more. Host Altus in the cloud, on-premises using COTS servers, or on our preconfigured AP-3000 audio platform.



Telos VX®

Not just VoIP - Telos VX is Broadcast VoIP, designed to meet and exceed the demands of radio and TV professionals. The pre-eminent name in broadcast telephony, Telos VX provides unparalleled audio quality, reliability, and flexibility, with crystal-clear voice transmission even in the most challenging broadcasting environments. With advanced features like SIP interoperability and IP codec integration, VX seamlessly integrates into existing workflows, enabling effortless call management, conferencing, and IFB communications. From single studios to enterprise-level installations, there's a Telos VX Broadcast VoIP solution for you.

Aldena Has EMF Safety Under Control

The Aldena ABM is a compact hand-held broadband electromagnetic field meter. It is designed to measure and control field strength for compliance with regulations and limits such as ICNIRP, IEC and IEEE.

The ABM is compact and light, weighing less than 11 ounces. Features include GPS, temperature-humidity sensors and a multi-data logger function for storing measurement results.

Aldena provides a range of E-field/H-field probes covering various frequency ranges from DC to 65 GHz. Probes

come with individual calibration certificates and are interchangeable and plug-and-play.

Aldena also makes antennas and RF coaxial components for broadcasting, civil and military applications. Its Measuring & Monitoring Division develops customized EMF measurement products. The company's EMLAB software is a specialized tool to design and calculate array radiation patterns and coverage areas or identify EM risks to health and safety.

Info: www.aldena.it



Comrex to Introduce Two New Gagl Features

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This spring Comrex is debuting a major feature update for its Gagl remote contribution service called Hotline, as well as a new tier called Gagl Solo.

Gagl enables users to send and receive audio through common web browsers to Comrex hardware IP audio codecs. It supports up to five remote participants in one session.

"Hotline dramatically improves the quality of a standard cell phone call for on-air use," Comrex said in its announcement.

"Gagl + Hotline provides a 10-digit telephone number with each Gagl + Hotline subscription. A guest or reporter can call the number

using an AT&T, T-Mobile or Verizon cell phone. The caller's audio will be presented within the Gagl interface in HD Voice quality for clean, clear full fidelity for use on-air."

The Gagl service doesn't require specialized hardware or software on the remote end. With a computer or smartphone plus a headset, Comrex says, high-quality audio can be transmitted bidirectionally with minimal latency, to get anyone on the air.

Also new is Gagl Solo, which supports single guest connections and is suitable for users who don't need to manage multiple participants, like a reporter in the field.

"Acquiring high-quality audio from remote locations is essential for creating compelling radio. Providing flexibility for guests who can't come into the studio was a driving force behind Gagl's creation. Gagl + Hotline creates more options for guest connectivity and makes it even more valuable for radio programming."

Info: www.comrex.com



BSI Plans Upgrade for Simian Pro

The flagship software of Broadcast Software International is getting an upgrade.

"Simian Pro 3.0 will have a new look and new features including, but not limited to, a new and improved database, and our value-added TransferConvert program for customers with a valid TechAdvantage Plan," BSI states.

The TransferConvert program downloads files from any FTP or HTML site on the user's schedule and converts them to the desired format. It can also convert in bulk, adding files directly to your database.

"Simian Pro's ease of use and cost-effectiveness make it a perfect fit for small-market or single stations looking to



streamline their operations," the company says, highlighting the tool as affordable, scalable and powerful.

BSI welcomes appointments for the NAB Show; call (541) 338-8588 to schedule.

Info: www.bsiusa.com

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LAWO.COM

MaxxKonnnect Launches Portable LTE Router

A new fully portable LTE router is the product of a partnership of MaxxKonnnect and inHand Networks.

The MaxxKonnnect CR202 has a 4G LTE Cat-6 cellular modem to provide the speed you need in portable form. A 5000 mAh internal battery provides power for up to eight hours without having to worry about adapters, and it charges with a standard 5-volt 2-amp USB-C connection, so no proprietary power connectors.

"Unlike a standard hotspot, this full-featured router has dual LAN/WAN connections, complete firewall with NAT capabilities, static routing and a host of other robust features," the company says.

Its centralized management

platform provides an intuitive UI that includes location data of each device. As with other MaxxKonnnect Wireless devices, a public static IP address is included with prioritized service.

MaxxKonnnect Wireless provides reliable, robust LTE connectivity for broadcasters on major U.S. carriers. It requires no contract or commitment; you can sign up for a week, a month, a football season or longer. Service can be activated and deactivated as often as needed. The user

portal lets you monitor device usage to the day and receive usage alerts based on custom thresholds so you know how much data you're using and can control overage costs.

Info: www.maxxkonnnect.com



10

Digigram Offers ALP-Dante PCIe Solution

Highlighting its versatility, Digigram features the ALP Dante PCIe sound card.

"Its low-profile form factor design matches all PCs and servers to address many applications," the company states.

"Its fanless design reduces consumption and is an asset for durability and sustainability. The card's connectivity, combined with 64 channels of playback and 64 recording channels to/from a Dante network, opens new possibilities to reach beyond usual applications."

ALP-Dante operates under Windows or Linux environments to address various applications. Digigram says it uses a reliable, stable architecture suitable for mission-critical audio applications in broadcasting as well as other sectors like public safety, medical and industry.

Features include two or four Ethernet ports for redundant Dante network connectivity; compatibility with AES67 and SMPTE ST2110-30; and management via Dante controller and Dante device manager.

Info: www.digigram.com



Maximize Car Dashboards With RCS AudioDisplay

AudioDisplay from RCS provides granular management of advertising content, including text and images, delivered in sync with your audio. RCS says this is particularly important in car dashboards, where radio station displays compete with sources like Spotify.

You can display an advertiser of your choice during a commercial break, not necessarily the one that's on the air, generating additional revenue.

RDS and HD Radio advertising campaigns run when an ad break is on air. Your station can send a short punchy message for RDS receivers but something more detailed for HD Radio, including an image.

An account executive in the field can create or change a campaign while they're with a client and see the impact the next time an ad break plays.

Campaigns are scheduled to one-minute granularity. When multiple stations across time zones are targeted, they can run to a specific or per-station time zone. Priority settings allow overlapping campaigns to prioritize automatically based on your needs.

If a break is not followed by new data such as song artist and title, advertising is automatically replaced by station or show branding.

AudioDisplay is also segment-aware. You can configure all your programming segments or shows to generate a schedule for each of your channels to control the messaging delivered during that time, allowing for segment sponsorships to take place alongside, or independently of, on-air activity.

User rights management means you can require approvals by traffic management before a campaign airs.

Info: <https://audiodisplay.com/>



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WorldCast Unveils New Version of AiO Series

WorldCast Systems says version 3.2.1 of its Eceso FM AiO Series marks a notable advancement.

The AiO Series transmitters are available in power options from 100 watts to 1 kW. The company highlights their STL capabilities and built-in software features including APT IP decoder, RDS encoder, sound processing and IceCast and SHOUTCast streaming.

“Key enhancements include a complete refactoring of the onboard APT IP decoder, now supporting the AES67 standard, simplifying audio cabling and interoperability with peripheral equipment,” WorldCast stated.

“The update also includes automatic switching management between external exciters and internal direct-to-channel digital modulators, enhancing redundancy and transforming the AiO series into an amplifier for future applications.”

