

# Shure and Q5X Join Forces for a Wireless Transmitter That Goes Anywhere

**Dubbed the QT-AD10 by Q5X and Axient Digital-Enabled Q5X Wireless Transmitters by Shure**

By [Dan Daley, Audio Editor](#)

Tuesday, May 12, 2020 - 10:20 am

Shure has been in business for 95 years, most of that time making microphones ranging from the iconic Model 55 famously caressed by Elvis Presley to the powerful wireless systems now used routinely for broadcast sports. Q5X (né Quantum5X) is considerably younger, founded in 2002 in London, Ontario and known mostly for microphones that they have gone to great lengths to make sure no one can see: a line of transmitters small enough to discretely and safely secure on athletes for NBA, MLB, NHL, and other major leagues' games used to bring player sound to broadcast sports. Together, this month the two companies announced the fruit of an 18-month collaboration that synergizes the best of both their respective technical talents.

Dubbed the QT-AD10 by Q5X and Axient Digital-Enabled Q5X Wireless Transmitters by Shure — each company will sell the products through their own distribution channels — the new wireless transmitters combine Q5X's hyper-compact form factors and safety-conscious industrial design with Shure's widely used Axient Digital RF technology. Axient's digital operation allows versions of Q5X's four primary models — the CoachMic, RefMic, PlayerMic, and AquaMic — to function as digital devices, conferring key features of signal encryption and expanded channel density to Q5X's diminutive dimensions. The combination also allows the use of Q5X's RCAS (Remote Control Audio System) remote-control functionality, including set up and monitoring: on/off, frequency, mic offset, RF power, groups, and battery level.



Both companies have extensive experience in broadcast-sports production. Shure's portfolio of microphones, transmitters, and receivers have been heard regularly at Super Bowls, NBA Finals, the Olympic games, NHL finals, World Cup soccer, and MLB World Series telecasts. Q5X's foundational product, the PlayerMic, was originally developed for the NBA, its soft-rubber and flexible form factor intended to get close-up audio from athletes without the potential for injury if they fell on them. Q5X's highly specialized bodypacks have also been planted in the field for baseball, on buoys for water sports, and in the bottom of golf holes to pick up golfer-caddy strategy conversations.

## **NBA All Star Game Demonstration**

The new Shure/Q5X microphones arrive at a time when live sports have been all but shuttered, but the mics did have a baptism of fire: they were used during the NBA All Star Game on Feb. 16. Coaches from both teams were miked with the wireless CoachMic transmitter, its audio aired during the live national broadcast. The transmitters used Shure Axient Digital to transmit audio

for TNT Sports. The mics could also be remotely muted by the network's audio engineers, via Q5X MicCommander unit, as the coaches entered the locker rooms at halftime. Meanwhile, Q5X's analog QT-5100 PlayerMic model S transmitters, supplied through Bexel, were cached in sewn-in pouches of the players' jerseys during the game. The outing, says Q5X CEO Paul Johnson, was a complete success.



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“We wanted to validate the idea of an encrypted wireless system that was also small enough to not interfere with the game in any way, and we did,” he says.

Achieving that wasn't simple, Johnson says. Digital systems have higher clock speeds, which require more power, which usually would require a larger battery, and that generates more heat. A bodypack transmitter with only a shirt between it and an athlete's skin could become uncomfortable very quickly. The trick, he

says, was getting the necessary power into a small transmitter but without the thermal byproduct, and without any appreciable latency to the transmission. Johnson says the radio module based on Shure's Axient platform, which also does the A-D/D-A conversion process, fit the bill perfectly.

“It was not a minor development,” he says. “We had teams from both companies working on it for 18 months.”

### Best of Both Worlds

Michael Johns, senior manager, global product management for Shure, says that both companies brought their best competencies to the project, at a time when there is a growing premium on intimate audio from sports and athletes but with an equally great need to be able to protect that audio via encryption.

“It takes significant resources to build a reliable digital product, and it made sense for [Q5X] to partner with a company like Shure, with our Axient platform, for that,” he explains. “At the same time, as a smaller company Q5X is positioned to respond to unique customization requests from customers, like sports networks and leagues. That's not something that a large company like us could easily accommodate. Now, with this new product, we can, while [Q5X], which has a good existing sports base, can offer its customers the benefits of digital encryption and spectral efficiency.”



“With the combination of Q5X and Shure, this is really the best of both worlds,” adds Jens Rothenburger, Director of Pro Audio Marketing at Shure.

“The new Axient Digital-Enabled Q5X Wireless Transmitters provide the sports industry with a complete solution in a superior, already-established form factor.”

The Axient Digital-Enabled Q5X Wireless Transmitters will be available summer 2020. The price is expected to be \$2,695.

<https://www.sportsvideo.org/2020/05/12/shure-and-q5x-join-forces-for-a-wireless-transmitter-that-goes-anywhere/>