2x2 XLR Dante Audio Bridge with DSP, 8-Band PEQ and Delay

Mic-to-Line Analog onto Dante® and Back, Tuned at the Box, from -35dBV Mic to +24dBu Line Level



Puts two analog XLR sources onto a Dante® network and sends two Dante® feeds back out to analog XLR, all from one box at the equipment location. The AUD-DTE-2X2XLR is a bidirectional 2x2 audio bridge in a 1U-high black metal enclosure, 8.27 in wide. It runs on PoE+ (IEEE 802.3at, Class 4) from the network switch or from the supplied 12V locking DC supply, and draws 5.4W maximum. Each XLR/TRS combo input supplies +48V phantom power and has six sensitivity steps, from -35dBV mic level to +24dBu line level. Each balanced XLR output has five selectable levels up to +20dBu.

Built-in DSP adds 8-band parametric EQ (+/-15dB) on both inputs and both outputs, plus delay on the outputs. Zone tuning, speaker voicing and delay alignment are set at the bridge rather than in an external processor. Two locking RJ45 ports connect to Dante primary and secondary networks: if the primary network fails, the unit switches to the secondary automatically. The bridge supports AES67 and carries Dante audio at 44.1kHz to 96kHz, 16/24-bit. It is routed in Dante Controller like any Dante device. Its local settings are handled in a built-in Web GUI with separate Admin and User accounts and five preset scenes, or through ASCII commands over TCP/IP. Its biggest advantage is that one box does the work of separate input and output adapters. A 2x2 job needs one switch port, one PoE budget and one device to configure.

Surge Protection Recommended — This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, or lightning strikes. Use of surge protection systems is highly recommended.

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1. Features

- ✓ Two balanced analog inputs on XLR/TRS combo connectors
- ✓ Two balanced analog outputs on XLR
- ✓ Dante® 2x2 and AES67 audio input and output
- ✓ Accepts and delivers balanced or unbalanced analog audio
- ✓ +48V phantom power on each input, switchable per input, with a rear-panel indicator for each port
- ✓ Adjustable 0dBFS line-up: six input sensitivity levels (-35dBV, -18dBV, 0dBV, +4dBu, +14dBu, +24dBu) and five output levels (+20dBu, +14dBu, +4dBu, 0dBV, -18dBV)
- ✓ Built-in audio DSP for sensitivity, gain, 8-band PEQ and delay
- ✓ 8-band PEQ (+/-15dB) on inputs and outputs, with Parametric, Lowpass, Highpass, Low Shelf and High Shelf filter types and stereo-link, copy, import and export of EQ settings
- ✓ Output delay
- ✓ Dante audio at 44.1kHz, 48kHz, 88.2kHz and 96kHz, 16/24-bit
- ✓ Dante device latency of 5ms or 10ms, set in Dante Controller
- ✓ Configuration through the built-in Web GUI or Dante Controller
- ✓ ASCII API control over TCP/IP (default port 8000)
- ✓ Settings export and import, and firmware update through the Web GUI
- ✓ DHCP or static IP addressing, set separately for the primary and secondary networks
- ✓ Powered by PoE+ (Class 4) or a local 12V DC locking power supply
- ✓ 1U-high metal enclosure with mounting ears
- ✓ Works with RelayAV, KanexPro's control app: 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, from the RelayAV app

2. Package Contents

- ✓ 1x 2x2 XLR Audio Bridge with Dante® and PoE+
- ✓ 1x 12V/1A locking power supply with optional multinational conversion plug
- ✓ 2x mounting ear
- ✓ 8x machine screw

3. Specifications

AUDIO	
Dante Audio Format	Dante/AES67 digital audio in/out, PCM 2-channel, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 16/24-bit
Audio Latency	Dante device latency 5ms or 10ms, set in Dante Controller
Network Bandwidth	100 Mbps Dante network

continued

Input Sensitivity	+24dBu, +14dBu, +4dBu, 0dBV, -18dBV, -35dBV
Output Levels	+20dBu, +14dBu, +4dBu, 0dBV, -18dBV
Phantom Power	+48V on each input, switchable per input
DSP	Gain, 8-band PEQ on inputs and outputs (+/-15dB), output delay
PEQ Filter Types	Parametric, Lowpass, Highpass, Low Shelf, High Shelf
AUDIO PERFORMANCE	
Frequency Response	20Hz to 20kHz (+/-0.5dB)
THD+N	< 0.01% at +4dBu, 1kHz
S/N Ratio	at least 105dB at +4dBu, 1kHz, A-weighted
Dynamic Range	at least 105dB at +4dBu, 1kHz, A-weighted
LINE/MIC INPUT	
Input Level	Max +24dBu (12.28Vrms) balanced line; max +18dBu (6.14Vrms) unbalanced line; min -35dBV (17.78mVrms) balanced mic
Input Impedance	20k Ohm balanced; 10k Ohm unbalanced
LINE OUTPUT	
Output Level	Max +20dBu (7.75Vrms) balanced; max +14dBu (3.875Vrms) unbalanced
Output Impedance	600 Ohm balanced; 300 Ohm unbalanced
CONNECTIONS	
Mic/Line Inputs	2x XLR/TRS combo, female; balanced/unbalanced
Line Outputs	2x XLR, male; balanced/unbalanced
Dante Primary	1x RJ45, locking; PoE+ PD (Class 4, IEEE 802.3at); Dante/AES67 audio, Web GUI, TCP/IP and RelayAV control
Dante Secondary	1x RJ45, locking; PoE+ PD (Class 4, IEEE 802.3at); Dante/AES67 audio
Power Input	1x DC 12V, 2-pin locking jack, max 1A
Ground	1x chassis ground terminal
Transmission Distance	328ft (100m) over CAT6/6A/7
CONTROL	
Methods	Built-in Web GUI, Dante Controller, ASCII API over TCP/IP; RelayAV
TCP/IP Control Port	8000 (default), configurable
Presets	5 preset scenes
IP Addressing	DHCP (default) or static, set separately for primary and secondary networks
Front Panel	Power LED, Status LED, Reset button (hold 5 seconds for KanexPro default settings)
PROTECTION	
ESD Protection	IEC 61000-4-2: +/-8kV (air-gap discharge), +/-4kV (contact discharge)
POWER	
Power Supply	12V/1A 2-pin locking power supply, or PoE+ PD (Class 4, IEEE 802.3at)
Power Consumption	5.4W max