Version 3.2.1 introduces static synchronization of audio between multiple



transmitters, suitable for technically demanding applications like SFN networks, ensuring interference-free transmission.

Additional improvements cover various aspects of the transmitter including RDS encoding, IceCast and SHOUTCast streaming, SNMP, seven-day graphical history logs,

cybersecurity, and easier initial setup of SmartFM for energy savings.

WorldCast said the series is designed to minimize total cost of ownership and facilitates a transition to software-rich designs.

Info: www.worldcastsystems.com

12

Wheatstone Systemlink MPX Transporter Adds RIST

Wheatstone has updated its SystemLink FM MPX over IP transporter. It now includes Reliable Internet Stream Transport, or RIST, connectivity.

The company says SystemLink provides robust, secure and reliable transport over any IP link.

“With this, SystemLink can transport FM MPX+HD/DAB reliably and at low latency across IP links of any capacity, whether as uncompressed or via optional μ MPX codec,” the manufacturer said.

“RIST adds real-time error correction among other benefits as a relatively new protocol widely adopted by the broadcast industry for transmitting video and audio over the public internet.”

SystemLink is available for Wheatstone audio processors, including its Layers FM audio processor software hosted on a local server or running on cloud data centers.

This FM MPX over IP transporter is compatible with existing STLs and audio processors; it supports μ MPX, analog MPX, and MPX over AES.

SystemLink is accessible through an HTML5 browser interface. It comes as a software encoder with a hardware decoder at the transmitter or as a hardware encoder/decoder option. Configured as a software encoder with a SystemLink decoder at the transmitter, SystemLink transports FM MPX + HD/DAB out of the Layers FM audio processor from the cloud data center to the transmitter.

It is a WheatNet IP appliance with SNMP alerting and control. SystemLink passes the MPX and all subcarriers as well as stereo HD or DAB audio aligned with stereo FM.

Info: wheatstone.com



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- Easy migration to an all-IP broadcast chain: Embedded software-based APT IP decoder directly ingests audio over IP to the direct-to-channel digital modulator
- Rock-solid design & simplified maintenance: RF planar design, HALT tests, swappable fans and power supply, up to 10-year warranty
- Available in three exclusive packs: Starting at \$3 490 (100W), \$3 790 (300W), \$4 590 (600W), \$5 590 (1kW)

SPECIAL!
AVAILABLE IN PACKS
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DISCOVER



Manage Your Rack Room Environment With Burk

Burk's Rack Room Environmental Monitoring Package provides early warning of abnormal environmental conditions before they can develop into costly equipment failures.

It detects HVAC equipment failure, power outages, smoke, flooding, increased fan noise, heat rise in racks, excessive humidity and intrusions.

The package includes a Climate Guard Environmental Monitor (Plus-X EM32) equipped with sensors for flood, smoke, humidity and temperature. Its Tri-Temp sensor array combines three pre-wired temperature sensors for mounting at the bottom, middle and top of an equipment

rack, providing a real-time view of heat rise from air inlet to outlet. Sensors track changes in light and sound levels over time. More sensors can be added based on your station's requirements.

Climate Guard's web interface displays current and historical sensor data and alerts. Colorful web-based charts display variations in heat distribution over time, tracking normal fluctuations due to HVAC operating cycles as well as identifying abnormal temperature variations. Alarm thresholds trigger alerts via email, text and SNMP, giving operators warning of impending failures.

The Plus-X EM32 can operate on its own or



integrated with an ARC Plus on the network. Jet Active Flowcharts in ARC Plus can respond to environmental events, enabling backup cooling systems, shutting down non-critical equipment or shifting to backup facilities. AutoPilot custom views integrate environmental data with other critical broadcast system parameters for a comprehensive view of facility performance.

Info: www.burk.com

Marketron Adds Features to NXT Platform

Marketron NXT, a third-party digital ad platform for managing proposals, orders, reporting and invoicing, has new features.

"As radio stations strive to boost revenue and capture more of their advertisers' spending, the path ahead is radio plus digital," the company says.

New tactics include streaming audio, CTV and updates for social media advertising and social display.

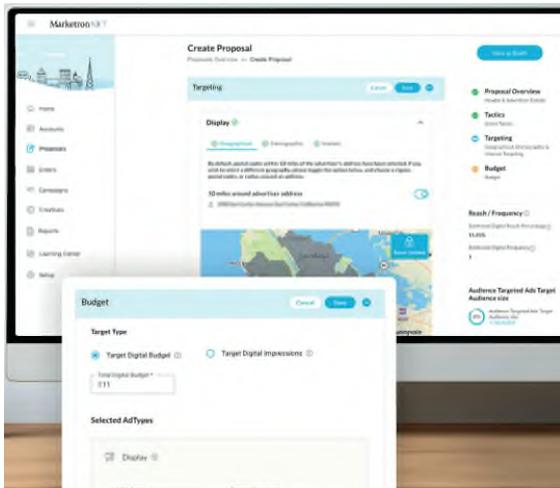
"Media sellers also have new targeting capabilities, including location-based retargeting, Spanish-language options and polygon targeting for geofencing and video geofencing. Users can now target more precisely in display and video, using relevant and high-quality segments selected by our experts."

CTV options include blends that offer a defined mix of CTV and OTT placements. Sellers also have more choices for creative and custom ad ops requests. Premium ad tactics, such as those for niche social sites and restricted categories like cannabis, are now incorporated directly into proposals and orders.

NXT also comes with a revamped NXT Training Academy, strategic account managers, and sales enablement and white-labeled seller resources.

Marketron says NXT drives a 20% increase in sales activity, an average increase in order volume of 76% and a 37% average close rate.

Info: Marketron.com/marketronnxt



940 Series Is New FM Bandpass Filter From ERI

An FM bandpass filter just introduced by Electronics Research Inc. is a compact model with an unusual form factor and construction. ERI highlights the 940 Series for a very small footprint and its capability of handling 5 kW average power.

The filter is a four-section single cabinet design with a footprint less than 18 by 21 inches. It includes the Invar and bellows temperature compensation used in other models of ERI's medium- and high-power FM filter products. The filter contains a cross-coupling standard for additional isolation in combiner systems with closely spaced frequencies.

The filter is rated to handle up to 3 kW (depending on tuning) at the output after insertion losses, convection cooled; the rating is increased to 5 kW with a forced-air cooling fan. It includes 1-5/8-inch unflanged input and output connections, and the EIA flanged version is available optionally.

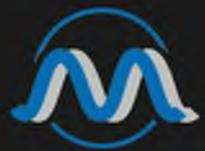
The filter can be used for intermodulation product suppression or configured as an FM channel combiner. A constant impedance configuration, also compact, is available.

Info: www.eriinc.com



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GV2 Series by Nautel Simplifies HD Radio Operation

Nautel's GV2 Series transmitters can host the full digital radio air chain, including HD Radio coding and all audio processing, without any external equipment.

"GV2 transmitters have entered the final phase of productization, with initial shipments supporting early adopters," the company said in March. The software-based air chain, called "Just Add Audio," is scheduled for summer release.

Nautel said the GV2 is a significant update to its transmitter line, with new power supplies, solid-state storage, a new interface card and "dramatic" increases in internal computing capacity. A new generation of its AUI, using HTML5, enables integration of new software components through virtualization.

