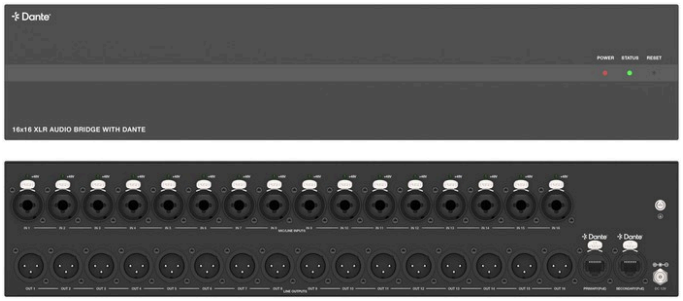
16x16 XLR Audio Bridge with Dante® and PoE+, 19" Rack Mount

One Chassis Replaces Separate Input and Output Units - 16 XLR/TRS Combo In, 16 XLR Out, +48V Phantom Power

MPN: AUD-DTE-16X16XLR



Puts sixteen microphone or line sources onto a Dante® network and returns sixteen balanced feeds to analog gear, all from one 19" rack-mount chassis. The AUD-DTE-16X16XLR has 16 XLR/TRS combo inputs, each with switchable +48V phantom power, and 16 balanced XLR outputs. All 32 channels are bridged to and from Dante® and AES67 through primary and secondary RJ45 ports.

Each input has six sensitivity settings, from -35dBV for microphones up to +24dBu for hot line-level gear, plus a fine gain trim of +/-12dB. An 8-band parametric EQ (+/-15dB) is available on every input and output, each output has delay, and five presets store complete room setups. Routing and latency are set in Dante® Controller, and levels, EQ and presets are set from the built-in Web GUI or by ASCII commands over TCP/IP or Telnet. If the primary network fails, the secondary port takes over automatically. The strongest reason to choose it is consolidation: one chassis does the work of separate 16-channel input and output units, or of sixteen 2-channel endpoints, at the head end.

1 PRODUCT OVERVIEW

DESIGNED FOR

AV integrators and audio engineers who need to connect microphones, mixing consoles, speakers or amplifiers to a Dante network from a 19" rack head end.

THE CHALLENGE

Getting sixteen mic or line sources onto Dante and sixteen feeds back to analog usually takes separate input and output units or many 2-channel endpoints.

THE KANEXPRO ADVANTAGE

One rack-mount chassis bridges all 32 channels to and from Dante and AES67, with phantom power, per-channel EQ and delay, and automatic network failover.

2 PRODUCT POSITIONING

> ***A single-chassis 16x16 XLR Dante and AES67 audio bridge that consolidates head-end input and output interfaces.***

3 APPLICATIONS

Analog console onto Dante (HoW and live venues)

Many sanctuaries and venues run an analog console with a copper snake to the amp room. One unit at the console, cabled XLR-to-XLR, sends 16 channels out to the network and brings 16 returns back for monitors, recording or zones. The 100 m copper snake becomes a single CAT6 run.

Stage box for mics in an auditorium

In a university auditorium or performing-arts hall, the unit lives in a stage-side rack. It takes up to 16 microphones with +48V phantom power, and its outputs drive stage monitors or legacy analog amplifiers. Primary and secondary Dante ports run to separate switches, so a single switch failure does not take the room down.

Legacy analog head-end retrofit

A building moving to Dante often keeps working analog amplifiers and DSP. The 16 balanced outputs feed those amplifiers straight from the Dante network. Per-output 8-band PEQ and up to 50 ms of delay handle basic zone voicing and speaker alignment. Our 2-channel adapters cover the edge points.

Divisible ballroom and corporate town hall

Hotel ballrooms and corporate event spaces collect wireless mic receivers, playback and press-feed sources in one rack. The unit puts all of them on Dante for routing between partitions in Dante Controller, and sends 16 outputs to press feeds, assistive listening transmitters and overflow rooms.

Broadcast, streaming and production room

Streaming studios, worship broadcast rooms and campus media centres need analog sources multitracked to a recording or production PC over Dante. The unit supports up to 96 kHz/24-bit and AES67. Configurable latency (2–10 ms) lets the engineer balance stability against delay on larger networks.

High-end residential media room or whole-home audio

In a central equipment rack, the unit takes analog outputs from sources, preamps or a processor's analog pre-outs onto Dante. It feeds 16 balanced outputs to multichannel amplification in other zones. The 2-channel KanexPro adapters and wall plates (WPXLR, WPBT) cover individual rooms and inputs.

4 WHO THIS IS FOR

- Houses of worship: the highest volume

Ideal User	A senior audio or systems engineer at a commercial integrator. They are Dante Level 2/3 certified, already use Dante Controller, and specify by spec sheet.
Project Types	- Houses of worship: the highest volume, and analog consoles being moved to Dante. - Higher education. - Corporate. - Hospitality. - Live and performance venues. - Broadcast and streaming.
Typical Buyer	- The engineer specifies the unit. - The project manager or owner of the integration firm approves the substitution. - In HoW and education, a technical director or AV manager often has a veto.

5 FREQUENTLY ASKED QUESTIONS

Q: What equipment does it typically connect to?

A typical system connects microphones and a mixing console to the inputs, and active speakers or an audio amplifier to the outputs. The unit links over a PoE switch to Dante devices such as a Dante amplifier. A laptop running Dante Controller handles routing and the Web GUI handles setup.

Q: What input levels and gain adjustment does each input offer?