continued

PHYSICAL	
Housing	Metal enclosure, 1U high
Color	Black
Dimensions (W x D x H)	8.27 x 5.91 x 1.73 in (210 x 150 x 44 mm)
Weight	1.98 lbs (0.90 kg)
ENVIRONMENTAL	
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Operating Humidity	20% to 80% RH, non-condensing
Storage Humidity	10% to 90% RH, non-condensing

4. Surge Protection

This product contains sensitive electrical components that can be damaged by electrical spikes, surges, electric shock, lightning strikes and similar events. Use a surge protection system to protect your equipment and extend its life.

5. Introduction

The AUD-DTE-2X2XLR is a 2x2 XLR audio bridge for Dante® networks, built on the Dante Embedded Platform (DEP). It converts two analog inputs and two analog outputs to and from the Dante audio standard. The inputs are XLR/TRS combo connectors and accept both balanced and unbalanced audio. Each input supplies 48V phantom power and offers six sensitivity levels. The outputs offer five gain levels.

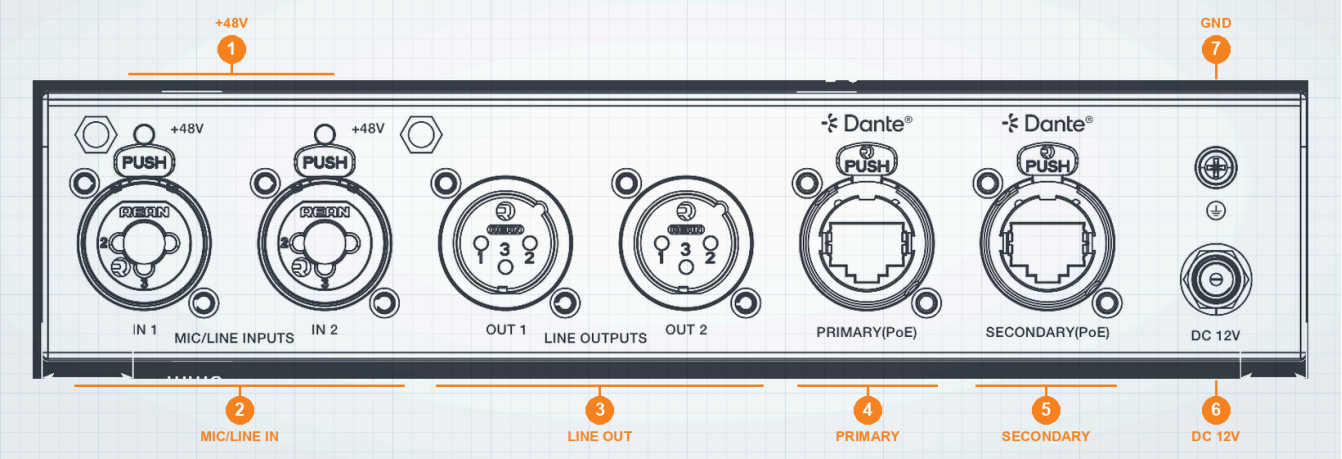
Built-in audio processing gives you gain, equalizer and delay control. You can set the unit up through its built-in Web GUI or with the standard Dante Controller software. Power it with PoE/PoE+ (Power over Ethernet) or with the supplied local DC power supply.

This 1U rack-mount unit pairs with a wide range of professional audio equipment and greatly simplifies system wiring.

6. Panel descriptions



Front Panel



Rear Panel

FRONT PANEL

No.	Name	Description
1	**POWER LED**	Solid green means the unit is powered on, from PoE+ or the DC power supply. Solid red means the unit is in standby. Off means the unit is powered off.
2	**STATUS LED**	This is the system status indicator. Solid green means the system is working normally. Flashing at 2Hz means the system has a fault.
3	**RESET button**	Press the button briefly to reset the system. Press and hold it for 5 seconds to reset it to KanexPro default settings. All front-panel LEDs flash at 2Hz for 5 seconds to confirm.

REAR PANEL

No.	Name	Description
1	**48V phantom power indicator lights**	There are two indicator lights, one for each MIC/LINE IN port. A light turns green when 48V phantom power is on for its port.
2	**MIC/LINE INPUTS ports**	These two analog audio inputs accept balanced or unbalanced audio, at a maximum line input level of 24dBu or a minimum mic input level of -35dBV. Both ports support 48V phantom power. When you turn phantom power on in the Web GUI or by API command, the port powers the connected microphone.
3	**LINE OUTPUTS ports**	These two line-level analog audio outputs carry balanced or unbalanced audio, at a maximum output level of 20dBu.

continued

No.	Name	Description
4	PRIMARY(PoE) / SECONDARY(PoE) port	These are the Dante primary and secondary network ports, and both support PoE+. They carry Dante audio in and out, and they are the control ports for the Web GUI and TCP/IP. The two networks work as hot backups: if the primary network fails, the unit switches to the secondary network automatically.
5	DC 12V	Connect the supplied 12V/1A power supply here.
6	GND	Connect this terminal to ground to ground the unit's housing.

