News Release



Phoenix Model Market Single Frequency Network Transmissions to begin with an ATSC 3.0 SFN System from Hitachi Kokusai Electric Comark

Phoenix, AZ, April 4, 2019 – Hitachi Kokusai Electric Comark LLC (hereinafter "COMARK"), a manufacturer and supplier of DTV transmitters, encoding systems, and associated field services for over 45 years, today announced that Pearl TV is deploying a COMARK ATSC 3.0 Single Frequency Network (SFN) transmitter solution for the Phoenix Model Market, in cooperation with licensees of Fox Television Group and Nexstar.

COMARK originally supplied a **PARAJLAX**[®] liquid-cooled 20kW DTV transmitter for the Nexstar's KASW-TV phase 1 repack, operating on post-repack channel D27. This main transmitter is located within the primary broadcast facility at the South Mountain Antenna Farm. The 20kW main transmitter was equipped with licenses for operation in both ATSC 1.0 and ATSC 3.0 modes and has been fully tested on-site by the COMARK field engineering staff.

Recently, COMARK supplied the Phoenix Model Market project with an additional PARALLAX 5kW liquid-cooled DTV transmitter at the Shaw Butte transmitter site. PARALLAX transmitters are delivered complete with dual EXACT-V2 DTV exciters, which are "IP Optimized" platforms. The second 5kW transmitter is also equipped with the licenses for ATSC 3.0 operation. Both transmitters will operate in Single Frequency Network (SFN) mode.

COMARK debuted the PARALLAX high-efficiency transmitter at NAB 2016, where it won TV Technology's Best of Show Award. PARALLAX is the definitive transmitter that was "designed for repack", providing:

- Highest power, liquid-cooled, solid-state transmitter available with:
 - ✓ up to 27.5kW TPO per single rack cabinet
 - ✓ multiple cabinets in parallel for higher power requirements
- Highest efficiency with wideband Doherty technology
- Unique, high-gain, vertical PA's providing 2kW per module
- Asymmetrical Doherty; allowing for the same power in 8VSB and OFDM
- Unique DualCast ATSC 1.0 / 3.0 upgradeable; preserving investment
- Hot-swap AC to DC rectifiers with >96% efficiency
- Manufactured, serviced, and supported out of Southwick, MA

"We have been very active in the ATSC 3.0 marketplace over the last several years." says Dick Fiore, President and CEO of COMARK. "We have provided ATSC 3.0 equipment and solutions to Sinclair's Baltimore SFN, to Dish Network, to OneMedia's Dallas SFN, and to PBS member station WKAR in East Lansing, Michigan. COMARK has the experience, equipment, and integration capability for these types of projects. Our team worked very closely with the staff at Pearl TV to provide them best solution and we are extremely pleased to be part of this very important, over-the-air deployment of next generation broadcast television services."

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About Hitachi Kokusai Electric Comark LLC:

For over 45 years COMARK has been synonymous with broadcast expertise and innovation. A trusted partner to the world's leading broadcasters, COMARK has pioneered many developments that have shaped the industry, leading innovation in IOT & MSDC-IOT technology, transistorized solid-state technology, Digital Adaptive Pre-correction (DAP), and also winning multiple Emmy[®] Awards; and gaining numerous patents in technologies that have become fundamental to broadcasting. COMARK is now building on this great heritage with the release of an entirely new range of transmission products for terrestrial television broadcasting, and state-of-the-art products for scientific/industrial RF applications. With thousands of active COMARK transmission systems deployed worldwide and a global support presence, COMARK plans to continue to develop technologies for the future, with efficient performance initiatives that improve coverage and save power.

PARAJIAX ® is a registered trademark or trademark of Hitachi Kokusai Electric Comark LLC

Emmy® is a registered trademark or trademark of The National Academy of Television Arts and Sciences, Inc. and Academy of Television Arts and Sciences Corporation.

Look for Hitachi Kokusai Electric Group at NAB 2019, booth # C4409.

Information about products from COMARK is available at <u>www.comarktv.com</u>.

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