"GV2 transmitters can natively incorporate the software-based radio air chain



architecture presented by Nautel at the 2023 NAB Show, which supports HD Radio with Xperi Gen4 Importer, Exporter and Exgine implementations for HD Radio encoding, station logo and Artist Experience," it said.

"Omnia for Nautel covers all FM and HD Radio audio processing needs and provides Livewire AoIP inputs for all audio streams." No added hardware is needed.

As long as there is an IP audio feed to the transmitter site, operation is "audio in and RF out."

The platform's streamlined deployment and elimination of time alignment issues bring benefits to FM stations operating digital modes or considering a shift to HD Radio.

A key component of the architecture is an air chain selector that allows the GV2 to select one of many air chain inputs (FM and all HD)

and change from one feed to another, no matter whether a feed originates from the studio, the cloud or the internal platform. FM/HD1 time alignment is assured through the blend lock function without the need for GPS antenna connections. Components can be activated optionally to suit each station's needs.

Info: www.nautel.com/gv2/

16

Triple Tuner From Inovonics Supports EAS

The 677 Triple Tuner is an EAS Monitor Receiver in a compact half-rack package. It has three discrete built-in, frequency agile receivers, each one programable for AM, FM or NOAA reception. Each receiver has a balanced monoaural XLR audio output to serve as EAS monitor or off-air monitor throughout the broadcast facility.

Designed as an EAS monitor receiver, the 677 also serves as a remote off-air monitor for three stations in any combination of FM, AM or Weather band.

The unit has front-panel set-up with jog-wheel menu navigation and front readout. The dynamic Web interface provides control and monitoring remotely via any web-

enabled device. In addition, remote listening by web stream along with alarms/notification via email and SMS messages. SNMP is fully supported.

The 677 is available and shipping from stock.

Info: www.inovonicsbroadcast.com



How does Gagl work?

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Find Comrex at Booth C2234

Lawo Highlights New Iterations of Crystal

Lawo launched a new iteration of its crystal mixing console for broadcast and pro-audio applications late last year. It is available in light and dark finishes and integrates with Lawo's Power Core, a 1RU software-defined DSP mixing engine.

"This integration ensures seamless compatibility with Ravenna/AES67, MADI, Dante, AES3 and analog signals, future-proofing radio and TV broadcast operations," the company states.

Crystal has dual-mode operation capabilities, "Power Core" and "Controller." It integrates via "Controller" mode with Lawo's mc² systems or third-party DAW applications supporting the Open Sound Control protocol, providing enhanced flexibility and workflow efficiency.

The company also offers the diamond modular broadcast console for IP-native mixing in radio and TV applications. It is compliant with AES67/Ravenna standards

and ST2110-30/-31 and ST2022-7, sharing workflow principles and design with the new crystal.

Power Core is a versatile solution for high-density I/O, mixing, processing and routing in broadcast operations. It provides up to 512 Ravenna/AES6- and 256 MADI-native channels and supports customization for radio and TV applications. Power Core features up to 96 DSP channels and mixing

features such as AutoGain, AutoMix and AGC Loudness Leveler.

In connection with the NAB Show, Lawo is releasing a new user interface and software for remote audio productions and radio software package 8.1, featuring remote sync support plus a new virtual interface for on-air radio applications.

Info: <https://lawo.com>



18

GatesAir Expands Intraplex IP Link Lineup

GatesAir has expanded its second generation of IP Link solutions with a full-duplex, single stereo-channel 1RU codec to receive and transmit audio over IP streams.

It says the Intraplex IP Link 100n is a modernized platform that allows it to integrate more features, including 10-bit audio processing for improved program audio quality, Secure Reliable Transport and cloud-based monitoring of live streams.

It is compatible with existing IP Link codecs, including the IP Link MPXp codec for FM-MPX

composite signal transport, and Intraplex Ascent, GatesAir's bulk cloud-transport platform for enterprise applications.

As with other IP Link products, the IP Link 100n accommodates Dynamic Stream Splicing technology, developed by GatesAir a decade ago. "DSS fortifies network path redundancy across two or more live streams for hitless protection against packet and link losses."

IP Link 100n also supports GatesAir's Intraplex SynchoCast3, a dynamic, scalable

simulcasting solution for overlapping transmitters that helps broadcasters cover a bigger geographic area with a single frequency. Additionally, support for third-party MicroMPX technology reduces bandwidth consumption for FM MPX signal transport by up to five times.

Other features include dual power supplies and multi-source audio switching to backup streams and USB for on-air protection.

Info: www.gatesair.com



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ALSO Intraplex Ascent platform for scalable, multichannel audio/video over IP via SRT, available as either a 1RU server or a software-only solution



MDCL+

BE Helps AMs Reduce Costs

Broadcast Electronics has released its latest version of MDCL, or Modulation Dependent Carrier Level, saying it can save most AM radio stations up to half of their electricity costs.

"For a station operating 12 hours per day (excluding nighttime savings), with a transmitter power output of 10 kW, and with an average electricity cost of 20 cents per Kilowatt/hour, the savings can be more than \$6,000 every year," the company states. "Even for a 1 kW AM transmitter, savings are typically over \$600 per year."

It adds that some locations, including Alaska and Hawaii, have considerably higher power rates and so stations there will see more savings in energy and cost.

"MDCL works by reducing transmitter power during periods when the program is louder and quickly recovers power during quiet periods," BE notes. "Any increase in received noise is masked by the louder program content. Compression is easily adjustable to ensure the best power savings are obtained without affecting received audio quality."

The company said it takes less than 30 minutes to install MDCL on most of its transmitters. "The savings are the same on any brand of transmitter not currently employing MDCL."

Info: www.bdcast.com

Radio.Cloud Introduces NewsStar in U.S.

NewsStar is a custom news platform that serves more than 100 stations hourly in Germany. Radio.Cloud is bringing it to the U.S. market.

"Fifteen years ago, the concept behind NewsStar was similar to the goal that we have with Radio.Cloud today: provide hyper-localized news content to stations," said Founder/CEO Christian Brenner. This flexible operation replaced traditional satellite-delivered news.

Affiliate stations build a news profile and select from a library of national, state and local news stories along with other content like weather and sports. At present there are some 90 unique news profiles created hourly, and the resulting news reports are distributed to user stations.

"Each hour, reporters populate the NewsStar portal with stories and actualities," Radio.Cloud stated.

"Based on what each affiliate station wants — for example, two national

stories plus two local stories plus weather, or one national story plus two state and two local stories — NewsStar compiles the stories into one newscast and distributes the audio to each station."

Radio.Cloud is using the capabilities of Amazon Web Services, which it says enables NewsStar to be a fast, flexible and stable application for daily use. Ninety versions of news are produced and distributed in less than 10 seconds. "This enables the news content itself to be as up to date as possible each hour and reduce stress for the staff to a minimum."

Info: www.radio.cloud



From Angry Audio Comes a SMOoth Companion

The Chameleon SMOoth from Angry Audio is a microphone processor designed for the iconic Shure SM7.

Its DSP algorithms enhance the SM7's characteristics, with defined adjustments designed to give only the range needed to tailor the sound of the mic to a given user's voice.

"SMOoth's microphone preamp stage is ultra-high gain and extremely low-noise," Angry Audio states. "Being a very insensitive mic, the SM7 requires more clean gain than many preamps can provide, so our mic preamp circuitry is capable of 70 dB of gain."

