Technical Tip

ATSC-8 / NTSC-8 with High Definition IP Multicast Distribution

We have discovered an issue with installing an NTSC-8, or an ATSC-8 on a COM2000 system that is distributing HD signal via a multicast IP network. If a “dumb” switch is used to connect the COM2000 to the ATCS or NTSC units the multicast traffic will overwhelm the units processing power. This will cause inconsistent reporting of NTSC-8 information on the COM46 user interface and intermittent or no output of NTSC or ATSC channels. The results will look similar to an IP conflict in the network.

To resolve the issue connect the ATSC-8 / NTSC-8s to the COM2000 chassis via a Gigabit network switch that supports Internet Group Management Protocol (IGMP). IGMP will route multicast packets only to a switch port connected to a device that requests multicast information. Since the ATSC-8 / NTSC-8 units are UDP they will never request multicast streams. (See diagram on next page)

For more information on IGMP Wikipedia has a good overview:

IGMP will block multicast traffic on the ports connected to the NTSC-8s.