

Dante® 2CH Optical Input Adapter



User Manual

VER 1.0

Thank you for purchasing this product

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

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

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1. Introduction

This Dante® 2CH Optical Input Adapter is an audio transmitter based on the Dante® Ultimo 2x2. It converts two-channel optical audio into Dante® 2CH digital audio, then transmits the audio to the receiving end through network (Dante®).

The adapter supports audio sampling rate conversion and pure digital signal conversion without signal loss. In addition, it supports local USB-C port power supply and PoE function. It is compact and easy to carry, plug-and-play, suitable for various scenarios such as recording studios, art festivals, concerts, etc.

2. Features

- ☆ Two-channel optical audio to Dante® 2CH digital audio
- ☆ Optical audio input supports PCM 2CH 32KHz ~192KHz@24bit
- ☆ Dante® audio output supports PCM 2CH 44.1/48/88.2/96KHz@24bit
- ☆ Dante® audio delay supports 1/2/5ms (configurable)
- ☆ Supports local USB-C port power supply and PoE function (Class 0 802.3af PoE)
- ☆ Supports AES67
- ☆ Compact design for easy and flexible installation

3. Package Contents

- ① 1x Dante® 2CH Optical Input Adapter
- ② 2x Hook & Loop
- ③ 1x User Manual

4. Specifications

Technical		
Input	Two-channel optical audio	
Output	Dante® 2CH digital audio	
Control Method	Dante® Controller	
Video Network Bandwidth	100M	
Audio Latency	Configurable Dante® device latency (Supports 1, 2 or 5ms configurable using Dante® Controller)	
Audio Formats	Optical IN [Digital audio input, PCM 2CH 32K-192KHz 16/24bit] Dante® OUT [Digital audio output, PCM 2CH 44.1K-96KHz 16/24Bit]	
Audio Parameters	Input Impedance	N/A
	Line Input Level (Maximum)	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% at +4dBu, 1KHz
	Audio Output Delay	< 1ms
Transmission Distance	328ft/100m (CAT6/6A/7)	
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)	

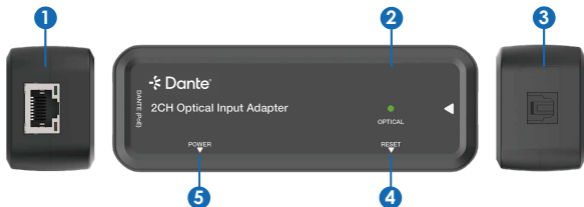
Connection

1x OPTICAL IN [S/PDIF, female]
1x DANTE [RJ45 connector, PoE]
1x POWER [USB-C port, 12-pin female]
1x RESET button [System reset button]
1x OPTICAL LED [Green color, optical signal indicator]

Mechanical

Housing	Plastic Enclosure
Color	Black
Dimensions	115mm [W] x 40mm [D] x 28 mm [H]
Weight	88g
Power Supply	USB input: 5V/500mA PoE input: PoE IEEE802.3af Class 0
Power Consumption	0.69W (Max)
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C
Operating Humidity	20% ~ 80% RH (relative humidity, non-condensing)
Storage Humidity	10% ~ 90% RH (relative humidity, non-condensing)

5. Operation Controls and Functions

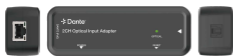


No.	Name	Function Description
1	DANTE (PoE) port	Dante® 2CH digital audio output port, connected to the Network Switch through RJ45 line, supporting PD power supply. The green LINK LED is always on after normal connection. The yellow DATA LED is flashing when there is data transmission.
2	OPTICAL LED (green)	<ul style="list-style-type: none">▪ Solid on: Active audio input is detected.▪ Light flashing: The unit is booting.
3	OPTICAL port	Optical signal input port, connected to the optical signal source device.
4	RESET button	Press this button to reset Dante® setting.
5	POWER port	USB-C port with following two functions: (1) USB-C 5V/500mA power input port. (2) MCU FW update port.

Note: The RESET button can only be used for Dante® setting reset, and the device reset setting needs to be done through the Dante® Controller.

6. Application Example

Dante® 2CH Optical Input Adapter



Mixing Console



Set-top Box

DVD or Blu-ray Player



Network Switch (PoE)



Dante® 2CH Optical Output Adapter



Dante® Amplifier



Dante® Controller

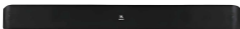
Audio Amplifier



Speakers



Soundbar



Trademarks

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