While noise gates are useful for eliminating

background noise, Angry notes, they can clip off the beginning or end of words, while dialing them back lets in background.

"Corny Gould, our resident processing genius, decided to invent a new approach: the Room control. It acts like a mixer; turn it clockwise to add more room tone (environment) to the signal, counterclockwise for room suppression."

The compressor is adjustable from "natural" to "massive" but is clear and silky. "We've created the optimal frequency-shaping contours, so again, just plug in your SM7 and it sounds amazing." The de-esser reduces sibilance "without giving you a

lithp" and a setting called Sparkle emulates the sound of the original SM7 or the legendary SM5.

Angry Audio promises: "Everything you love about the SM7 is right there — but warmer, punchier, more articulate and consistent. And yes — bigger."

For users of Electro-Voice RE series mics, Angry Audio also offers the REbel.

Info: <https://angryaudio.com/smooth/>



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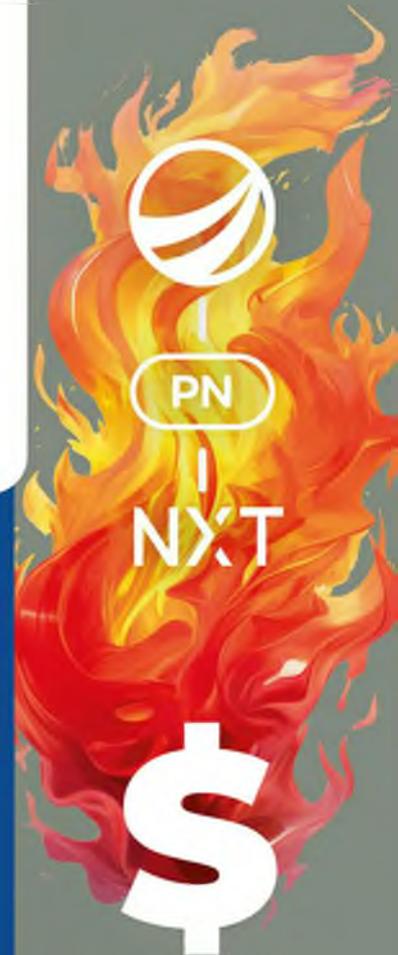
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Bionics Caller One Now Integrates With Telos VSet

"Broadcasters still reliant on POTS lines for studio phones systems are facing hefty price hikes, if not now, then very soon," says Broadcast Bionics.

"In August 2022, the FCC removed requirements for ILECs to offer analog POTS at competitive rates. By October 2023, all remaining cost obligations were lifted."

Bionics says this spurred carriers to plan the decommissioning of outdated lines, aiming to end all PSTN lines by 2030.

"Transitioning to SIP can be daunting, and what about those trusted Telos VSets your talent loves?"

In response, the company offers Caller One, now with Telos VSet integration.

CallerOne seamlessly integrates with SIP (VoIP) lines on your network. With this new integration,

CallerOne now works with any Telos VSet handsets you have or plan to purchase.



"Moving to digital will not only help broadcasters save significantly on POTS line rental, but opens the door to all that AoIP offers."

The platform streamlines the SIP setup as well as the call screening process, empowering air talent, call screeners and producers to manage calls and ensure seamless content flow.

Separately, Bionics announced that its BionicStudio Director is now available with a live graphics management extension called ConText, to help teams deliver professional-grade live video streams.

"Where Director handles intelligent camera switching, recording, and streaming, ConText enables live data-driven graphics management, all through a user-friendly browser interface."

Info: <https://bionic.radio/CallerOne>

Ferncast to Offer Aixstream Cloud by Subscription

Ferncast is now offering its aixstream platform as a cloud-based service available on a monthly subscription.

In recent years Aixstream software has

expanded to approximately 30 feature modules, including encoding algorithms (xHE AAC, Dolby AC-3 and others), web radio, DVB de/muxing, podcast encoding, DAB/FM

monitoring and SIP/WebRTC.

"Aixstream installations exist around the globe for various applications," the company said in a release.

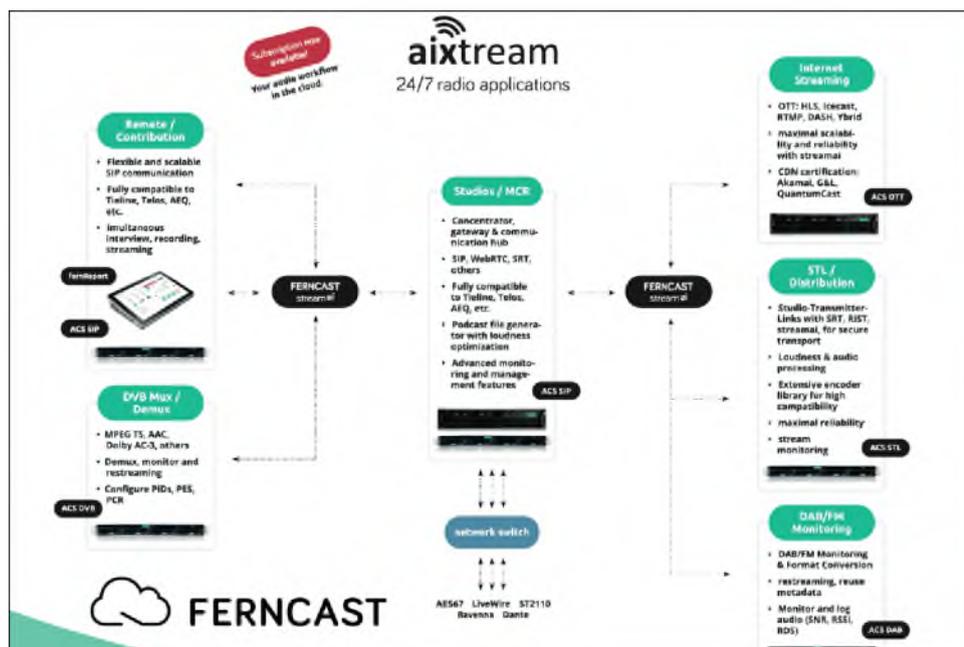
"It runs as server appliance on bare metal, as virtual machine, or containerized on AWS and other cloud computing services."

The cloud service will be available as a monthly subscription starting in the second quarter of this year, providing access to aixstream's capabilities with minimal overhead.

"Customers do not need to rent server access or handle installation and setup," it said. "Everything needed to get started is provided by Ferncast. If desired, Ferncast even handles everything for the customer, including operation and monitoring of the installation."

The company is also highlighting a new fernReport reporter codec for field reporting and live sports commentary. The compact codec combines aixstream software and a RasPad 3 portable Raspberry Pi Tablet.

Info: www.ferncast.com



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Futuri's SpotOn Now Integrates With TopLine

Futuri says the integration of its TopLine sales intelligence platform with SpotOn Spec Spots helps broadcast sales professionals by bringing speed, customization and efficiency to their work.



"Account executives can now quickly create fully produced and highly customized AI-powered spec spots for any business category, right in front of clients," the company says.

"By combining SpotOn Spec Spots with the proven business insights and deep category research TopLine provides, account executives can accelerate the sales process, from getting the first appointment with personality profiles to developing the right commercial for client campaigns."

Ad buyers get better consumer insights and creative concepts as a result, Futuri says.