Each input has six sensitivity settings: +24dBu, +14dBu, +4dBu, 0dBV, -18dBV and -35dBV. Gain trim runs from -12dB to +12dB in 0.1dB steps. Line inputs accept up to +24dBu balanced or +18dBu unbalanced, and input impedance is 20k ohm balanced or 10k ohm unbalanced.

Q: What output levels and delay can I set on each output?

You can set each output to +20dBu, +14dBu, +4dBu, 0dBV or -18dBV. Maximum output is +20dBu balanced or +14dBu unbalanced, and output impedance is 600 ohm balanced or 300 ohm unbalanced. Each output also has 0 to of delay.

Q: What sample rates, bit depths and latency settings does it support on the Dante network?

It runs Dante and AES67 audio at 44.1kHz, 48kHz, 88.2kHz or 96kHz, at 16-bit or 24-bit. You can set the device latency to 2, 3, 4, 5 or 10ms in Dante Controller.

Q: A condenser microphone gives no signal. What should I check?

Phantom power is off by default on every input, so turn it on for that input in the Web GUI or with set input x phantom power on. Confirm that the matching phantom indicator on the rear panel lights. Then check that the input sensitivity suits a microphone (-35dBV is the most sensitive setting) and that the input is not muted.

Q: Can I connect microphones directly?

Yes. Every input provides +48V phantom power, and the global line-up selection runs from -35 dBV for microphone-level sources up to +24 dBu for hot line-level gear. Per-channel sensitivity gain in the built-in DSP trims individual inputs.

Q: Can I control it from the RelayAV app?

Yes. RelayAV, KanexPro's control app, gives you each output's gain, mute, delay and level, each input's gain, mute, sensitivity, delay and 48 V phantom power, DCA groups, input and output EQ, expander, limiter, presets, auto standby and power. Control systems reach the same controls through the RelayAV API and MCP. RelayAV asks before it switches 48 V phantom power on. Dante routing and the primary and secondary Dante ports stay in Dante Controller, and channel and preset names, settings export and import, and firmware updates stay on the unit's own web page.

Q: Do I still need a separate DSP?

For trim and voicing, usually not. Each input and output has an 8-band parametric EQ (+/-15 dB) and delay, set from the built-in web interface. The unit does not mix or matrix channels; routing is done in Dante Controller, and mixing stays with your console or system DSP.

Q: Does this replace separate input and output interfaces?

Yes. One chassis provides 16 balanced analog inputs on XLR/TRS combo connectors and 16 balanced analog outputs on XLR, all bidirectional on Dante and AES67. There is one device to rack, power and name in Dante Controller, instead of separate input and output units or a stack of 2-channel adapters.

Q: How are the XLR connectors wired?

The inputs and outputs use the same pinout: Pin 1 is Ground/Shield, Pin 2 is Positive/Hot and Pin 3 is Negative/Cold. The inputs are female XLR/TRS combo jacks, and the outputs are male XLR.

Q: How do I find the unit's IP address the first time?

The unit uses DHCP by default. Connect its PRIMARY port and your PC to the same switch, and set the PC to obtain an IP address automatically. Find the unit on the Routing page of Dante Controller, read its IP address on the Device Info tab, then enter that address in a browser and log in with the Admin account.

Q: How do I give it a static IP address?

On the Web GUI network settings, set the primary or secondary network to Static and enter the IP address, subnet mask and gateway. You can also use commands such as set pri ip mode 0 followed by set pri ip addr. A new network setting takes effect only after the set net reboot command or a power cycle.

Q: How do I rack mount and ground it?

Fit the two included mounting ears with the eight machine screws and mount the unit in a standard 19 in rack. Connect the rear GND terminal to ground to ground the chassis.

Q: How do presets work?

The unit stores up to five preset scenes, each with a name of up to 32 characters. A preset holds every setting except the network settings. You can recall one from the Web GUI or with set preset recall x, where x is 1 to 5.

Q: I can't reach the Web GUI or API. What should I check?

Confirm that the Dante port and your PC are on the same switch and LAN, and that the unit appears in Dante Controller with the IP address you are using. If you changed network settings, apply them with set net reboot or a power cycle. A static address can only be set after DHCP is turned off for that network.

Q: The unit keeps dropping into standby. Why?

Auto standby is on by default and puts the unit into standby after 10 minutes. Wake the unit with the power icon in the Web GUI or the power on command. Change the delay with set auto stb x (1 to 100 minutes), or turn auto standby off with set auto stb 0.

Q: What are its size, weight and operating range?

It measures 17.32 x 7.87 x 3.46 in (440 x 200 x 88mm) and weighs 6.88 lbs (3.12kg). It operates from 32 to 104 deg F (0 to 40 deg C) at 20% to 80% RH, non-condensing, and draws 19.44W at most.

Q: What audio performance should I expect?

THD+N is below 0.01% (+4 dBu, 1 kHz), and signal-to-noise ratio is 105 dB or better (+4 dBu, 1 kHz, A-weighted). Frequency response is 20 Hz-20 kHz (+/-0.5 dB). Dante audio is supported at 44.1, 48, 88.2 and 96 kHz, at 16 or 24 bits, with device latency selectable at 2, 3, 4, 5 or 10 ms.

Q: What do the front-panel LEDs mean?

A solid green POWER LED means the unit is on, solid red means it is in standby and off means it has no power. A solid green STATUS LED means the system is working normally, and a STATUS LED flashing at 2Hz means a fault. A short press of RESET restarts the system, and holding it for 5 seconds restores KanexPro default settings, with all LEDs flashing for 5 seconds.