4x4 XLR Dante® Audio Bridge with 8-Band PEQ and Delay, 1U Rack

Level-Match, EQ and Time-Align at the Bridge - 8-Band PEQ on Every Input and Output, up to 50ms Output Delay, 6 Input Sensitivities

MPN: AUD-DTE-4X4XLR



Brings four analog sources onto a Dante® network and sends four Dante® feeds back out to analog, with level matching, EQ and time alignment handled in the bridge itself. AUD-DTE-4X4XLR is a 1U, 19-inch metal rack unit. It has four XLR/TRS combo mic/line inputs, each with switchable +48V phantom power, and four balanced XLR line outputs.

A global line-up setting chooses one of six input sensitivities, from -35dBV for microphones to +24dBu for hot console outputs, and one of five output levels, from +20dBu to -18dBV. The same unit can take condenser mics and wireless receivers and drive professional or consumer-level destinations. Every input and output has an 8-band parametric EQ (+/-15dB) with parametric, shelf and pass filters, and every output has up to 50ms of delay. Five presets store complete room setups. The unit is configured from its built-in Web GUI or from Dante® Controller, supports AES67, and accepts ASCII commands over TCP/IP and Telnet from a control system. The strongest differentiator is its primary and secondary Dante® ports, both PoE+ capable. If the primary network fails, audio switches to the secondary network automatically, and each port can power the unit on its own.

1 PRODUCT OVERVIEW

DESIGNED FOR

Equipment racks where analog gear meets a Dante® network: the AV closet behind a university lecture hall, the stage-side rack in a house of worship, the section racks of a divisible hotel ballroom, the credenza rack in a corporate town-hall space, the council chamber's recording rack and the head-end of a large residence. Wherever four analog sources have to get onto Dante® and four Dante® channels have to come back out to amplifiers, powered speakers, recorders or assistive-listening transmitters, it does the job in one rack unit.

THE CHALLENGE

Analog consoles, wireless receivers, legacy DSPs and amplifier banks are still in service when the Dante® backbone goes in. Alternatively it takes two one-direction boxes, or a basic 4x4 with one network port and no processing. In each case level matching, EQ and alignment delay end up on a DSP channel somewhere else, if there is one free, and a single switch or cable failure takes the audio down mid-event.

THE KANEXPRO ADVANTAGE

- One device and one rack unit replace four 2-channel adapters: one Dante® device to patch, one network drop and one PoE+ port.
- Primary and secondary Dante® ports, both PoE+ capable, keep audio running through a switch or cable failure, and a 12V DC input adds a further power path.
- An 8-band PEQ on every input and output and up to 50ms of delay on every output let the room be tuned and time-aligned at the bridge.
- Six input sensitivities and five output levels, with +48V phantom on each input, take condenser mics, wireless receivers and console outputs directly and drive both +4dBu and -18dBV destinations without extra preamps or pads.
- A Web GUI, Dante® Controller and a TCP/IP and Telnet API let the control system read status and recall any of five presets.

2 PRODUCT POSITIONING

> ***The AUD-DTE-4X4XLR is the 4x4 XLR Dante® Audio Bridge with 8-Band PEQ and Delay, 1U Rack for AV integrators who want analog audio on Dante® with DSP at the interface.***

3 APPLICATIONS

1. Bringing a legacy analog system onto Dante in higher education

A university is moving lecture halls onto a Dante backbone, but each hall still has a working analog DSP and amplifier bank. One 4X4XLR in the hall rack sends four DSP outputs to the network for overflow rooms, lecture capture and assistive listening. It returns four Dante channels to the existing amplifiers. The 8-band PEQ and delay on each output tune the room on the bridge itself, and the analog investment stays in service until the next refresh.