"In only a few seconds, account executives can create ready-to-play spec spots, complete with a customized voice over, music and sound effects."

Info: <https://futurimedia.com>

R&S Highlights DAB Transmitter Efficiency

Rohde & Schwarz is emphasizing transmitter efficiency and its cost and environmental benefits. The manufacturer highlights its THV9evo and TMV9evo DAB transmitters for high-quality, high-energy, efficient operation.

"R&S has been using multiband Doherty amplifier technology since 2012 to drive efficiency up and reduce power costs," it said. Today it delivers as much as 50% energy efficiency in DAB radio transmitters.

"The high efficiency is achieved through intelligent transmitter management. This optimizes the amplifier parameters and controls the Doherty circuits to ensure the transmitters are always delivering maximum efficiency, even when working at reduced power. These algorithms operate at the touch of a button or by instructions from external systems."



The transmitters also incorporate improved adaptive pre-correction. "At all times, the transmitters are working to ensure they are delivering the required coverage with the minimum power input."

R&S highlights the compact cabinet design that allows for very high densities in multi-channel facilities. The electronics of the THV9evo are liquid-cooled, minimizing the required air conditioning, and further reducing the total cost of ownership.

Features include a touch-screen user interface and a web server so it can be operated from anywhere. The transmitters can be integrated into a network management system using SNMP.

Info: www.rohde-schwarz.com

Axel Offers Oxygen Remoter Software

Oxygen Remoter is a free software tool available for any console of the AxelTech Oxygen lineup.

"It offers advanced remote control features such as access to setup information, fader and buttons control and any other operation available on the physical consoles," the company states.

"It is very useful especially for compact consoles and in any environment that has limited space."

The Virtual Fader technology enables up to eight additional virtual faders for full

I/O control. Users can assign each input to a virtual fader/channel on the remote surface, useful for controlling channels remotely. Additionally, transforming an A/B pair into two virtual faders maximizes the management of available sources.

Oxygen Remoter can also be used to control multiple consoles remotely and create an ecosystem.

"This can be very helpful for remote productions where, for instance, some the channels may need to be controlled from a studio while others are managed from the

physical surface in the control room."

Oxygen Remoter can be downloaded from the Oxygen console administration web page.

Info: www.axeltechnology.com



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Mackie Introduces MobileMix

Here is a small audio mixer for use with DSLR cameras, PA systems and smartphone streaming setups. The Mackie MobileMix retails for \$229.99.

“From on-the-go live sound, to live streaming with your phone, to video production, MobileMix delivers professional audio quality in an analog mixer you can use anywhere,” the company says.

It can be powered via a USB battery that fits in a dedicated slot underneath, or another USB power source.

The mixer can handle up to eight channels of audio, including microphones, instruments and Bluetooth audio. Features include two low-noise mic preamp channels with combo XLR and 1/4-inch connectors, Hi-Z impedance switches for electric guitars, low-cut filters and 48V phantom power for condenser mics.

“Connect stereo sources with 1/4-inch line

and 3.5 mm aux inputs. Use the bi-directional Bluetooth audio to bring in phone calls, with Mix Minus to monitor and record your callers without echo. Apply onboard EQ and reverb for a complete mix on the go.”

Dual mix outputs let the user send the mix to two places simultaneously. MobileMix can be used to run live sound to the speakers while recording to an audio interface or tablet mounted in the dedicated tablet slot. It allows streaming to two devices at once; and you can play music from one device while recording to another.

In 2023 Mackie was acquired by the Freedman Group, parent of Røde.

Info: <https://mackie.com>



Yellowtec Launches Six New Products

28

New from Yellowtec is the Intellimix Neo Desktop Mixer in all-black, shown.

The eight-channel device offers unlimited user profiles and detailed parameter settings paired with intuitive usability. Intellimix Neo is for users who don't need AoIP; for those who do, the company offers Intellimix Pro.

This is one of a half-dozen new items from the company.

Also new is the VIP Voice Processor, featuring LEA leveling technology, according to Yellowtec.

“As a one-channel voice processor, VIP offers the perfect-fit DSP

settings for all the voices out there,” it says. Creators benefit from Smart Mode with a “Magic Button” and a range of factory presets. In VIP's Advanced Mode, audio pros get individual parameter settings and DSP functions.

Also, the PUC2 Mic LEA USB Audio Interface has received a major upgrade. “The two-channel interface can now serve as a sample rate converter, too. The new SRC- feature makes PUC2 compatible with encoders.”

PUC2 Mic LEA deploys LEA leveling technology for maximum speech intelligibility, ensuring balanced audio with optimum dynamics.

The m!ka Mounting System family has eight new m!ka Mic Arms. The m!ka Table Stand is available in eight versions, with XLR or USB-C connection to your mic, or without a cable to hold mobile devices. The XLR version also is available with red light.

“Conveniently control the OnAir indicator via Yellowtec's hush OnAir Controller, which is made for m!ka OnAir. Along with the USB-C Table Stand, the new m!ka Mic Arm M USB-C is Yellowtec's answer to the growing demand for a premium-quality mic boom for USB microphones.” It is available in black or aluminum colors.

Info: www.yellowtec.de





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Waymark Adds Support for Spanish Video

In response to rapidly growing media opportunities in Spanish-speaking markets, Waymark has added support for video in that language to its AI platform.

“Now with just a click of a button, users can generate broadcast-ready commercials, complete with on-screen text and voice-over in Spanish,” it said.

VP of Revenue Hayden Gilmer said it is part of the company's focus on automating personalized, locally-focused content that meets needs across diverse markets. “By extending content and voices

to cover Spanish content, we're not just communicating, we're enabling our users to resonate with a crucially important audience.”

Waymark's AI-based platform takes a business prompt and scans the web for local business data, then automatically produces a video based on the user's brand. The broadcaster can polish the video with last-minute adjustments, then share, download and get ready to air it.

Info: <https://waymark.com/>



R.V.R. Launches Hot Plug-In Next Gen Series

FM transmitter manufacturer R.V.R. Elettronica, celebrating its 45th year, has expanded its Hot Plug-In transmitter family, beginning with the 6 kW and 10 kW Hot Plug-In EPS models. EPS stands for Extractable Power Supplies.

“Due to the increasingly common need for fast maintenance, minimal downtime and redundancy at multiple points in the transmitter, R.V.R. has decided to provide a drawer of hot-pluggable power supplies, with an additional empty slot for N+1 PSU configurations.”

It allows the integration of supplies from different brands based on the budget and technical needs of clients in various countries.

In the company's Hot Plug-in Standard Series, power supplies are placed inside each Hot Pluggable Power Amplifier Module; the user extracts the entire amplifier module to work on the power supply section. It allows simple maintenance but requires the complete RF and power supply module to be turned off.

In the new Hot Plug-in Next Gen Series, currently available in 6 and 10 kW versions, the EPS enhancement allows the user to extract each power supply without shutting down the amplifiers. The configuration increases redundancy since each amplifier is separated from the power supply “bank” section. The power supplies are available in a slot mounted on the front the rack, and each can be hot-plugged independently. The option allows extremely quick intervention.

Info: www.rvr.it/en



DJB Radio Adds Subscription Option

DJB Radio is launching a subscription-based model for DJB Radio Automation.

A basic package starts at \$89 per month and includes scheduling, satellite support, sports remotes, auto-ingest, remote voice-tracking and metadata management.

