DXA-OPT-RX

Dante® Optical Decoder

USER MANUAL

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Table of Contents

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
Chat Live: www.orei.com

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

Introduction

The ToVi DXA-OPT-RX is a 2-channel Dante® optical output adapter built on the Dante® Ultimo 2×2 platform, designed to bridge Dante® networked audio systems with optical (SPDIF/TOSLINK) audio equipment. It converts 2-channel Dante® digital audio into 2-channel optical audio, enabling seamless audio distribution from IP-based networks to optical audio devices.

The adapter supports PCM 2-channel audio at 44.1, 48, 88.2, and 96kHz at 24-bit. Configurable Dante® audio delay settings of 1ms, 2ms, or 5ms allow precise audio synchronization, and AES67 support ensures interoperability with other compliant audio-over-IP systems. High-quality digital signal processing delivers lossless audio performance with low latency and high reliability.

Designed for ease of deployment, the DXA-OPT-RX offers plug-and-play operation, USB-C or Power over Ethernet (PoE) power options, and a compact, lightweight form factor. It is ideal for recording studios, live sound, concerts, broadcast environments, art installations, and professional AV applications requiring reliable Dante® to optical audio conversion.

Features

1. **Dante® to Optical Audio Conversion** – Converts Dante® 2CH digital audio to two-channel optical (SPDIF) output
2. **Dante® Ultimo 2×2 Platform** – Delivers stable, low-latency net worked audio performance
3. **High Sampling Rate** – Supports PCM audio up to 96kHz at 24-bit depth
4. **Configurable Latency** – Adjustable 1ms, 2ms, or 5ms delay settings
5. **AES67 Compatibility** – Ensures interoperability with AES67-compliant audio networks
6. **Dual Power Options** – Powered via USB-C or PoE (IEEE 802.3af, Class 0)
7. **Compact & Portable Design**– Simple installation with flexible deployment

Package Contents & Specifications

Package Contents

1.	DXA-OPT-RX	1pcs
2.	Hook & Loop	2pcs
3.	User Manual	1pcs

Specifications

Technical	
Input	Dante® 2CH digital audio
Output	Two-channel optical audio
Control Method	Dante® Controller
Network Bandwidth	100Mbps
Audio Latency	Configurable Dante® device latency (Supports 1, 2 or 5ms configurable using Dante® Controller)
Audio Formats	Optical OUT [Digital audio output, PCM 2CH 44.1K-96KHz 16 / 24bit] Dante® IN [Digital audio input, PCM 2CH 44.1K-96KHz 16 / 24Bit]
Transmission Distance	328ft / 100m (CAT6/6A/7)

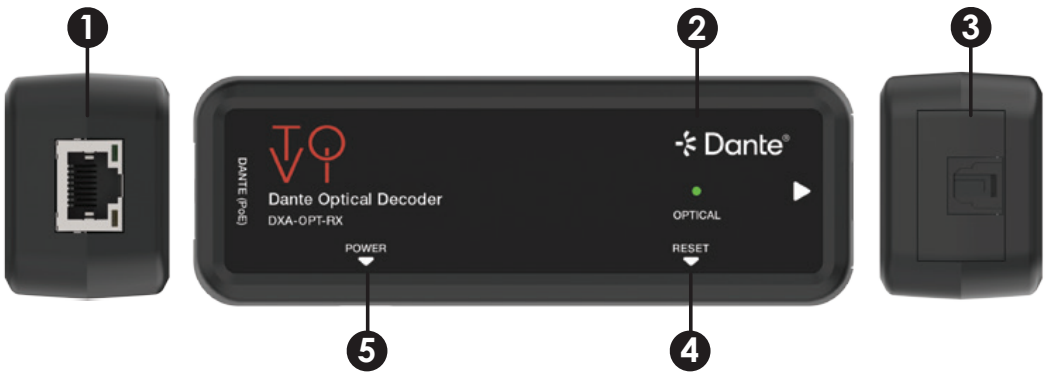
Specifications

ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Audio Parameters	
Output Impedance	N / A
Line Output 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
Connections	
INPUT	1x DANTE [RJ45 connector, PoE] 1x POWER [USB-C port, 12-pin female]
OUTPUT	1x OPTICAL [S/PDIF]

Specifications

Mechanical	
Housing	Plastic Enclosure
Color	Black
Dimensions	L: 115mm / 4.53in | W: 40mm / 1.57in | H: 28mm / 1.10in
Weight	88g / 3.10oz
Power Supply	USB input: 5V / 500mA PoE input: PoE IEEE802.3af Class 0
Power Consumption	0.64W (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

