



DXA-HD-TX

Dante® HDMI™ Audio Encoder

USER MANUAL

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Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating, or adjusting this product. Keep this manual for future reference.

Important Safety Note – Surge Protection Recommended

This product contains sensitive electronic components that may be damaged by electrical spikes, surges, lightning strikes, or static discharge. To protect and extend the service life of your equipment, we strongly recommend using a surge protection device.

Warranty Registration

Activate your warranty by registering your product at:

→ www.orei.com/register

Need Technical Support? We're Here to Help.

Our experienced Technical Support Team is available to answer your questions, offer expert advice, and help troubleshoot any issues to keep your project on track—on time and on budget.

Live Support Hours (US/Canada/Mexico):

🕒 Monday–Friday | 9:00 a.m. – 5:00 p.m. Central Time

Contact Us:

✉ Email: info@orei.com

📞 Phone: 877-290-5530

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Send us an instant message—our team typically responds within moments during live support hours.

Introduction

The ToVi DXA-HD-TX is a 2CH Dante® HDMI™ audio transmitter built on the Dante® Ultimo 2x2 platform, designed to integrate HDMI™ audio sources into Dante® networked audio systems. It converts two-channel HDMI™ audio into Dante® 2-channel digital audio, enabling reliable audio distribution over standard IP networks.

The adapter supports HDMI 2-channel audio with sampling rates ranging from 32 kHz to 192 kHz at 24-bit depth, while delivering Dante 2-channel audio output at 44.1, 48, 88.2, and 96 kHz, also at 24-bit depth. It features selectable Dante audio latency settings of 1 ms, 2 ms, and 5 ms. With plug-and-play functionality, flexible power options via USB-C or Power over Ethernet (PoE), and a lightweight, portable design, it is well-suited for applications such as recording studios, live events, concerts, art festivals, and broadcast environments.



1. **HDMI™ to Dante® Audio Conversion** – Transmits two-channel HDMI™ audio to Dante® digital networks
2. **Wide HDMI™ Audio Support** – PCM 2CH from 32kHz to 192kHz at 24-bit
3. **Professional Dante® Output** – PCM 2CH at 44.1/48/88.2/96kHz with 24-bit depth
4. **Configurable Latency** – Adjustable 1ms, 2ms, or 5ms delay settings
5. **Dual Power Options** – USB-C or PoE (802.3af) operation for installation flexibility
6. **AES67 Compatibility** – Ensures interoperability with standards-based audio networks
7. **Compact and Portable** – Space-efficient design for mobile or fixed setups
8. **Pure Digital Transmission** – Lossless audio conversion for pristine sound quality

Package Contents & Specifications

Package Contents

1.	DXA-HD-TX	1 pcs
2.	Hook & Loop	2pcs
3.	User Manual	1 pcs

Specifications

Technical	
Input	Two-channel HDMI™ audio
Output	Dante® 2CH digital audio
Control Method	Dante® Controller
Network Bandwidth	100Mbps
Audio Latency	Configurable Dante® device latency (Supports 1, 2 or 5ms configurable using Dante® Controller)
HDMI™ Compliance	HDMI™ 2.0b
HDCP Compliance	HDCP 2.3

Audio Formats	HDMI™ IN [Digital audio input, PCM 2CH 32kHz-192KHz at 16/24bit] Dante® OUT [Digital audio output, PCM 2CH 44.1kHz-96kHz at 16/24Bit]
Transmission Distance	328ft/100m (CAT6/6A/7)
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Audio Parameters	
Input Impedance	N/A
Line Input Level (Max)	N/A
Frequency Response	20Hz to 20kHz (± 0dB)
Dynamic Range	> 130dB@0dBu, 1kHzA-weighted
Audio S/N Ratio	> 130dB@0dBu, 1kHzA-weighted
Audio THD+N	< 0.01%@+4dBu, 1KHz
Audio Output Delay	< 1ms

Specifications

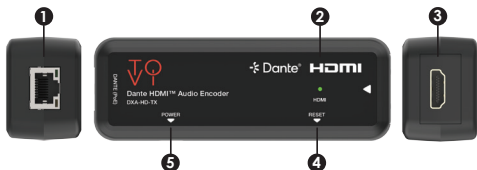
Connections

Input	1x HDMI™ [Type A, 19-pin female] 1x POWER [USB-C port, 12-pin female]
Output	1x DANTE [RJ45 connector, PoE]

Mechanical

Housing	Plastic Enclosure
Color	Black
Dimensions	L: 115mm / 4.53in W: 40mm / 1.57in H: 28mm / 1.10in
Weight	90g / 3.17oz
Power Supply	USB input: 5V/500mA PoE input: PoE IEEE802.3af Class 0
Power Consumption	1.8W (Max)
Operation Temperature	32°F~104°F/0°C~40°C
Storage Temperature	-4°F~140°F/-20°C~60°C
Operating Humidity	20%~80% relative humidity, non-condensing
Storage Humidity	10%~90% relative humidity, non-condensing

Operation Controls and Functions



No.	Name	Function Description
1.	DANTE (PoE)	Connect to a 1G network switch for PoE and signal transmission. Green LINK LED: Remains steady when the network connection is established successfully. Yellow DATA LED: Blinks during active Dante® audio data transmission.
2.	HDMI LED (green)	• Solid On: Active audio input detected. • Flashing: Unit is booting.
3.	HDMI port	Connect an HDMI source device, used specifically for extracting (de-embedding) audio from the HDMI signal.
4.	RESET button	Press the button to reset the Dante® settings of the device.
5.	POWER port	Connect a 5V/500mA power supply to power the device. This port can also be used for firmware updates and as an API control interface, including support for downloading user-defined EDID.