“Those who are looking to level-up their radio automation game will see some fresh new updates coming to DJB Radio Zone Automation, as well,” the company says.

Supporting “work from anywhere,” Zone now offers enhanced wide-area support and multi-market features. It provides remote access, on-screen audio mixers, integration with WNIP, Livewire and SAS, scheduling, and customizable screen setups.

The company also highlights DJB Radio Spider and its companion DJB Radio Logger. Spider automatically downloads content and formats it for any automation system. Logger will log, skim or schedule recordings from any local audio source, AoIP drive or URL. Remote access and monitoring are supported by an HTML interface and integrated email notifications.

Also available is DJB Radio Studio, a streamlined solution for home studios, remotes, podcasting and simple recording. It provides a 10-channel on-screen mixer, editor, sound board, direct streaming support and audio scheduler.

DJB Radio Studio starts at \$195, Logger at \$295, Spider at \$395 and automation packages at \$89 a month.

Info: www.djbradio.com



SuiteLife Offers GPX Pro

SuiteLife Systems distributes Axess software products for monitoring, control and management of facilities and network remote sites. For radio, its solutions automate station operations and minimize control and operating costs.

For example, GPX Pro is deployed out on the "edge," integrated by Axess remote site management, and prioritizes northbound data and delivery up to Mosaic. The company

says it "provides a proactive orchestration of device control and automation at every level."

The Suitelife Systems 1RU software-embedded GPX Pro integration platform is a flexible monitoring and control solution, affordable for individual and/or wide-scale network edge remote sites.

GPX Pro uses the company's SLS Web Controls embedded software and is

compatible with the Axess platform.

"A selection of GPX Pro solutions economically streamline the integration of smaller monitoring operations with legacy and incumbent systems used for meshing repack initiatives and emerging cloud-centric operating strategies."

Info: www.suitelivesystems.com



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AEQ Introduces the Solaris Codec

New from AEQ is Solaris, a high-density multi-channel audio codec intended for multiple STL links, remote contributions and other broadcast applications. It can be purchased with eight bidirectional stereo channels and upgraded in groups of eight channels, to build up to 64 channels in a single 1RU 19-inch form factor.

Audio I/O is via IP using Dante (AES-67 compatible). Redundancy can be added with a second Ethernet port where required.

Audio coding algorithms include Opus in various flavors, G.722, G.711 and uncompressed PCM audio (16 bit). Several MPEG-4 AAC modes plus apt-X are available as licensed options.

Communications can be established using SIP, either server-based or serverless, or RTP.

Calls can be made manually, using an internal directory or from a list of prior calls per channel.

The unit can be controlled remotely using a Web interface that allows configuration and operation of the unit. Diagnostics tools are included such as Syslog, SNMP, CPU load and memory usage. AEQ plans to support integration with ControlPhoenix.

Info: www.aeq.eu



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Shure SM7dB Carries on a Legendary Line

The Shure SM7B has been popular with radio broadcasters and vocalists for decades, later expanding into the podcast space. Recently, Shure introduced a new member to the iconic SM7 family.

"The new SM7dB XLR dynamic vocal microphone delivers the exemplary sound of the SM7B with the addition of a built-in active pre-amp," Shure tells us.

"It offers a selectable +18/+28 dB of pristine gain, streamlining the path to professional audio and removing the need for inline amplification in the signal chain. The SM7dB ensures users have enough gain on-hand for audio to be heard with maximum clarity on broadcast, a recording, or stream."

The mic includes a pre-amp bypass option that reverts the mic to original SM7B performance.

"By eliminating the need for inline amplification in the signal chain, Shure is making it easier than ever for a new generation of professionals to produce pristine recordings without barriers to entry," the company says.

It retails for \$499.

Info: www.shure.com



RFE Offers Automatic Changeover for N+1

RFE's new XC0n Automatic Changeover Unit is a companion for your N+1 system. It monitors your transmitters and, in case of a failure, changes over to the backup.

"The XC0n unit can handle systems from 2+1 up to 6+1 and is compatible with most common RF coaxial switches," the company says.

The ACU features Linux-based software and a large 7-inch LCD color graphic display with touchscreen for intuitive operation.

Features include a web server for remote management; SNMP v2c; main page with N+1 system synoptic; priority management; USB and remote software updates; and an onboard micro uninterruptible power supply.

RFE Broadcast, based in Italy, designs and manufactures FM transmitters, RF amplifiers and accessories.

Info: www.rfebroadcast.com



Super Hi-Fi Introduces HLS+

A new streaming technology from Super Hi-Fi enables interactivity and personalization in traditional radio.

Super Hi-Fi says it combines live, linear radio with interactivity and personalization all in the same audio stream, while ensuring backward compatibility with billions of existing devices.

The company said Audacy's 700+ online stations will integrate with HLS+ by the end of March.

"HLS+ ensures backward compatibility with countless existing devices worldwide that support HLS, including Amazon Alexa, iPhone, Android and many in-car entertainment systems," Super Hi-Fi said.

HLS+ was developed on top of HLS, the HTTP live streaming video streaming protocol. It supports a range of metadata capabilities and is compatible with most existing playout and broadcast systems for FM, HD, DAB+ and online solutions.

"HLS+ is advertising-ready, supporting numerous programmatic ad services and integrating seamlessly with traditional radio traffic systems."

"With HLS+, radio stations will still sound and feel like traditional live linear radio streams, complete with incredible programming, full production, and voice tracks. But the addition of new features will up-level the listening experience significantly," Super Hi-Fi said.

"Songs can now start right at the beginning. No more dropping into

a random spot on the stream," the company said.

"Skipping on live radio will allow consumers to move forward or even backward directly and perfectly to the head of a song, with no remnant

production creating a messy listening experience. Content can now be fully personalized. Imagine weather reports that are delivered directly to each listener's unique location. Or imagine a sports break, where one listener hears about the Lakers, and another hears about the Mets, all from within the same linear stream."

And linear radio broadcasts can be delivered over-the-air with advertisements, while the same broadcast is delivered online with ads removed. "Both experiences will be perfect and seamless."

HLS+ launched with support from Telos Alliance, Barix, Orban, StreamGuys and Xperi, including its AIM app platform.

Info: www.superhifi.com



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Tieline to Unveil Bridge-IT II Codecs

At the NAB Show, Tieline will unveil its Bridge-IT II and Bridge-IT Xtra II IP audio codecs.

These latest Bridge-ITs deliver high-quality transport for applications such as home studios and simple remote broadcasts, STLs, studio-to-studio links, and multi-unicasting and multicasting.

They offer native support for AES67, ST2110-30, ST2022-7, Livewire, Ravenna and AMWA NMOS IS-04 and IS-05. The codecs provide two full-duplex mono connections, or full duplex stereo. Features include multiple Ethernet and AoIP ports; failover to another connection, HTTP stream, or audio file playback; and support for wireless cellular modems.



Carrying over from the first generation of Bridge-IT are the front-panel screen for menu navigation; XLR analog and digital AES inputs; a range of encoding options; and support for multi-unicast and multicast connections.

"The codecs support automated failover and SNMP for STL links," Tieline says.

"SmartStream Plus redundant streaming and Fuse-IP data aggregation are also included as standard."

The ToolBox HTML5 web-GUI and optional Cloud Codec Controller software provide real-time monitoring and remote management of connections.

