

PBS39 Taps Wheatstone For Audio Over IP

Wheatstone gear allows for simultaneous use across the station's studios.

[Jonas Bowen](#) Sep 4, 2019

BETHLEHEM, Pa.—In 2011, PBS39—WLVT-DTV, serving the Greater Lehigh Valley in Eastern Penn. and Western N.J.—moved from their legacy studios on the grounds of Lehigh University to a state-of-the-art facility at the base of the iconic Bethlehem Steel blast furnaces. Along with the move came a new Wheatstone D-10 5.1 console that served us well for many years.

Fast forward to 2019: WLVT-DTV

received a windfall of funding due to the FCC spectrum auction. Upgrades began

The Blade-3 system at WLVT connects with an adjacent building that the station uses for live events.

immediately by replacing the D-10 and its network with an updated Wheatstone Blade-3 system and a Dimension Three Touchscreen 5.1 console.

KEEPING UP WITH UPDATES

Audio over IP has improved greatly in the past decade and a multitude of developers have jumped into the mix. However, the decision to stick with Wheatstone was a no-brainer. The Dimension Three Touchscreen, a WheatNet-IP audio networked console, has the durability and service of Wheatstone products we like; and now with AES67 compatibility across the industry, the future is full of endless audio possibilities.

The system quickly proved its worth. A USB input is a highlight when first facing the faders. You can also plug and play your preloaded playlist or

news clips in a standard Windows format during any event.

STUDIO-WIDE APPLICATIONS

Our plant features three main shooting locations, all of which can now be used at the same time from the Dimension Three console. In studio A, we track a news interview being recorded on the fly. Jump to the rental event in studio B with a presenter and PowerPoint with embedded videos going seamlessly over the house speakers. In studio C, local dignitaries drop in for a satellite shoot with CNN/FOX/MSNBC.

The functionality and utility of the Blade system cuts out the previous patches and hard routes needed to jump special audio needs room to room. Two 5.1 busses, two stereo busses, plus multiple auxiliary and sub mixes are all part of the setup.

In 2011, contractors set up an Ethernet pipe between our studios and a huge arts complex next door, but they had not been connected until this past May, when we brought an eight-channel mic Blade to the arts complex and finally connected the buildings. We used the fiber haul for the cameras and the mic Blade for the audio. We were able to produce our athlete-of-the-year event live, no audio delay, no problems.

On the video side, the HD/SDI de-embedder Blade was a huge help, effectively integrating de-embedding of the audio channel directly into the Dimension Three. That alone eliminated extra wiring and the breakouts we needed with the old AES de-embedder.

The ability to spill a 5.1 channel is a lot better on this console as well. The satellite feeds from PBS send standard eight channel SDI audio. With the Dimension Three spill button, we can hear all eight or isolate a few of those channels easily. We call it "5.1 quality control in a button."

With this new sound board, we have gone from the routing cages and

crossover cables of 2011 to one-rack unit audio over IP control. As a sound designer and media transmission engineer, I am sleeping sound in a dream come true.

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For more info, visit www.wheatstone.com.