2. Divisible ballroom in a hotel or conference centre

Each section of a divisible ballroom has analog wall-input mic lines and powered speaker zones. A 4X4XLR per section rack puts the section's mics on Dante with +48V phantom and receives four zone feeds back from the central processor. The output delay time-aligns the speaker zones when partitions open. Primary and secondary Dante ports keep the audio up through a single switch failure during a paid event.

3. House-of-worship stage rack

A church with an analog console on stage and a Dante-based distribution system puts the 4X4XLR stage-side. Four console matrix outputs go onto the network for the lobby, cry room, overflow and stream mix. Four returns feed powered monitors and an in-ear transmitter. The combo inputs accept TRS sends from the console without adapters, and PoE+ from the stage switch removes a power outlet from a crowded riser.

4. Corporate town-hall and boardroom programme feed

A corporate AV team adds a wireless mic system with analog outputs to a Dante-based conferencing space. The 4X4XLR takes four receiver outputs at the right input sensitivity and puts them on Dante for the DSP and codec. It returns four channels to analog line inputs on the in-room recorder and an interpretation booth feed. The web GUI and TCP/IP control let the control system check status without a Dante Controller workstation.

5. Government chamber and council meeting room

A council chamber records and broadcasts its meetings from a Dante network, but the press feed box and assistive-listening transmitter are analog. One 4X4XLR provides four balanced line outputs at the level each device expects (+4dBu or -18dBV) and four inputs for the clerk's legacy mic lines. A local DC supply is a second power path as well as PoE+, which suits chambers that want backup power on critical audio.

6. Large-home distributed audio (high-end residential)

A residential integrator using Dante for whole-house audio needs to connect a stereo analog source pair (turntable preamp, legacy streamer) and an outdoor mic input to the network, and to send four zones to analog multi-channel amplifiers in the equipment room. The 4X4XLR fits the head-end rack in 1U, takes four amplifier feeds from one network drop, and uses the PEQ for basic zone EQ ahead of amplifiers that have none.

4 WHO THIS IS FOR

Ideal User	an audio systems designer or project engineer at a commercial AV integrator, Dante Level 2/3 certified, who writes the Dante subscription list and the rack elevation.
Project Types	higher education → corporate → house of worship → hospitality and conference venues → government chambers → small broadcast and streaming rooms.
Typical Buyer	- The designer picks the part. - The project manager or purchasing lead checks lead time and price against the bid. - Consultants (specifying engineers) write it into specs as "or equal".

5 FREQUENTLY ASKED QUESTIONS

Q: Does it show up in Dante Controller like any other Dante device?

Yes. AUD-DTE-4X4XLR appears in Dante Controller as a 4x4 device. Subscriptions, sample rate and device latency are set there as on any Dante endpoint. It also supports AES67 for networks that mix Dante and AES67 equipment. Device settings such as input sensitivity, output level, EQ and delay are also available from its built-in web interface.

Q: Will it take microphones directly, or do I need separate preamps?

Each of the four inputs is an XLR/TRS combo jack that accepts mic or line level, balanced or unbalanced, with +48V phantom power on each input. A global input sensitivity setting covers six levels, from -35dBV for mic sources to +24dBu for hot line-level outputs. Condenser mics, wireless receivers and console outputs can all connect directly.

Q: Can it handle level matching and room tuning, or do I still need an external DSP?

Every input and output has an 8-band parametric EQ (+/-15dB), and every output has up to 50ms of delay. A global setting selects one of five output levels, from +20dBu down to -18dBV, so the outputs can drive professional or consumer-level inputs. For many bridging jobs this means basic EQ, alignment delay and level matching happen in the bridge, and a DSP channel elsewhere stays free.

Q: What comes in the box, and how is it installed?

The box contains the AUD-DTE-4X4XLR audio bridge, a 12V/2.5A locking power supply with multinational plug adapters, two rack-mounting ears and eight machine screws. The unit is a standard 1U, 19" rack-mount metal chassis, 17.32" x 7.87" x 1.73". It supports runs of up to 328ft (100m) over CAT6/6A/7 to the network switch.