7. Dante® Web GUI Operation Guide

You can control the audio bridge from its built-in Web GUI. To open it:

1. Connect the PRIMARY(PoE) port on the audio bridge to your Ethernet switch. 2. Connect your PC to the same switch, and set the PC's network connection to "Obtain an IP address automatically". 3. Open Dante Controller on the PC and find the audio bridge on the Routing page. 4. Click the Device Info tab to see the audio bridge's IP address. 5. Type that IP address into a browser on the PC to open the Web GUI login screen. 6. Sign in with the Admin account and enter its password, then click LOGIN. The Information page opens.

The Web GUI has two accounts. **Admin** opens every page described below. **User** opens only the User page.

INFORMATION PAGE

This page shows basic information about the audio bridge: model name, MCU version, web version, DEP SDK version, IP hostname, and the network settings of the primary and secondary networks.

PRESET PAGE

You can store up to five preset scenes.

- ① **Preset Name:** Give the scene a name of up to 32 characters.
- ② **Preset Save:** Click Save to store the current scene.
- ③ **Preset Clear:** Click Clear to delete a stored scene.
- ④ **Preset Recall:** Click Recall to load a stored scene.

The upper right corner of every page also has these controls:

- ① **Master Out volume:** Click the volume icons to raise or lower the Master Out volume. Click the mute icon to mute or unmute it. The icon turns red while Master Out is muted.
- ② **Current user:** Shows whether you are signed in as User or Admin.
- ③ **Power:** Click the power icon to power the audio bridge on or put it into standby.
- ④ **Logout:** Click the logout icon to sign out and return to the login screen.

INPUT PAGE

Input Setting

- ① **XLR IN 1 / XLR IN 2:** Set the volume of each input, or mute and unmute it. You can rename each input channel (32 characters max).
- ② **Sensitivity:** Choose each input's sensitivity from the drop-down list: +24dBu, +14dBu, +4dBu, 0dBV, -18dBV or -35dBV.
- ③ **Phantom Power:** Use the switch to turn 48V phantom power on or off for each input. While it is on, that XLR IN port on the rear panel powers the connected microphone.

OUTPUT PAGE

Output Setting

- ① **Master Out:** When the XLR OUT 1 and XLR OUT 2 switches are both on, Master Out sets the volume and mute of both outputs together. Each output's switch also lets you set that output's volume and mute on its own.
- ② **XLR OUT 1 / XLR OUT 2:** Choose each output's gain from the drop-down list: +20dBu, +14dBu, +4dBu, 0dBV or -18dBV. You can also set each output's delay, raise or lower its level, or mute it. You can rename each output channel (32 characters max).

DSP PAGE

PEQ Setting

- ① **Output:** Choose the channel to equalize from the drop-down list: XLR IN 1, XLR IN 2, XLR OUT 1 or XLR OUT 2.
- ② **Stereo:** Turn stereo mode on to give both channels the same EQ settings.
- ③ **Equalizer:** Choose an EQ setting. **Flat** sets every band to 0dB. **Custom1** and **Custom2** are your own EQ settings.
- ④ **1–8:** These are the eight PEQ bands. Click a band to select it; a blue box shows the selected band. Then set its parameters:
- **Filter Type:** Parametric, Lowpass, Highpass, Low Shelf or High Shelf.
- **Gain [dB]:** Drag the slider to set the gain.
- **Frequency [Hz]:** Drag the slider to set the frequency.
- **Q:** Drag the slider to set the Q value.
- ⑤ **Clear:** Clears the EQ settings.
- ⑥ **Copy PEQ Settings:** Copies the PEQ settings to another channel.
- ⑦ **Export PEQ Settings:** Saves the PEQ settings to a file.
- ⑧ **Import PEQ Settings:** Loads PEQ settings from a file.

NETWORK PAGE

Network Configuration. Choose the IP mode, DHCP or Static, separately for the primary and secondary networks. With DHCP, the unit takes the IP address your router assigns. With Static, enter the IP address, subnet mask and gateway yourself, then click Save.

You can also set the TCP port, the Telnet port and the domain name of the primary network. By default the domain name is the unit's IP hostname. It ends in ".local" and is different on every unit. You can type the domain name into a browser instead of the IP address to reach the Web GUI. You can change it (32 characters max).

Click Save to apply your changes, or Cancel to discard them.

SYSTEM PAGE

System Utilities

- ① **Power On:** Use the switch to power the audio bridge on or off.
- ② **Standby Mode:** Choose Standby or Sleep from the drop-down list.
- ③ **Auto Standby Time:** Drag the slider or type a value to set how long the unit waits before it goes into standby on its own. Set it to 0 to turn auto standby off.
- ④ **Reboot:** Restarts the audio bridge.
- ⑤ **Restore Factory Settings:** Returns the audio bridge to its KanexPro default settings.
- ⑦ **Export Settings:** Saves the configuration to a file.
- ⑧ **Import Settings:** Loads a configuration file.

Account Passwords. Change the login password for the User and Admin accounts here, then click Save.

Firmware Update. Click "Choose File" to pick the update file, then click "Update". The update is finished when the progress bar reaches 100%.

