



**DXA-LINE-TX**

**Dante® Line 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](http://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](mailto:info@orei.com)

📞 Phone: 877-290-5530

💬 Chat Live: [www.orei.com](http://www.orei.com)

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

# Introduction

The ToVi DXA-LINE-TX is a 2-channel Dante® line-level audio encoder built to transmit high-quality analog audio over standard IP networks. It converts two-channel balanced or unbalanced analog signals into Dante® 2-channel digital audio, ensuring reliable, low-latency audio distribution in professional network audio environments.

Supporting 24-bit audio with sampling rates of 44.1 kHz, 48 kHz, 88.2 kHz, and 96 kHz, the DXA-LINE-TX also offers selectable audio delay options of 1 ms, 2 ms, or 5 ms for precise system timing. A 5-level input sensitivity adjustment (+24dBu, +4dBu, 0dBu, 0dBV, and -10dBV) allows seamless integration with a wide range of audio sources.

For flexible installation, the unit can be powered either via the side USB-C port or through PoE (IEEE 802.3af Class 0). Its compact, plug-and-play design makes it ideal for space-constrained professional AV and Dante audio deployments.

## Features

1. **2-Channel Analog-to-Dante® Transmission** – Converts line-level analog audio to Dante® digital streams
2. **Balanced & Unbalanced Inputs** – Compatible with professional and consumer audio sources
3. **5-Level Sensitivity Adjustment** – +24dBu to -10dBv input range for optimal signal matching
4. **High Bitrate Audio** – Up to 96kHz/24-bit audio sampling rate
5. **Configurable Audio Delay** – 1 ms, 2ms, or 5ms latency settings
6. **Dual Power Options** – Powered via USB-C or PoE (IEEE 802.3af)
7. **Compact & Durable Design** – Space-efficient for fixed or portable installations
8. **Plug-and-Play** – Seamless integration with Dante®-enabled networks

## Package Contents

|    |                                     |       |
|----|-------------------------------------|-------|
| 1. | DXA-LINE-TX                         | 1 pcs |
| 2. | 6pin-3.5mm Phoenix Connector (male) | 1 pcs |
| 3. | Hook & Loop                         | 2 pcs |
| 4. | User Manual                         | 1 pcs |

# Specifications

| Technical                |                                                                                                                                                 |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Input                    | Two-channel balanced/unbalanced analog audio                                                                                                    |
| Output                   | Dante® 2CH digital audio                                                                                                                        |
| Control Method           | Dante® Controller                                                                                                                               |
| Network Bandwidth        | 100Mbps                                                                                                                                         |
| Audio Latency            | Configurable Dante® device latency<br>(Supports 1, 2 or 5ms configurable using Dante® Controller)                                               |
| Audio Formats            | LINE IN [Analog audio input, Balanced/unbalanced 2CH, Max input level +24dBu]<br>DANTE OUT [Digital audio output, PCM 2CH 44.1K-96KHz 16/24bit] |
| LINE IN Audio Parameters |                                                                                                                                                 |
| Input Impedance          | 20k Ohm balanced<br>10k Ohm unbalanced                                                                                                          |
| Line Input Level (Max)   | +24dBu (12.28Vrms) @balanced audio<br>+18dBu (6.15Vrms) @unbalanced audio                                                                       |
| Frequency Response       | 20Hz to 20kHz (-/+0.5dB)                                                                                                                        |
| Dynamic Range            | >100dB@0dBu, 1 kHzA-weighted                                                                                                                    |
| Audio S/N Ratio          | >100dB@0dBu, 1 kHzA-weighted                                                                                                                    |
| Audio THD+N              | < 0.01% at +4dBu, 1KHz                                                                                                                          |

|                         |                                                                                                                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------|
| Audio Output Sync Delay | <10ms                                                                                                            |
| Transmission Distance   | 328ft/100m (CAT6/6A/7)                                                                                           |
| ESD Protection          | IEC 61000-4-2:<br>±8kV (Air-gap discharge) & ±4kV (Contact discharge)                                            |
| <b>Connections</b>      |                                                                                                                  |
| Input                   | 2× CH1/CH2 LINE [6pin-3.5mm phoenix connector]<br>1× POWER [USB-C power and firmware update port, 12-pin female] |
| Output                  | 1× DANTE [RJ45 connector, PoE]                                                                                   |
| <b>Mechanical</b>       |                                                                                                                  |
| Housing                 | Plastic Enclosure                                                                                                |
| Color                   | Black                                                                                                            |
| Dimensions              | L: 115mm / 4.53in   W: 40mm / 1.57in  <br>H: 28mm / 1.10in                                                       |
| Weight                  | 94g / 3.32oz                                                                                                     |
| Power Supply            | USB input: 5V/500mA<br>PoE input: PoE IEEE802.3af Class 0                                                        |
| Power Consumption       | 2W (Max)                                                                                                         |

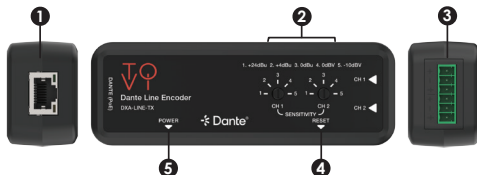
# Specifications & Operation

## Controls and Functions

### Specifications

|                       |                                           |
|-----------------------|-------------------------------------------|
| 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



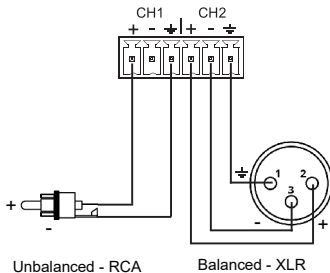
# Operation Controls and Functions

| No. | Name             | Function Description                                                                                                                                                                                                                              |
|-----|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  | DANTE (PoE) port | Connect to a 1G network switch for PoE and signal transmission.<br><b>Green LINK LED:</b> Remains steady when the network connection is established successfully.<br><b>Yellow DATA LED:</b> Blinks during active Dante® audio data transmission. |
| 2.  | CH 1/2 knob      | Used to adjust the input sensitivity for analog audio channels 1 and 2.<br>It has 5 sensitivity levels:<br>1. +24dBu, 2. +4dBu, 3. 0dBu, 4. 0dBv, 5. -10dBv.                                                                                      |
| 3.  | CH 1/2 port      | Connect an audio source device using a phoenix connector.                                                                                                                                                                                         |
| 4.  | RESET button     | Press this button to reboot the unit.                                                                                                                                                                                                             |
| 5.  | POWER            | USB-C port for connecting a 5V/500mA power supply to power the device, while also supporting firmware updates.                                                                                                                                    |

**Note:** The RESET button will only reboot the device; device reset must be performed through the Dante® Controller software.

# Wiring Configuration

The connection methods for balanced and unbalanced analog audio ports are as follows:



# Application Example

## Dante® Line Encoder



## Network Switch (PoE)



## Dante® Line Decoder



## Mixing Console



Media  
Player



Laptop



## Dante® Amplifier

## Audio Amplifier



Speakers

## Trademarks

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# FAQs & Troubleshooting

## 1. Audio dropouts or unstable playback

- Ensure the audio format is set to PCM or Stereo from the audio 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.

## 2. 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/sub-net.
- Disable or configure firewalls that may block network discovery.

## 3. Noise or interference in audio

- Try using using balanced connection
- Ensure proper grounding of equipment
- Keep audio cables away from power lines

### ***Still have some questions?***

Please feel free to contact us at: [info@orei.com](mailto: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.

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