API Commands

Note: The RESET button only restores Dante® settings. To reset the device to factory settings, please use the Dante® Controller software or API commands.

API Commands

The encoder supports API commands control. Connect the POWER port to a PC with a USB-C cable. Then, open a serial command tool on PC to send API commands to control the encoder.

The supported commands are mentioned below.

API Commands				
Service port (USB-C virtual RS-232) communication protocol Baud rate: 115200 (Fixed) Data bit: 8 Stop bit: 1 Parity bit: none				
Command	Function	Example	Feedback	Factory Default
?	List all commands	?		
help	List all commands	help		
get fw version	Get firmware version	get fw version	MCU: V1.00.01	
set reboot	Reboot the device	set reboot	Reboot... System Initial- izing... Initialization Finished! BOOT: V1.00.01 MCU: V1.00.01	

Command	Function	Example	Feedback	Factory Default
set reset	Reset to factory defaults	set reset	Sure to RESET to default settings? Type "Yes" after next prompt to confirm...	
get status	Get system status	get status	Please refer to the note for "get status".	
set edid x	Set HDMI input port EDID to (x=0~2) x=0: Internal EDID (4K60, Audio 2CH PCM) x=1: User Defined 1 x=2: User Defined 2	set edid 0 set edid 1 set edid 2	EDID 0: Internal EDID (4K60, Audio 2CH PCM) EDID 1: User Defined 1 EDID 2: User Defined 2	on
get edid	Get HDMI input port EDID	get edid	EDID 1: User Defined 1	
set user edid x <y>	Set user defined EDID (x=0~2) to y x=0: User Defined 1 and User Defined 2 x=1: User Defined 1 x=2: User Defined 2 y=00 FF FF FF (y is 256 bytes EDID data)	set user edid 1 <00 FF FF FF.....>	User Defined 1 EDID is loaded	

API Commands

Command	Function	Example	Feedback	Factory Default
get edid data x	Get EDID data (x=0~2) x=0: Internal EDID (4K60, Audio 2CH PCM) x=1: User Defined 1 x=2: User Defined 2	get edid data 0	Internal EDID <00 FF FF FF....> User Defined 1 <00 FF FF FF....> User Defined 2 <00 FF FF FF....>	
set hotplug	Toggle HDMI input port hotplug event (low 1s then high)	set hotplug	Hotplug event	

Note: The feedback of the command of “get status” is as following.

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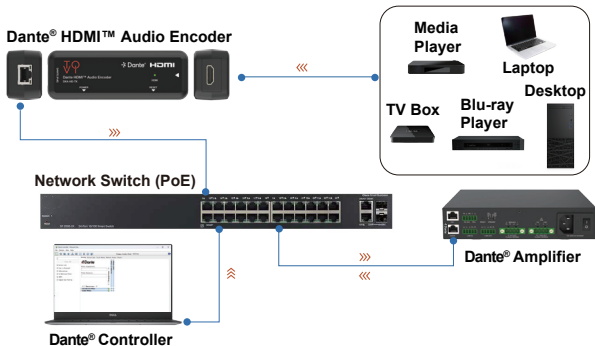
Status Info Dante 2CH HDMI Input Adapter
MCU: V1.00.01

Input	Cable	Resolution	ColorSpace	ColorDepth
HDMI	Connected	3840x2160p60Hz	YUV 4:4:4	8bit

Audio	HDCP	EDID
PCM 2CH 48K	2.2	Internal EDID

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Application Example



Trademarks

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FAQs & Troubleshooting

1. Audio is not heard on Dante Decoders

- Ensure proper routing in Dante Controller software.
- Ensure the sampling rate set at the source is supported by the Decoders.
- Ensure the audio format is set to PCM or Stereo from the HDMI source device settings.
- Check if the Decoders are on the same network/subnet.

2. Audio dropouts or unstable playback

- Ensure the audio format is set to PCM or Stereo from the HDMI source device settings.
- Increase Dante latency to 2 ms or 5 ms in Dante Controller
- Press the Reset button to reboot the unit or do a hard reset within Dante Controller software.

3. The device does not appear in Dante® Controller

- Confirm the device is powered (via USB-C or PoE).
- Make sure your computer and the device are on the same network/subnet.
- Disable or configure firewalls that may block network discovery.

4. How do I route audio from the device?

All audio routing is managed through Dante® Controller software. The device appears as a Dante® transmitter, allowing its audio channels to be routed to other Dante®-enabled devices, including ToVi Dante® models.

Still have some questions?

Please feel free to contact us at: info@orei.com. OR Fill out the form on the 'Contact Us' page on the website.

Our team will be more than happy to help you.

OREI Live Technical Support Hours

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