USER PAGE

Sign in with the User account and enter its password, then click LOGIN to open the User page. It has these controls:

- ① **Preset:** Recall a stored preset scene.
- ② **Master Out:** When the XLR OUT 1 and XLR OUT 2 switches are both on, Master Out sets the volume and mute of both outputs together. Each output's switch also lets you set that output's volume and mute on its own.

8. Control with RelayAV

RelayAV is KanexPro's control app. Once the AUD-DTE-2X2XLR is on a RelayAV site, these controls are in the RelayAV app, and control systems reach the same controls through the RelayAV API and MCP.

- **Outputs:** Gain (dB); Mute; Delay (ms); Output level
- **Inputs:** Gain (dB); Mute; Sensitivity; Delay (ms); 48 V phantom
- **DCA groups:** Volume; Mute; Inputs in a DCA group; Outputs in a DCA group
- **EQ:** EQ on; Set an EQ band; Turn an EQ band on or off; Clear the EQ; Copy an EQ
- **Input EQ:** EQ on; Set an EQ band; Turn an EQ band on or off; Clear the EQ; Copy an EQ
- **Expander:** Expander on; Set an expander; Clear the expander
- **Limiter:** Limiter on; Set a limiter; Clear the limiter
- **Presets:** Presets; Save a preset; Clear a preset
- **System:** Standby after no sound (min, 0 = never); Standby kind
- **Power:** Power
  RelayAV asks before it switches 48 V phantom power on.

Set elsewhere, or not in RelayAV:

- Dante routing (which Dante channels it sends and receives) is set in Dante Controller.
- Which Dante network port is primary or secondary, and redundancy, are set in Dante Controller.
- It has no master volume: each output has its own gain, and DCA groups move several at once.
- On its own web page only: channel and preset names, exporting and importing its settings, and firmware updates.
- Never from RelayAV: network settings, logins, restart and reset to KanexPro default settings.

9. API Control Commands

You can also control the audio bridge with ASCII commands over the network. Connect the PRIMARY(PoE) or SECONDARY(PoE) port and your PC to the same switch, on the same LAN. Then open a TCP/IP command tool on the PC, connect to the unit's IP address on TCP port 8000 (the default), and send the commands below.

In the tables, **x** is the first parameter and **y** is the second. Version numbers in the examples are illustrations only; your unit reports its own versions. Network addresses shown as `<address>` stand for the value your unit reports.

SYSTEM SETTING

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
`help`	Lists all commands	`help`	Lists all API commands	
`?`	Lists all commands	`?`	Lists all API commands	
`get type`	Gets the device model	`get type`	`AUD-DTE-2X2XLR`	
`get status`	Gets the device's current status	`get status`	See the status example after this table	
`get fw version`	Gets the firmware version	`get fw version`	`Web: V1.00.02 MCU: V2.0.0 DEP: V1.3.3.5_20250519`	
`set power on`	Powers the device on	`set power on`	`Power on System Initializing... Initialization Finished! Web: V1.00.02 MCU: V2.0.0 DEP: V1.3.3.5_20250519`	
`set power off`	Powers the device off	`set power off`	`Power: off`	
`get power`	Gets the current power state	`get power`	`Power: off`	
`set standby x`	Sets the standby mode. x=[1-2]: 1 Standby, 2 Sleep	`set standby 1`	`Standby mode: standby`	1

continued

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
get standby	Gets the standby mode	get standby	Standby mode: standby	
set reboot	Reboots the device	set reboot	Reboot… System Initializing... Initialization Finished! Web: V1.00.03 MCU: V2.0.0 DEP: V1.3.3.5_20250226	
set reset	Resets system settings to default. Type "Yes" to confirm or "No" to cancel	set reset	Sure to Reset System Settings To Default? Type "Yes" after next prompt to confirm…	
set reset all	Resets system and network settings to default. Type "Yes" to confirm or "No" to cancel	set reset all	Sure to Reset System and Network Settings To Default? Type "Yes" after next prompt to confirm…	
set auto stb x	Sets the auto standby time. x=0: auto standby off; x=[1-100]: minutes	set auto stb 10	Auto standby time: 10mins	10
get auto stb	Gets the auto standby time	get auto stb	Auto standby time: 10mins	

Here is an example of the `get status` reply:

```
`` ========================================================================================== Status Info AUD-DTE-2X2XLR Audio Bridge Web v1.00.03 MCU v2.0.0 DEP v1.3.3.5_20250226 Power Standby Mode Auto_Standby Baud On Sleep 10m in 115200 Input Name Phantom_Power Sensitivity Gain(dB) Mute 01 XLR IN1 Off 0dBV 0 Off 02 XLR IN2 Off 0dBV 0 Off Output Name Gain Volume Mute Delay (ms) 01 XLR OUT1 0dBV 50 Off 0 02 XLR OUT2 0dBV 50 Off 0 TCP/IP Telnet MAC (PRIMARY) MAC (SECONDARY) 8000 0023 xx:xx:xx:xx:xx:xx xx:xx:xx:xx:xx:xx PRIMARY DHCP IP Gateway SubnetMask On <address> <address> <address> (Static: <address> <address> <address>) SECONDARY DHCP IP Gateway SubnetMask On <address> <address> <address> (Static: <address> <address> <address>)
========================================================================================== ``
```

INPUT SETTING

For every input command, x=[0-2]: 0 is all inputs, 1 is XLR IN1, 2 is XLR IN2.

