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## Burk ARC+ Serves Northeast Public Radio

Benefits Include IP/Dial-Up Capabilities and Broad Selection of Peripherals

### USERREPORT

BY BUD WILLIAMSON

President

Digital Radio Engineering

SLATE HILL, N.Y. — Northeast Public Radio is a client of my contract engineering firm, Digital Radio Engineering. It is a group of nine stations throughout eastern New York.

As typical for many public radio organizations, they started with one station, WAMC(FM) at Albany, N.Y., and grew from there. At present most of the sites have dial-up access utilizing a VRC2000 or an ARC16. Two sites with IP connectivity utilize simple Broadcast Tools Remote Controls.

WAMC(FM) on Mount Greylock in Massachusetts used a Potomac Instruments subcarrier-based system, meaning once the transmitter went off, you had no communication from the site.

Training control room operators on how to operate nine transmitters with four types of remote control is an adventure; and with two more stations coming online, a decision was made to standardize on a multi-site remote control system. I have seen other more costly scalable multisite products in the field and heard of a number of issues including complexity, bugs and reliability.

### ORGANIZING

The Burk Technology ARC+ system was chosen because of its IP and dial-up capabilities along with the selection of peripherals that can be connected to each chassis.

The pricing is quite reasonable, in line with what I was familiar with in the ARC16 product. WAMC was the first station to get cut over to the ARC+ system. Two additional stations obtained in the 2007 noncommercial

window will be coming online and interconnected with the ARC+ system shortly.

WAMC has IP connectivity via a Moseley Broadcast LanLink. Connecting an ARC+ chassis at the studio with a chassis at the site was simple. It is necessary to plan the system out as it is so scalable. IP addresses were established for each chassis and I/O device with ease.

Burk provides AutoLoad Plus software for programming the ARC+. While some settings can be changed directly on the chassis, the software is necessary to program the ARC+.

The software may appear intimidating at first, but recall that each chassis can have 256 each control, metering and control channels. I quickly found the software to be intuitive and I was on my way laying out the system.

One of many features I like is the ability to assign any status input on the chassis to any of the 16 status lights on the front panel, not the first 16 only.

In fact, any Plus-X I/O device metering, status and control channel can be mapped to any channel on the ARC+. This allows placement of more important channels first for operator convenience and placement of less-used or engineer-only channels elsewhere on the system while still keeping wiring neat to the I/O device.

As expected, I was able to assign a color to each status indication. Even the two control buttons can be assigned text and colors in order to be more intuitive. Programming of the enhanced speech interface is simple, as well as setting up events for call out or e-mail notification.

Burk has a nice variety of Plus-X I/O devices that include the typical status/metering and command relays like the ARC16 has. Being in the digital world, there is occasion-



ally the need to reboot a piece of equipment. The Plus-X AC-8 provides this functionality via the front panel, Web browser, ARC Plus or even external contact closure. Labels and switch functionality can be assigned.

The Plus-X-300 is handy in that you can hang the unit off the same network as the ARC+, and have eight status or metering and eight relays. I don't have this need at the WAMC site, but will use this unit at the studio as we monitor and control equipment such as the satellite uplink which is located on a separate floor.

Another handy device included in this installation is the PlusConnect, basically a direct interface to the transmitter — in my case, by a serial connection. Burk supports a number of transmitters bringing out control, metering and status of dozens of functions. Again, set the IP on the device, connect to the ARC+, tell it what channels to use in AutoLoad Plus and it shows up instantly.

Clearly this product is paramount to Burk. IP control is the future, not just for broadcast. As such, development continues in firmware and software, making this system as future-proof as possible.

**For information, contact Stephen Dinkel at Burk Technology in Massachusetts at (978) 486-0086 or visit [www.burk.com](http://www.burk.com).**