

Plagued by Supply-Chain Issues, Pro-Audio Suppliers Invest and Upgrade

[Dan Daley, Audio Editor](#)

Wheatstone doubles down on manufacturing, inventory

Supply-chain problems have beset global manufacturing for over a year, since the COVID pandemic closed down much of the world's manufacturing and transport. The situation has been exacerbated by growing demand as the pandemic recedes in some areas, even as the supply chain, materials, and especially the critical microchip-supply ecosystem have barely begun to reopen and re-establish themselves.

Professional audio has not been immune to any of this and has been scrambling to respond.

"Lead times on everything, including fairly standard parts like diodes and capacitors, are all over the map," says

Wheatstone Production Manager Matt Wilson, citing a 61-week lead time on capacitors, for example. "Metal extrusions have a normal six- to eight-week lead time, [which] went to 13 weeks. It then climbed to a 24-week lead time. Wheatstone has been fortunate in that we have

reserves of the [necessary] ADC chip, along with other components, and, earlier this year, we were able to buy up even more in bulk."

In broadcast, the audio-console sector in particular has been vulnerable to supply-chain issues and other disruptions to manufacturing, [especially the chip shortage](#).

Some Context on Chips

The microchip landscape was fragile to begin with. Only a handful of suppliers were making ADC/DAC chips, which are used in phones, cameras, anything and everything that converts analog audio to digital and vice versa. But only a few — notably, Cirrus Logic and AKM — make the kind and quality of ADC/DAC parts used in pro, musical-instrument,

and broadcast products. AKM experienced a [massive factory fire in October](#) and hasn't yet ramped up production of those chips.

Another complication is that chips from different manufacturers are not necessarily interchangeable. For instance, pin configurations for AKM's ADC chips are different from those of Cirrus Technology's equivalent ADC/DAC chips; AKM chip users would have to redesign their circuit boards to accommodate a different chip-pin configuration.

[Industry sources](#) indicate that chip-supply disruptions won't be resolved anytime soon and will likely continue to fuel price increases for products ranging from audio consoles to automobiles.

Wheatstone's Million-Dollar Investment



One aspect of Wheatstone's response to the current environment is a literal doubling down on its domestic manufacturing capacity, with a million-dollar investment in large component buys and new equipment at its

manufacturing facility in New Bern, NC. The goal, according to an announcement made in mid July, is to increase production 100% at the factory, where all products from Wheatstone and corporate sibling [Audioarts Engineering](#) are made — from machining, fabrication, screening and circuit-board surface mounting to final testing and AoIP-system configuration.

“Manufacturing in-house lets us respond more quickly to changes and gives us much better control over a volatile supply chain,” says Wilson. “By maintaining high inventories on components and investing in additional machinery, we are more than able to meet our customer requirements well into and past 2022.”

Among the new additions to its 52,000-sq.-ft. factory floor are a second [multi-axis CNC milling machine](#) and a larger-format brake press to keep up with the production demand for precision metal work. An additional surface-mount machine also will be added, to increase the production quantity and quality of the circuit boards used in Wheatstone consoles, [Blade](#) interfaces, and other audio processors.

The ramp-up in manufacturing capacity comes ahead of a multimillion-dollar contract to provide WheatNet-IP audio-console surfaces, network devices, and system preconfiguration for 247 studios in 32 U.S. markets, for an undisclosed broadcast and production customer, with the

majority of completed systems to ship through
September.