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
set input x gain y	Sets the input gain. y=[-12~12]dB, in 0.1dB steps	set input 1 gain 10	XLR IN1 gain: 10dB	0
get input x gain	Gets the input gain	get input 1 gain	XLR IN1 gain: 10dB	
set input x gain+ / **set input x gain+y**	Raises the input gain by y. y=[0.1-24]; leave y out to step by 1dB	set input 1 gain+ / set input 1 gain+5	Increase XLR IN1 gain: 1dB / Increase XLR IN1 gain: 5dB	

continued

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
set input x gain- / set input x gain-y	Lowers the input gain by y. y=[0.1-24]; leave y out to step by 1dB	set input 1 gain- / set input 1 gain-5	Decrease XLR IN1 gain: -1dB / Decrease XLR IN1 gain: -5dB	
set input x sensitivity y	Sets the input sensitivity. y=[1-6]: 1 +24dBu, 2 +14dBu, 3 +4dBu, 4 0dBV, 5 -18dBV, 6 -35dBV	set input 1 sensitivity 1	XLR IN1 sensitivity: +24dBu	0dBV
get input x sensitivity	Gets the input sensitivity	get input 1 sensitivity	XLR IN1 sensitivity: +24dBu	
set input x phantom power on/off	Turns 48V phantom power on or off	set input 1 phantom power on	XLR IN1 phantom power: on	Off
get input x phantom power	Gets the 48V phantom power status	get input 1 phantom power	XLR IN1 phantom power: on	
set input x mute on/off	Mutes or unmutes the input	set input 1 mute on	XLR IN1 mute: on	Off
get input x mute	Gets the input mute status	get input 1 mute	XLR IN1 mute: on	

OUTPUT SETTING

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
set master member <ab>	Sets which outputs Master Out controls. a = XLR OUT1, b = XLR OUT2; 1 includes the output, 0 excludes it	set master member <11>	Set master member: 11	11
get master member	Gets the Master Out members	get master member	11	
set master vol x / set vol x	Sets the master output volume. x=[0-100]	set master vol 50 / set vol 50	Master volume: 50	50
get master vol / get vol	Gets the master output volume	get master vol / get vol	Master volume: 50	
set master vol+ / set vol+ / set master vol+y / set vol+y	Raises the master output volume by y. y=[1-100]; leave y out to step by 1	set master vol+ / set master vol+5	Master volume: 51 (from 50) / Master volume: 56 (from 51)	
set master vol- / set vol- / set master vol-y / set vol-y	Lowers the master output volume by y. y=[1-100]; leave y out to step by 1	set master vol- / set master vol-5	Master volume: 49 (from 50) / Master volume: 44 (from 49)	
set master mute on/off / set mute on/off	Mutes or unmutes the master output	set master mute on / set mute on	Master mute: on	Off

continued

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
get master mute / get mute	Gets the master output mute status	get master mute / get mute	Master mute: on	

For every per-output command, x=[0-2]: 0 is all outputs, 1 is XLR OUT1, 2 is XLR OUT2.

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
set output x gain y	Sets the output gain. y=[1-5]: 1 +20dBu, 2 +14dBu, 3 +4dBu, 4 0dBV, 5 -18dBV	set output 1 gain 1	XLR OUT1 sensitivity: +20dBu	
get output x gain	Gets the output gain	get output 1 gain	XLR OUT1 sensitivity: +20dBu	
set output x vol y	Sets the output volume. y=[0-100]	set output 1 vol 50	XLR OUT1 volume: 50	50
get output x vol	Gets the output volume	get output 1 vol	XLR OUT1 volume: 50	
set output x vol+ / set output x vol+y	Raises the output volume by y. y=[1-100]; leave y out to step by 1	set output 2 vol+5	XLR OUT2 volume: 55 (from 50)	
set output x vol- / set output x vol-y	Lowers the output volume by y. y=[1-100]; leave y out to step by 1	set output 2 vol-5	XLR OUT2 volume: 45 (from 50)	
set output x mute on/off	Mutes or unmutes the output	set output 2 mute on	XLR OUT2 mute: on	Off
get output x mute	Gets the output mute status	get output 2 mute	XLR OUT2 mute: on	
set output x delay y	Sets the output delay. y=[0-50] milliseconds	set output 2 delay 50	XLR OUT2 delay: 50ms	0
get output x delay	Gets the output delay	get output 2 delay	XLR OUT2 delay: 50ms	

DSP SETTING

The EQ commands use these parameters. y is the EQ band index, [0-8], where 0 means all bands. t is the filter type, [1-5]: 1 Parametric, 2 Lowpass, 3 Highpass, 4 Low Shelf, 5 High Shelf. z is the frequency, [20-20000]Hz in 0.1Hz steps. aa is the gain, [-15~15]dB in 0.1dB steps. bb is the Q value, [0.02~16] in 0.01 steps. For EQ presets, y=[1-3]: 1 Flat, 2 Custom1, 3 Custom2.

Inputs. x=[0-2]: 0 is all inputs, 1 is XLR IN1, 2 is XLR IN2. For the stereo commands, x=[0-1]: 0 is all inputs, 1 is the XLR IN1/2 pair.