Info: <https://tieline.com/>

Digital Alert Systems Releases V5.3

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New from Digital Alert Systems is software Version 5.3 for all 64-bit-compatible DASDEC and One-Net systems.

This is on top of the recent release of V5.2, which incorporated the latest FCC requirements. V5.3 makes further improvements to platform's security posture, offering increased security settings to match users' network restrictions and IT requirements.

"These new options make it possible to tailor the device to work in the smallest to the most extensive corporate network environments," the company states. Several older protocols also were removed to tighten security.

Version 5.3 includes other enhancements. For DASDEC-III units with HDMI outputs, the company added new safe-title display boundaries and increased the font size to maximize the high-definition alert message textual display output.

A new alert duration feature allows users to set any of the GPOs (up to 32 possible) to remain closed for the duration of an alert. Thus a user can set a GPO to remain closed during the entire alert, not just while the video or audio is playing. Customers can use it to trigger other devices or alarms while an event remains technically active.

Several additions correspond with updates to the company's Halo Enterprise Level EAS Device Monitoring program. Because Version 5.3 is coupled with the Halo program, DASDEC and One-Net users can now select EAS logging views by device or in sync with their browsers.

This software update is free to customers who are enrolled in the company's Software Assurance Plan, have purchased a new DASDEC unit or have taken advantage of the company's Up-Trade program since April 2022.

Info: www.digitalalertsistemas.com



Davicom Launches the Neuro Series

Davicom offers an ecosystem of remote site management products for broadcasters. New to the lineup is Neuro, a rackable box that allows you to mix and match GPIO boards to give you the I/O count you need.

The box occupies one rack unit and is 3 inches deep. The GPIO boards are inserted into five independent slots in the chassis. Available boards are the NIO-8A for eight analog inputs, NIO-8D for eight digital inputs and the NIO-5R for five relay outputs.

The Neuro can be ordered with various combinations of NIO boards to give for example a maximum of 40 analog inputs or 40 digital inputs and any combination in between.

(One Neuro can accept a maximum of two NIO-5R boards. In this case, the three other slots can be populated with combinations of NIO-8A and NIO-8D boards.)

The compact Neuro can be used for

output relays.

The unit's operating firmware includes Jobs (or State Machines) that detect input conditions and initiate specific combinations of actions. Math functions can calculate VSWR, averages, decibels and other parameters. Schedulers and timers can trigger events or actions. Counters can compile events and trigger alarms. These operations can be combined or cascaded to produce smart functions at remote sites. Network pings are also included.

The Neuro has a built-in SNMP agent to allow monitoring and control (via GETs, SETs and TRAPs) from a central SNMP manager, such as Davicom's Cortex Series.

Info: <https://davicom.com/neuro/>



any application where general-purpose I/O (GPIO) is required. Sensor readings and status inputs can be monitored and used to automatically control actions on



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www.eriinc.com

Barix Introduces LX400 AoIP Broadcast Codec

Barix continues to build out its line of audio over IP encoders and decoders. The LX400 for broadcast is for STL, studio-to-studio and other audio networking applications.

"Benefits include an array of premium-quality software codec options, including Opus, AACplus and PCM for uncompressed transmission," Barix states.

"The LX400's inclusion of the Opus codec is especially attractive given its high-efficiency bitrate performance, ensuring broadcasters the best possible audio quality for compressed transmission."

Features include end-to-end delay control for RTP streaming, adherence to the latest security standards (HTTPS) and stream redundancy modes for uninterrupted

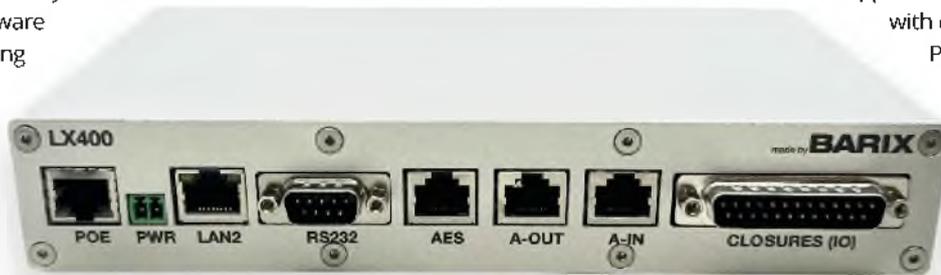
or decoder and is compatible with the Reflector EVO service for full-duplex audio contribution and distribution in the cloud.

For more traditional point-to-point applications, the LX400 can be ordered with optional Barix STL firmware.

Power redundancy is assured through the availability of PoE and 24VDC service, for those who want to use the network as their primary device powering option.

Features include eight dry contact inputs, eight output relays, a digital audio output and a USB port for local music playout direct from the device when configured as a decoder.

Info: www.barix.com



broadcasting. The LX400 also enhances buffering performance for Icecast streams, ensuring consistent playback.

The LX400 is configurable as an encoder

Calrec Type R Is a Modular, Expandable IP System

36

Users of the Type R for Radio from Calrec include RTM in Malaysia, which recently installed approximately 70 cores, as well as NASCAR's new facility in Concord, N.C., where two consoles are shared on a core, supporting a move to IP in the audio

infrastructure.

"Type R is easy to customize to meet the specific needs of operators and offers three standard hardware panels for a range of layouts," Calrec states. It offers large and small soft panels that are designed around

simple and colorful control elements, offering flexibility in setup.

Type R works with Calrec's Assist software, providing remote control that allows broadcasters to work locally or from elsewhere, for remote/distributed

production. The flexible IP core allows for the automation of broadcast workflows. The system is compliant with the SMPTE 2110 standard so it can integrate with other IP-based broadcast equipment.

Type R provides mix facilities for three independent mixers to hang off one system core, so it is suitable for stations of various sizes. The hardware elements are portable, so it can go on location for remote broadcasts or other events. Additionally, Type R offers fully automated programming, which can adjust in real time to unpredictable external factors via the web or dedicated hardware elements.

Info: <https://calrec.com/type-r>



Henry's Mike Alert Supports M!ka Arms

Henry Engineering's Mike Alert solves the problem of controlling and interfacing the two-color tally lights used on M!ka support arms made by Yellowtec.

"These popular mic arms have two tally lights that are visible to the user," Henry explains.

"One light is white, the other is red. In many installations, the white light is used to indicate a 'ready' condition, e.g., the mic has been assigned to a console channel. The red light is used conventionally, to indicate 'on air' or that the mic is live."

But Henry says control and interface can be a challenge. The mic arm uses a five-conductor cable, often terminated to a five-pin male XLR connector. Three wires are used for mic audio, and the two remaining wires are used for both the white and red tally lights.

"The two LED tally lights are wired with opposing polarity, so that reversing the polarity of the control voltage determines which light, white or red, will be on. This often causes interface headaches, since console Tally outputs don't provide any means of polarity reversal."

Mike Alert provides the power and control circuitry to interface the mic arm to the Tally outputs of any console, router or other equipment. Both the microphone audio and tally circuits are interfaced, with automatic polarity control to



operate the white and red tally indicators.

There are two independent GPI control inputs: one to activate the White tally LEDs and another one to activate the Red LEDs. The Mike Alert also provides mic audio on a standard three-pin male XLR, for interface to the console or studio wiring.