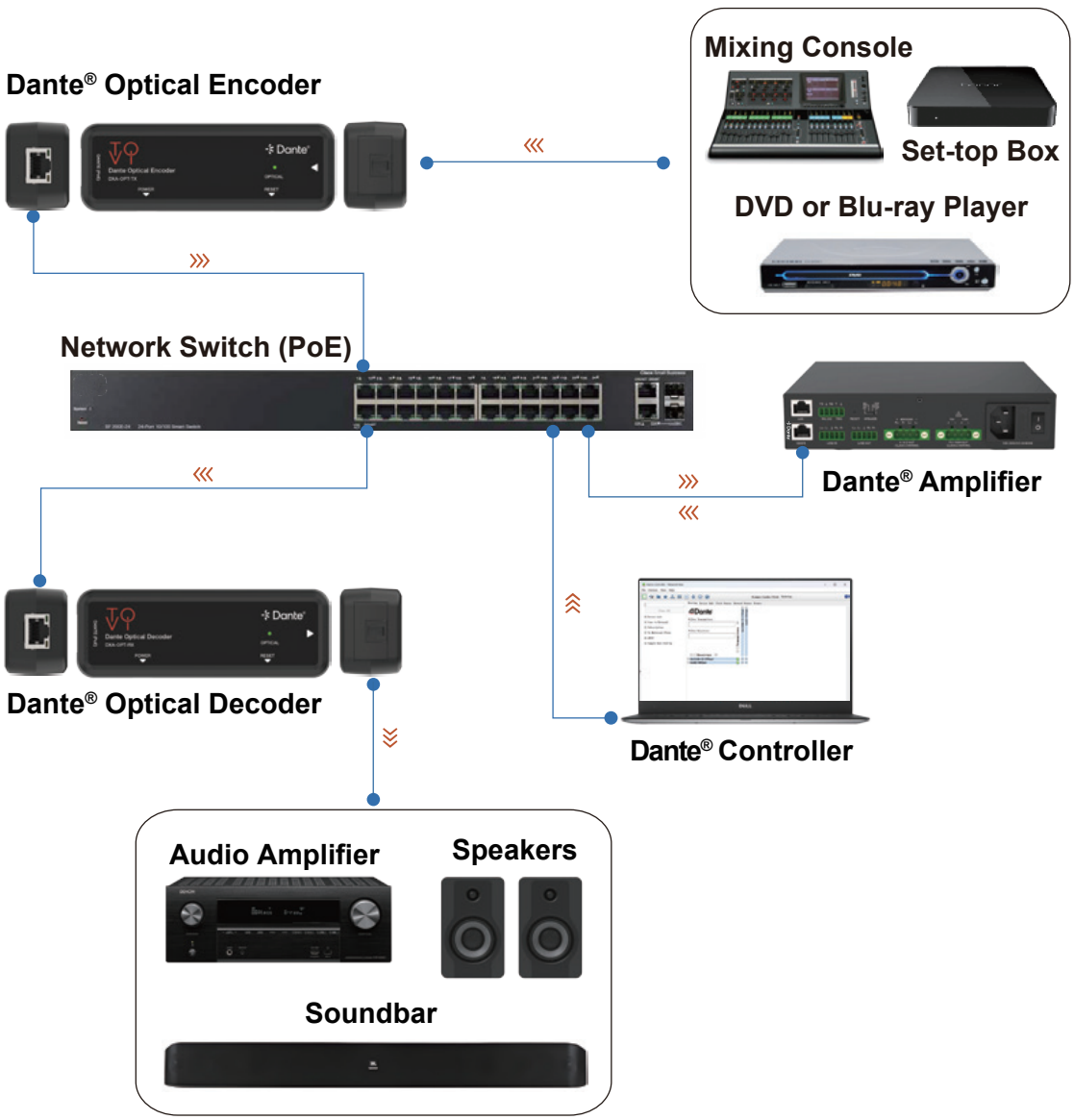
Operation Controls and Functions



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.	OPTICAL LED (green)	On: Audio output is active. Flashing: The unit is powering up and booting.
3.	OPTICAL	Connect an audio device such as AMP, AVR, Mixer, etc.
4.	RESET	Press to reset the unit.
5.	POWER port	USB-C port used for 5V/500mA power input and firmware updates.

Note: The RESET button only resets Dante® network settings. To perform a full device reset, use the Dante® Controller software.

Application Example



Trademarks

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FAQs & Troubleshooting

1. The device does not appear in Dante® Controller
- Confirm the device is powered (via USB or PoE). - Make sure your computer and the device are on the same network/ subnet. - Disable or configure firewalls that may block network discovery.

2. Audio dropouts or glitches
- Increase Dante® latency to 2ms or 5ms. - Confirm that all Dante® devices are set to the same sample rate. - Check for clock sync issues in Dante® Controller. - Avoid network congestion by using a dedicated Gigabit Ethernet switch.

3. How do I route audio to the device?
All audio routing is done through Dante® Controller software. The device will appear as a Dante® receiver allowing audio channels to be patched from other Dante®-enabled devices, including other 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.

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