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
set input x eq preset y	Sets the input PEQ preset	set input 1 eq preset 2	XLR IN1 PEQ: Custom1	
get input x eq preset	Gets the input PEQ preset	get input 1 eq preset	XLR IN1 PEQ: Custom1	
set input x eq y on/off	Turns EQ band y on or off	set input 1 eq 0 on	XLR IN1 EQ all: on	Off
get input x eq	Gets the on/off status of each EQ band	get input 1 eq	XLR IN1 EQ 1: off through XLR IN1 EQ 8: off	

continued

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
set input x eq stereo on/off	Turns EQ stereo mode on or off (same EQ settings on both inputs)	`set input 1 eq stereo on`	`XLR IN1/2 EQ stereo mode: on`	Off
get input x eq stereo	Gets the EQ stereo mode status	`get input 1 eq stereo`	`XLR IN1/2 EQ stereo mode: on`	
set input x eq y typ t frq z val aa q bb	Sets band y's filter type, frequency, gain and Q	`set input 1 eq 1 typ 1 frq 200 val -18 q 0.02`	`XLR IN1 EQ : Type: 2, Frequency: 1000Hz, Value: 12dB, Q: 1.4`	
get input x eq setting	Gets the values of every EQ band	`get input 1 eq setting`	`Dante XLR IN1 EQ,` then one line per band 1–8, for example `1: Type: 2, Frequency: 1000Hz, Value: 12dB, Q: 1.4 on`	
set input x eq clear	Clears the input EQ settings	`set input 1 eq clear`	`Clear XLR IN1 EQ`	

Outputs. x=[0-2]: 0 is all outputs, 1 is XLR OUT1, 2 is XLR OUT2. For the stereo commands, x is 0 for all outputs or 1 for the XLR OUT1/2 pair.

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
set output x eq preset y	Sets the output PEQ preset	`set output 1 eq preset 2`	`XLR OUT1 PEQ: Custom1`	
get output x eq preset	Gets the output PEQ preset	`get output 1 eq preset`	`XLR OUT1 PEQ: Custom1`	
set output x eq y on/off	Turns EQ band y on or off	`set output 1 eq 0 on`	`XLR OUT1 EQ 1: on` through `XLR OUT1 EQ 8: on`	
get output x eq	Gets the output EQ on/off status	`get output 1 eq`	`XLR OUT1 EQ: on`	
set output x eq stereo on/off	Turns EQ stereo mode on or off (same EQ settings on both outputs)	`set output 1 eq stereo on`	`XLR OUT1/2 EQ stereo mode: on`	Off
get output x eq stereo	Gets the EQ stereo mode status	`get output 1 eq stereo`	`XLR OUT1/2 EQ stereo mode: on`	
set output x eq y typ t frq z val aa q bb	Sets band y's filter type, frequency, gain and Q	`set output 1 eq 1 typ 1 frq 200 val -18 q 0.02`	`XLR OUT1 EQ Type: 2, Frequency: 1000Hz, Value: 12dB, Q: 1.4`	
get output x eq setting	Gets the values of every EQ band	`get output 1 eq setting`	`Dante XLR OUT1 EQ,` then one line per band 1–8, for example `1: Type: 2, Frequency: 1000Hz, Value: 12dB, Q: 1.4 on`	

continued

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
set output x eq clear	Clears the output EQ settings	`set output 1 eq clear`	`Clear XLR OUT1 EQ`	

Copying EQ settings

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
set input/output x eq copy to input/output y	Copies the EQ settings of x to y. x=[1-2]: 1 XLR IN/OUT1, 2 XLR IN/OUT2. y=[0-2]: 0 all inputs/outputs, 1 XLR IN/OUT1, 2 XLR IN/OUT2	`set input 1 eq copy to output 2`	`Set XLR IN1 EQ copy to XLR OUT2`	

PRESET SETTING

A preset stores all of the unit's settings except its network settings. x=[1-5] selects preset 1 to preset 5.

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
set preset save x	Saves the current settings to preset x	`set preset save 1`	`Save to preset 1`	
set preset recall x	Loads preset x	`set preset recall 1`	`Recall preset 1`	
set preset clear x	Clears preset x	`set preset clear 1`	`Clear preset 1`	

NETWORK SETTING

Changes to the IP mode, IP address, subnet mask or gateway take effect only after the network restarts. The unit reminds you with " (Please use "s net reboot!" command or repower device to apply new config!)". Send `set net reboot` or power-cycle the unit. While DHCP is on, the unit will not accept a static IP address, subnet mask or gateway, and replies "DHCP on, Device can't config …, set DHCP off first." Set the IP mode to Static first.

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
get ipconfig	Gets the current IP configuration	`get ipconfig`	TCP/IP port, Telnet port, and for the primary and secondary networks: IP mode, IP address, subnet mask, gateway, MAC address and stored static settings	
set pri ip mode x	Sets the primary network to static IP or DHCP. x=[0-1]: 0 Static, 1 DHCP	`set pri ip mode 0`	`Primary IP mode: Static` plus the restart reminder	1
get pri ip mode	Gets the primary network IP mode	`get pri ip mode`	`Primary IP mode: DHCP`	
set pri ip addr xxx.xxx.xxx.xxx	Sets the primary network IP address	`set pri ip addr 192.168.1.100`	`Primary IP address: <address>` plus the restart reminder	
get pri ip addr	Gets the primary network IP address	`get pri ip addr`	`Primary IP: <address>`	
set pri subnet xxx.xxx.xxx.xxx	Sets the primary network subnet mask	`set pri subnet 255.255.255.0`	`Primary Subnet Mask: 255.255.255.0` plus the restart reminder	