Mike Alert is compatible with any console or equipment that provides a GPI contact closure, open collector, logic or DC voltage for Tally light control. Each Mike Alert unit can control two mic arms. Sold through Henry dealers, its list price is \$325.

Info: <https://henryeng.com/mike-alert/>

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Thimeo Introduces New Compressors and Clippers

Thimeo Audio Technology recently introduced a new compressor design across its suite of audio processing products including STXtreme, ST-Enterprise, and Stereo Tool.

The “Adaptive” multiband compressor dynamically tailors its response to the input

does very little; for dynamic content, it works as hard as you let it. It can modify its response speed by more than a factor of 1000, ensuring smooth transitions that are imperceptible to the listener. Where one might expect that the adaptive behavior makes it harder to achieve a specific sound,

sudden loud sounds or drops in levels well, while preventing separate stages from “fighting” each other.

“The new design takes all those issues out of the user’s hands,” it says.

The consistent output of the new compressors makes the input going into the clippers more predictable, which Thimeo says paved the way for significant improvements in the clipper design. The new FM clippers deliver a louder, punchier and cleaner sound.

Current STXtreme and ST-Enterprise users and Stereo Tool users with an Advanced Dynamics license can use the new features for free. Stereo Tool users without an Advanced Dynamics license need to add that to their existing license to use the new compressor.

Info: www.thimeo.com



signal. This integrates typically separate processing stages — such as an AGC, multiple compressor stages and limiting — into a single, cohesive stage.

“Even at infinite ratios, the resulting audio sounds natural and very consistent,” the company states.

“For dense content, the compressor

the opposite is true: The ‘adaptive’ nature of this compressor actually helps to create a consistent sound regardless of the input, while giving users more control over the end result.”

Thus, Thimeo says, there’s no need for compromise settings to sound good for both dynamic and very dense content, to handle

Sennheiser Adds to MKH 8000 Family

This spring Sennheiser has introduced the MKH 8030 RF condenser microphone with figure-of-eight pick-up pattern.

“The MKH 8030 will not only unlock M-S, double M-S, and Blumlein stereo

recording options, but will also be a great choice wherever the highest attenuation of neighboring sound sources is required,” the company states, “be it a PA system whose sound needs to be eliminated or an adjacent

instrument that must not be picked up.”

The sound signature of the MKH 8030 is part of the MKH 8000 family. The MKH 8030 shares the qualities of that line and its RF condenser principle with push-pull transducer.

These include high resistance to moisture, a floating, balanced output signal, extended low- and high-frequency response (30 to 50,000 Hz) and low inherent self-noise.

“These features will enable sound recordists and engineers to capture a sound event in its entirety and with all its intricate detail, with wide dynamics, extremely low distortion, and a frequency-independent polar pattern to avoid coloration.”

The MKH 8030 includes a foam windshield, mic clamp and two Rycote back-to-back clips to create mic pairs.

Info: www.sennheiser.com





Streamline Your Metadata Handling With PostMaster

Summit Technology Group has introduced a suite of products called PostMaster Metadata Handling. "PostMaster is a comprehensive suite of software and platforms designed to streamline the ingest, maintenance, transport and encoding of Program Associated Data (PAD) metadata," the company says.

"With a scalable and robust architecture,

PostMaster revolutionizes the way broadcasters handle metadata, enhancing efficiency and accuracy in content distribution."

PostMaster encompasses three tools.

PostMaster Cloud Connect ensures reliable and powerful transport of PAD metadata across even challenging networks. "With PostMaster Suite's Cloud Connect, broadcasters can bridge the studio to transmitter site RDS encoders without the need for static IP addresses or port forwarding, simplifying the data transmission process."

PostMaster MetaLogger enables broadcasters to provide PAD metadata to content affiliates regardless of automation systems or distribution method.

"This cloud- or file-based solution allows broadcasters to store metadata securely and handle program delays with ease." It integrates with any distribution method and offers integrations to accommodate various playout systems and media asset management solutions.

With PostMaster Metadata Sync, broadcasters can synchronize metadata between automation platforms, across multiple markets and among various formats. This feature enables collaboration and ensures consistency in metadata across various systems.

Info: www.summittechgroup.com/postmaster

Broadcast Radio Offers Hybrid Solution

Broadcast Radio said its Hybrid Radio solution is now available for stations that want to blend traditional studio shows with cloud-based radio playout and the option for non-web dependent "edge playout" at point of transmission.



"The Cloud / Studio Hybrid model provides seamless synchronization between studio-based radio software (Myriad Playout 6) and native cloud playout (Myriad Cloud)," it stated.

"Radio shows can be broadcast directly from the studio OR from the Myriad Cloud system with further contribution from remote sources or presenters, either live or voice tracked, available regardless of where the show originates."

It said the new Myriad Edge application offers an extra dimension to the concept by introducing a lightweight "headless" daemon that synchronizes content and schedule from the Cloud / Studio Hybrid but plays all content locally, even if the web connection is unavailable.

Myriad Edge also includes synchronized station Clocks and Rules, allowing it to schedule content as required in the event of a prolonged loss of internet service. Myriad Edge can be positioned in radio control rooms or at transmission sites with intermittent internet access.

The company also will be adding Myriad DR to the Hybrid range. This allows stations to maintain a "warm" backup of content and schedule, which is automatically synchronized in near real-time from their main broadcast site. In the event of an emergency or planned maintenance, the system can take over broadcasting duties.

Info: www.broadcastradio.com

Dielectric Premieres DCR-E Antenna

Dielectric says its latest FM antenna fills the gap between its lowest-power DCR-T model and higher-power DCR-C, DCR-M, DCR-S and DCR-U ring antennas, bringing many of the design and performance characteristics to radio stations requiring input power ratings up to 4 kW per bay.

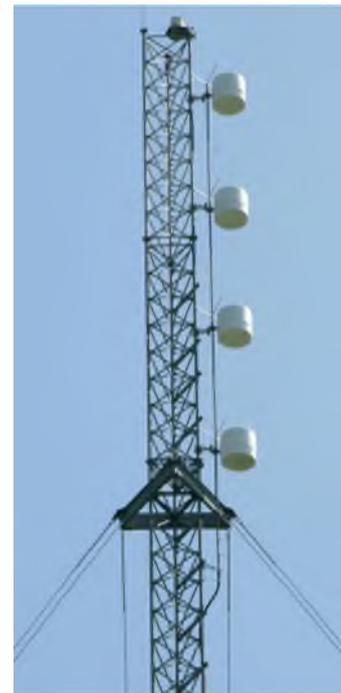
The DCR-E element is based on the DCR-T, which means that the company can produce DCR-E antennas under tight deadlines. The common parts of the two antennas allow Dielectric to minimize parts inventory, passing cost savings to customers and making the DCR-E affordable for all FM budgets.

The most notable design difference of the DCR-E is a pressurized balun, which increases its power rating by four times in comparison to the DCR-T.

As with other DCR antennas, the DCR-E is lightweight, with a robust structure and low windload, increasing reliability, simplifying maintenance and reducing stress on tower and/or building structures. The design architecture is scalable to 12 bays, with each bay weighing 18 pounds, making traditional mounting and installation simple.

The DCR-E offers stackable bay designs in center- or end-fed configurations, flexible wavelength spacings, and null fill and beam tilt options. Optional radomes protect the DCR-E from icing and other weather-related damage.

Info: www.dielectric.com



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