COMARK Communications

COMARK Communications Timeline

COMARK has a long standing presence in the industry highlighted by the following accomplishments:

1978:

- COMARK Communications based in Westfield, MA established first High Power UHF transmitter designed around E2V external cavity klystron yielding the highest efficiency of any UHF transmitter system to date

1981:

- COMARK Communications delivers first klystron transmitter system designed around 55kW wide band klystron from E2V, fully broadband amplifier for UHF television

1986:

- COMARK introduced the 2nd generation "S" series Klystrode IOT based amplifier at NAB '86, significantly increasing UHF tube based amplifier efficiency over klystrons

1987:

- COMARK launched production of the Klystrode IOT based transmitter

1988:

- First COMARK Klystrode IOT transmitter placed into full time broadcast service at WCES-TV

1990:

- COMARK receives an Emmy Award from the National Academy of Television Arts and Sciences (NATAS) for the development of the Klystrode tube and transmitter

1991:

- COMARK awarded the "Excellence in Engineering Award" from Television Broadcast magazine for the development of the 60kw UHF air-cooled transmitter

1992:

- WETA-TV 26 in Washington, D.C. transmitted the first all-digital broadcast of HDTV in the world using a COMARK transmitter
- FCC Advisory Committee on Advanced Television Service selects COMARK's "DUAL USE" 60kW IOT transmitter for the North Carolina field test project
- NBC owned and operated WRC-TV made the first simulcast transmission of both HDTV and NTSC in Washington, DC utilizing a COMARK "DUAL USE" IOT transmitter. This represented the 1st commercial TV broadcast and reception of over the air HDTV signals

1993:

- COMARK introduced the 3rd generation "IOX" transmitter line at NAB '93 supporting both NTSC and future HDTV for "DUAL USE"
- Delivered the first COMARK IOX transmitter with dual carrier NICAM sound in common amplification to the Finnish Broadcasting Company
- U.S. patent awarded to COMARK for aural carrier corrector. Patent # 5,198,904

1994:

- First COMARK DOMESTIC IOX transmitter "on air" at WABU TV 68 in Boston, MA

1995:

- Successful completion of North Carolina field test project with COMARK IOT transmitters
- National Institute of Standards and Technology (NIST) granted matching funds to support a joint venture led by the David Sarnoff Research Center which included COMARK to develop critical technologies needed to enable production and delivery of HDTV

1996:

- COMARK launches the first IOT transmitter specifically designed for digital at NAB '96
- COMARK and Ion Media (formerly Paxson Broadcasting) reach strategic DTV agreement
- COMARK and NBC sign strategic agreement to provide HDTV services to NBC owned and operated stations
- COMARK is selected to supply IOX digital transmitter for WHD-TV, the nation's model HDTV station project

1997:

- Fox Television Group and COMARK sign DTV agreement
- COMARK Signs DTV agreement with PBS station WGBH
- COMARK and LIN Television sign DTV agreement

1998:

- WKOW-DT is the first station in the US to go "on-air" with full power DTV "N+1" configuration with transmitters supplied by COMARK
- COMARK, LIN Television's KXAS, and NBC work together to air live HDTV content in the form of a Texas Rangers baseball game, made possible by COMARK's digital transmitter

1999:

- COMARK wins a 2nd Emmy Award for technical achievement for MPEG analysis system

2000:

- Raycom Media selects COMARK for digital transmission, Purchase includes ULTIMATE solid-state transmission system
- COMARK DCX Millennium transmitter debuts

2001:

- New York Public Broadcasting Stations sign with COMARK for digital rollout. Products included in the sale are DCX MILLENNIUM, ULTIMATE, and IOX transmitters
- COMARK introduces AFFINITY digital low power transmitter, these units offer proven design and cost savings

2002:

- COMARK debuts the DCX PARAGON™ MSDC IOT transmitter, Revolutionary MSDC IOT technology premiers at NAB 2002

2003:

- COMARK wins 3rd Emmy Award for the pioneering development of Digital Modular Adaptive Precorrection (DAP™) for ATSC 8VSB Digital Transmitter Systems
- COMARK awarded patent for oil cooling of MSDC-IOT amplifier. Patent # *6,601,641*
- COMARK awarded patent for a method to protect an IOT amplifier from stored energy in a linear High Voltage Power Supply (HVPS) without the use of a crowbar circuit. This patent covers the company's Soft Arc Technology (SAT), which is incorporated in the DCX Paragon. Patent # *6,724,153*
- Brookhaven National Labs orders UHF IOT based Scientific Industrial IOT Amplifier (SIIA) from COMARK, marking first major endeavor in the Scientific based applications