continued

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
get pri subnet	Gets the primary network subnet mask	`get pri subnet`	`Primary Subnet Mask: 255.255.255.0`	
set pri gateway xxx.xxx.xxx.xxx	Sets the primary network gateway	`set pri gateway 192.168.1.1`	`Primary Gateway: 192.168.1.1` plus the restart reminder	
get pri gateway	Gets the primary network gateway	`get pri gateway`	`Primary Gateway: 192.168.1.1`	
get pri mac addr	Gets the primary network MAC address	`get pri mac addr`	`Primary MAC: xx:xx:xx:xx:xx:xx`	
set sec ip mode x	Sets the secondary network to static IP or DHCP. x=[0-1]: 0 Static, 1 DHCP	`set sec ip mode 0`	`Secondary IP mode: Static` plus the restart reminder	1
get sec ip mode	Gets the secondary network IP mode	`get sec ip mode`	`Secondary IP mode: DHCP`	
set sec ip addr xxx.xxx.xxx.xxx	Sets the secondary network IP address	`set sec ip addr 192.168.1.100`	`Secondary IP address: <address>` plus the restart reminder	
get sec ip addr	Gets the secondary network IP address	`get sec ip addr`	`Secondary IP: <address>`	
set sec subnet xxx.xxx.xxx.xxx	Sets the secondary network subnet mask	`set sec subnet 255.255.255.0`	`Secondary Subnet Mask: 255.255.255.0` plus the restart reminder	
get sec subnet	Gets the secondary network subnet mask	`get sec subnet`	`Secondary Subnet Mask: 255.255.255.0`	
set sec gateway xxx.xxx.xxx.xxx	Sets the secondary network gateway	`set sec gateway 192.168.1.1`	`Secondary Gateway: 192.168.1.1` plus the restart reminder	
get sec gateway	Gets the secondary network gateway	`get sec gateway`	`Secondary Gateway: 192.168.1.1`	
get sec mac addr	Gets the secondary network MAC address	`get sec mac addr`	`Secondary MAC: xx:xx:xx:xx:xx:xx`	
set tcp/ip port x	Sets the TCP/IP control port. x=1~65535	`set tcp/ip port 8000`	`TCP/IP port: 8000`	8000
get tcp/ip port	Gets the TCP/IP control port	`get tcp/ip port`	`TCP/IP port: 8000`	
set telnet port x	Sets the Telnet port. x=1~65535	`set telnet port 23`	`Telnet port: 23`	23
get telnet port	Gets the Telnet port	`get telnet port`	`Telnet port: 23`	

continued

COMMAND	FUNCTION	EXAMPLE	FEEDBACK	DEFAULT
set net hostname xxxx	Sets the network hostname (32 characters max)	`set net hostname 123`	`Hostname: 123`	
get net hostname	Gets the network hostname	`get net hostname`	`Hostname: <hostname>`	
set net reboot	Restarts the network modules	`set net reboot`	`Network reboot... Search for IP, Please wait ...!,` followed by the primary and secondary network settings	

10. Connection Diagram

The connection diagram shows the audio bridge in a typical system with a microphone, a mixing console, a PoE network switch, a laptop, a Dante® amplifier, active speakers and an audio amplifier.

Check the XLR pinout whenever you connect an XLR input or output device:

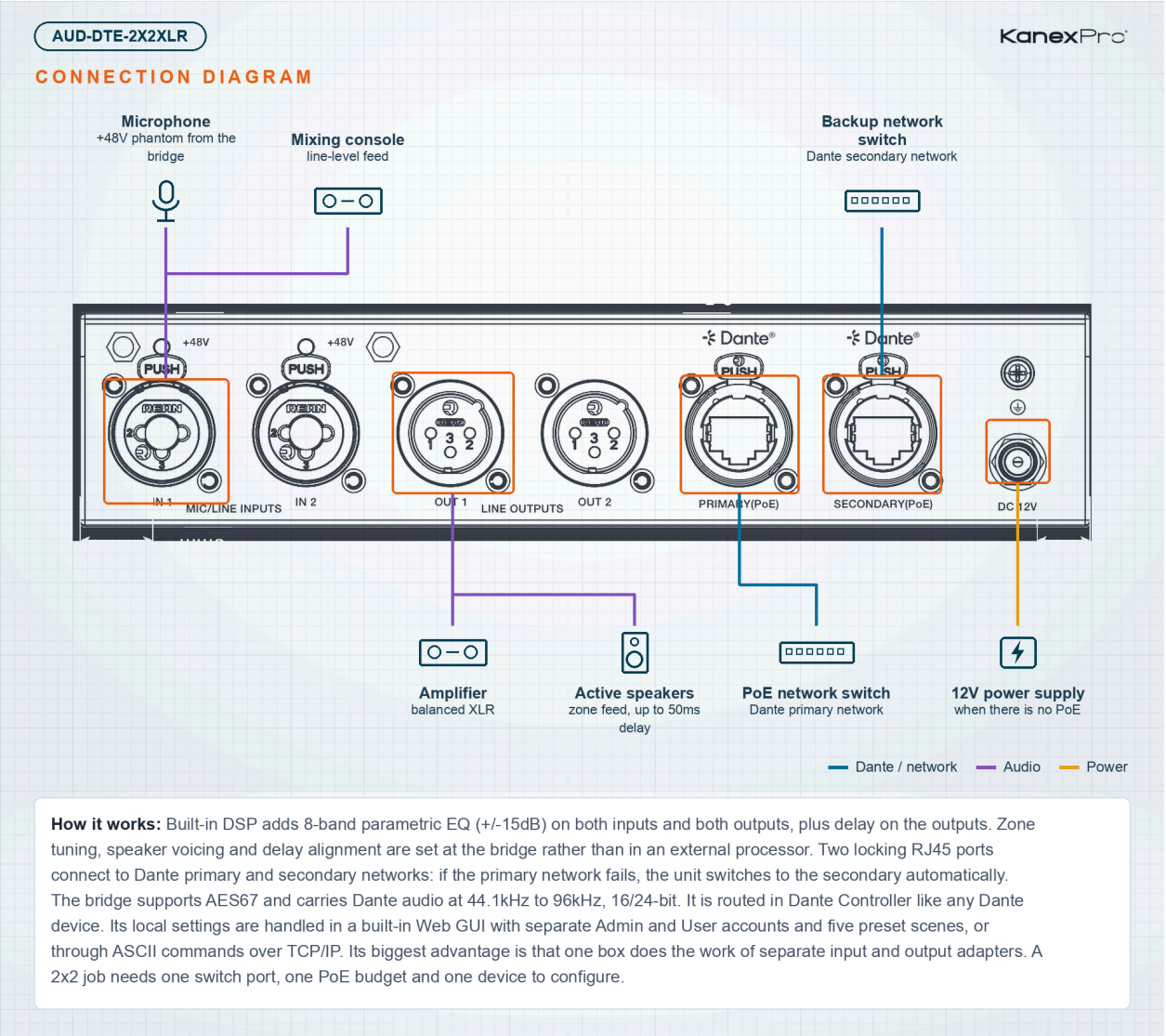
PIN	SIGNAL
1	Ground/Shield
2	Positive/Hot
3	Negative/Cold

