

TURTLE

DANTE DUAL LINE OUTPUT ADAPTER



User Manual

VER 1.0

Thank you for purchasing TURTLE product

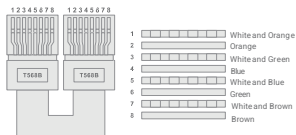
For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

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

Caution

The product requires the use of UTP connectors. Please connect in direct interconnection method and do not cross connect.



Direct Interconnection Method

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1. Introduction

Unlock the power of pristine digital audio with the Dante® 2CH Line Output Adapter. Built on the cutting-edge Dante® Ultimo 2x2 solution, this adapter converts crystal-clear Dante® digital audio into two-channel balanced or unbalanced analog audio.

With 5-level sensitivity adjustment for analog outputs, you can tailor your sound with ease. Additionally, the adapter is powered via USB-C or PoE, ensuring flexible and convenient power options. Perfect for professional-grade audio integrations that demand the best.

2. Features

- Dante® 2CH digital audio to two-channel analog audio
- Balanced/unbalanced analog audio output
- Dante® audio sampling rate supports 44.1/48/88.2/96KHz@24bit
- Dante® audio delay supports 1/2/5ms (configurable)
- Analog audio output supports 5-level gain adjustment (+18dBu, +4dBu, 0dBu, 0dBv, -10dBv)
- Supports local USB-C port power supply and PoE function (Class 0 802.3af PoE)
- Compact design for easy and flexible installation

3. Package Contents

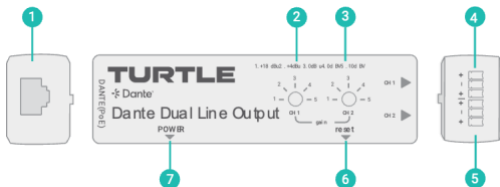
- 1x Dante® 2CH Line Output Adapter
- 1x 6pin-3.5mm Phoenix Connector (male)
- 2x Hook & Loop
- 1x User Manual

4. Specifications

Technical		
Input	Dante® 2CH digital audio	
Output	Two-channel balanced/unbalanced analog 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	DANTE IN [Digital audio input, PCM 2CH 44.1K-96KHz 16/24bit] LINE OUT [Analog audio output, Balanced/unbalanced 2CH, Max output level +18dBu]	
Audio Parameters	LINE OUT	
	Output Impedance	600 Ohm balanced 300 Ohm unbalanced
	Line Output Level (Maximum)	+18dBu (6.15Vrms) @balanced audio +12dBu (3.08Vrms) @unbalanced audio
	Frequency Response	20Hz to 20kHz (-/+0.5dB)
	Dynamic Range	>100dB@0dBu, 1kHzA-weighted
	Audio S/N Ratio	>100dB@0dBu, 1kHzA-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: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)	

Connection	
Input port	1x DANTE [RJ45 connector, PoE] 1x POWER [USB-C with USB power only, 12-pin female]
Output port	1x CH1/CH2 LINE IN [6pin-3.5mm phoenix connector]
Others	1x RESET button [System reboot button] 2x GAIN knob [5- level dip switch]
Mechanical	
Housing	Plastic Enclosure
Color	Black
Dimensions	115mm [W] x 40mm [D] x 28 mm [H]
Weight	94g
Power Supply	USB input: 5V/500mA PoE input: PoE IEEE802.3af Class 0
Power Consumption	1.25W (Max)
Operating Temperature	32 ~ 104°F / 0 ~ 40°C
Storage Temperature	-4 ~ 140°F / -20 ~ 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

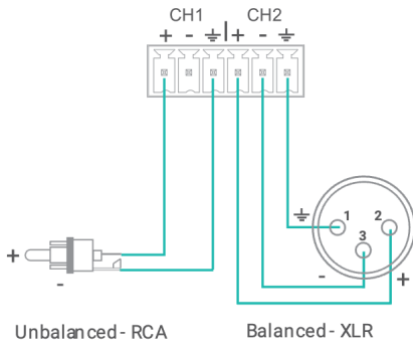


No.	Name	Function Description
1	DANTE (PoE) port	Dante® digital audio input port, connected to the Network Switch through RJ45 line, supporting PD power supply. The green LINK LED is always on after normal connection. The yellow DATA LED is flashing when there is data transmission.
2	CH1 Knob	The 5-level gain adjustment knob for analog audio output channel 1. The knob arrows indicate: 1. +18dBu, 2. +4dBu, 3. 0dBu, 4. 0dBv, 5. -10dBv.
3	CH2 Knob	The 5-level gain adjustment knob for analog audio output channel 2. The knob arrows indicate: 1. +18dBu, 2. +4dBu, 3. 0dBu, 4. 0dBv, 5. -10dBv.
4	CH1 port	Balanced/unbalanced analog audio output port 1, connected to the analog audio playback device.
5	CH2 port	Balanced/unbalanced analog audio output port 2, connected to the analog audio playback device.
6	RESET button	Press this button to reboot the unit.
7	POWER port	USB-C 5V/500mA power input port.

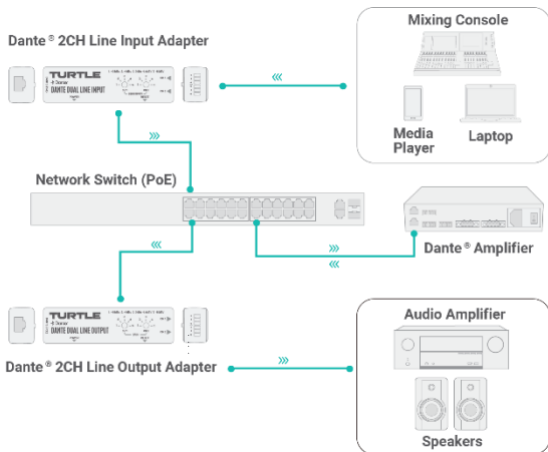
Note: The RESET button can only be used for device reboot, and device reset setting needs to be done through the Dante® Controller.

6. Wiring Configuration

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



7. Application Example



Trademarks

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