2004:

- COMARK unveils ADAPT-IV, Latest Generation Exciter for Digital Transmitters
- World on Wireless Limited Selects COMARK for Pay-TV Deployment in Bermuda, includes AFFINITY 200-watt average power digital solid-state UHF transmitters with integrated DVB-T modulators in a 19:1 active reserve configuration including all necessary RF combining and switching systems.
- Lockheed Martin orders UHF IOT based Scientific Industrial IOT Amplifiers (SIIA) from COMARK for high power RF component testing
- COMARK supplies UHF IOT SIIA to Diamond Light Source, UK's national synchrotron science facility, located at the Harwell Science and Innovation Campus in Oxfordshire, England

2005:

- WGBH upgrades existing IOT DTV Tx with COMARK DCX Paragon high efficiency MSDC-IOT
- Crown Castle Orders COMARK's DVB-H Transmitter Systems for Mobile TV Deployment
- Cornell University orders 1.3GHz IOT based Scientific Industrial IOT Amplifier (SIIA) from COMARK
- COMARK supplies UHF IOT SIIA to Danfysik, Denmark for the Australian Synchrotron Project

2006:

- Lockheed Martin orders more UHF IOT based SIIA from COMARK

2007:

- COMARK delivers transmitters for MediaFLO USA Mobile DTV Rollout
- COMARK selected for Modeo's DVB-H headend system for mobility deployment at their Pittsburgh, PA Network Operations Center (NOC)
- COMARK in Multi-Million Dollar Deal to Supply Transmitters for UK Digital Switchover, Arqiva(UK Reseller) orders 39 DCX Paragon 1+1 DVB-T transmitter systems

2008:

- US Broadcaster Trinity upgrades networks with COMARK 's DCX Millennium Digital Transmitters

2009:

- COMARK completes factory acceptance testing and begins delivery of first DCX Paragon transmitters for the digital switch-over in UK

2010:

- Boston's WGBH broadcasts the region's first ATSC Mobile DTV service with platform supplied by COMARK
- COMARK supplies transmission system FOX Charlotte - WCCB for Mobile DTV Broadcasting
- Arqiva Selects COMARK to support new DVB-T2 network in the U.K.

2011:

- Indosiar, one of Indonesia's top three broadcasters, ordered six new COMARK Inductive Output Tube (IOT) high-power transmission systems for its national television network.
- WMBC-TV successfully deployed an ATSC single-frequency network (SFN) from COMARK to improve its coverage in New Jersey and New York City.
- Brookhaven National Laboratory selected Thomson to supply technology for its NSLS-II Project in Long Island, N.Y.
- Thomson Supplies ATSC Mobile DTV System to WGCL-TV in Atlanta

2012:

- Comark launches the all new LPTV-8000 low power product line and ATSC-8000 advanced high performance digital TV exciter at the NAB show
- KQED Public Television, one of the nation's most-watched public television stations during primetime purchases a DCX Paragon two-tube 38kW DTV transmitter for its transmitter facility on Mt. Sutro, CA
- Management buyout of the company and name changed from Thomson Broadcast, LLC to COMARK Communications LLC

2013:

- Comark introduces the MPTV-8000 Medium Power TV series of solid state DTV transmitters. The MPTV-8000 series is available in both air and liquid cooling and the product family covers 2kW through over 20kW output power levels. The MPTV-8000 solid state transmitters utilize DOHERTY amplifier technology along with the latest 50VDC LDMOS devices.
- Comark introduces the CMX-5000 MPEG-2 digital TV encoder and multiplexer. The CMX-5000 is an integrated platform but is also very flexible. The unit can be configured to accommodate several different encoding needs.
- Comark introduces the VLP-5000 Very Low Power series of DTV transmitters and translators. The VLP-5000 series is a compact and rugged platform designed from the ground up specifically for LPTV operators needing to upgrade, replace, or construct VHF or UHF stations.

2014:

- Comark Communications LLC, in collaboration with InnovaRadio SA (Switzerland), is developing the next generation of high-efficiency solid state power amplifiers (SSPA) for DTV and Digital Radio transmitters
- Hitachi Kokusai Electric Invests in Comark Communications LLC accelerating efforts to increase its global market share of broadcasting equipment, aiming to be one of the world's leading providers of video and wireless network solutions

2015:

- Samsung, Comark and TeamCast demonstrate a live Next Genertation ATSC 3.0 over-the-air signal for the CES show in Las Vegas, NV