The diagram shows both the female and male XLR connectors.

11. Trademarks

Dante® is a registered trademark of Audinate Pty Ltd. All other trademarks are the property of their respective owners.

12. Connection Diagram



How it works: Built-in DSP adds 8-band parametric EQ (+/-15dB) on both inputs and both outputs, plus delay on the outputs. Zone tuning, speaker voicing and delay alignment are set at the bridge rather than in an external processor. Two locking RJ45 ports connect to Dante primary and secondary networks: if the primary network fails, the unit switches to the secondary automatically. The bridge supports AES67 and carries Dante audio at 44.1kHz to 96kHz, 16/24-bit. It is routed in Dante Controller like any Dante device. Its local settings are handled in a built-in Web GUI with separate Admin and User accounts and five preset scenes, or through ASCII commands over TCP/IP. Its biggest advantage is that one box does the work of separate input and output adapters. A 2x2 job needs one switch port, one PoE budget and one device to configure.

13. Troubleshooting

Q: The unit will not power up. What should I check?
A: If the POWER LED is off, confirm the switch port supplies PoE+ (Class 4, IEEE 802.3at), or connect the supplied 12V/1A power supply to the DC 12V jack. If the LED is solid red, the unit is in standby: power it on with the power icon in the Web GUI or with set power on.

Q: Why does the unit keep going into standby by itself?
A: Auto standby is on by default and puts the unit in standby after 10 minutes. Set Auto Standby Time to 0 on the System page, or send set auto stb 0, to turn it off. You can also set any time from 1 to 100 minutes.

Q: The STATUS LED is flashing. What do I do?
A: A STATUS LED flashing at 2Hz means a system fault. Solid green means normal. Press RESET briefly to reset the system. If the fault remains, hold RESET for 5 seconds to reset it to KanexPro default settings; all front-panel LEDs flash for 5 seconds to confirm.

Q: I cannot reach the Web GUI, or my static IP settings are not taking effect. What now?
A: Confirm your PC is on the same switch and LAN as the unit, and read the unit's current IP from Dante Controller's Device Info tab. If the unit replies "DHCP on", set the IP mode to Static before you enter the address. Address changes apply only after set net reboot or a power cycle.

Need help? — For additional support, visit kanexpro.com/support, or scan the QR code below for the product page.

14. Installation FAQ

Q: What does the network switch need to provide?
A: To power the unit over the network, the switch port must supply PoE+ (Class 4, IEEE 802.3at). Otherwise, use the supplied 12V/1A locking power supply. Each locking RJ45 port runs up to 328ft (100m) over CAT6/6A/7 on a 100 Mbps Dante network.

Q: How do I find the unit's IP address and open the Web GUI?
A: Connect the PRIMARY(PoE) port and your PC to the same switch, and set the PC to obtain an IP address automatically. In Dante Controller, find the unit on the Routing page, then open the Device Info tab to read its IP address. Enter that address, or the unit's .local hostname, in a browser and sign in with the Admin account.

Q: What XLR pinout and connectors does it use?
A: The inputs are female XLR/TRS combo jacks and the outputs are male XLR, all balanced or unbalanced. On the XLR pins, pin 1 is Ground/Shield, pin 2 is Positive/Hot and pin 3 is Negative/Cold. A chassis GND terminal on the rear panel lets you ground the housing.

Q: How do I give it a static IP address?
A: Set the IP mode to Static on the Web GUI Network page, enter the IP address, subnet mask and gateway, then click Save. You can do this separately for the primary and secondary networks. Over TCP/IP, send set pri ip mode 0 first, then the address commands, then set net reboot (or power-cycle the unit) to apply them.

15. Integration FAQ

Q: Which control methods and ports does it support?
A: You can control it from the built-in Web GUI, from Dante Controller, or with ASCII commands over TCP/IP. The TCP/IP control port is 8000 by default and can be changed, and you can reach it on either the PRIMARY or the SECONDARY network port.

Q: Where are Dante routing and latency set?
A: Dante channel routing and the device latency (5ms or 10ms) are set in Dante Controller, the same as for other Dante devices. A typical system routes a microphone or mixing console through it over a PoE switch to Dante amplifiers, active speakers or analog amplifiers.

Q: Can I copy a configuration to another unit or keep a backup?
A: Yes. Export Settings on the System page saves the configuration to a file, and Import Settings loads it. The DSP page can also export and import PEQ settings on their own, and copy one channel's PEQ to another.

Q: Can I control it from the RelayAV app?
A: 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.