

TURTLE

DANTE DUAL LINE INPUT ADAPTER



User Manual

VER 1.0

Thank you for purchasing TURTLE product

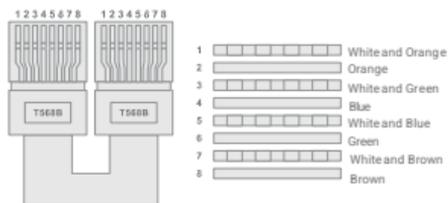
For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

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

Table of Contents

| | |
|---|---|
| 1. Introduction | 1 |
| 2. Features | 1 |
| 3. Package Contents | 1 |
| 4. Specifications | 2 |
| 5. Operation Controls and Functions | 4 |
| 6. Wiring Configuration | 5 |
| 7. Application Example | 6 |

1. Introduction

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

With 5-level sensitivity adjustment for analog inputs, 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

- Two-channel analog audio to Dante® 2CH digital audio
Balanced/unbalanced analog audio input
- Dante® audio sampling rate supports 44.1/48/88.2/96KHz@24bit
- Dante® audio delay supports 1/2/5ms (configurable)
- Analog audio input supports 5-level sensitivity adjustment (+24dBu, +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

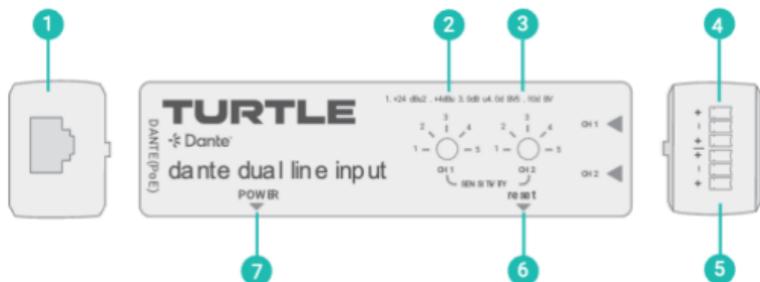
- 1x Dante® 2CH Line Input Adapter
- 1x 6pin-3.5mm Phoenix Connector (male)
- 2x Hook & Loop

4. Specifications

| Technical | | |
|--------------------------------|---|---|
| Input | Two-channel balanced/unbalanced analog 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 | LINE IN [Analog audio input, Balanced/unbalanced 2CH, Max input level +24dBu] DANTE OUT [Digital audio output, PCM 2CH 44.1K-96KHz 16/24bit] | |
| Audio Parameters | LINE IN | |
| | Input Impedance | 20k Ohm balanced 10k Ohm unbalanced |
| | Line Input Level (Maximum) | +24dBu (12.28Vrms) @balanced audio +18dBu (6.15Vrms) @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 CH1/CH2 LINE IN [6pin-3.5mm phoenix connector] 1x POWER [USB-C power and firmware update port, 12-pin female] |
| Output port | 1x DANTE [RJ45 connector, PoE] |
| Others | 1x RESET button [System reboot button] 2x SENSITIVITY 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 | 2W (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

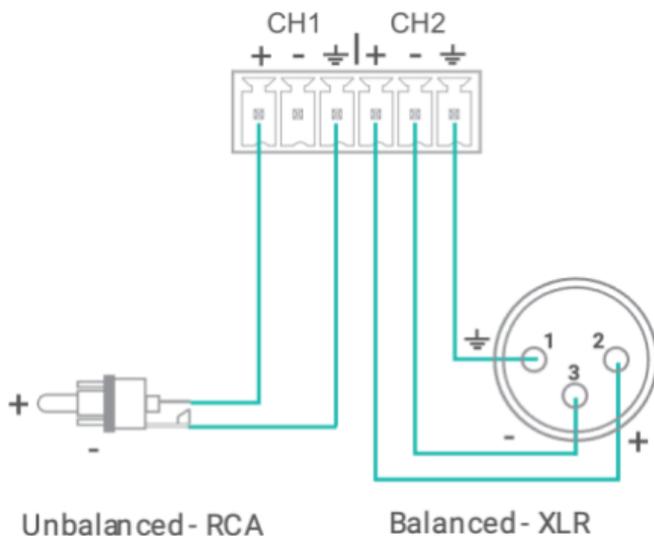


| No. | Name | Function Description |
|-----|------------------|--|
| 1 | DANTE (PoE) port | Dante® digital audio output port, connected to the Network Switch through RJ45 line, supporting PD power supply. The green LINK LED is always on after normal connection. The yellow DATA LED is flashing when there is data transmission. |
| 2 | CH1 Knob | The 5-level sensitivity adjustment knob for analog audio input channel 1. The knob arrows indicate: 1. +24dBu, 2. +4dBu, 3. 0dBu, 4. 0dBV, 5. -10dBV. |
| 3 | CH2 Knob | The 5-level sensitivity adjustment knob for analog audio input channel 2. The knob arrows indicate: 1. +24dBu, 2. +4dBu, 3. 0dBu, 4. 0dBV, 5. -10dBV. |
| 4 | CH1 port | Balanced/unbalanced analog audio input port 1, connected to the analog audio source device. |
| 5 | CH2 port | Balanced/unbalanced analog audio input port 2, connected to the analog audio source device. |
| 6 | RESET button | Press this button to reboot the unit. |
| 7 | POWER port | USB-C port with following two functions: (1) USB-C 5V/500mA power input port. (2) Firmware update port. |

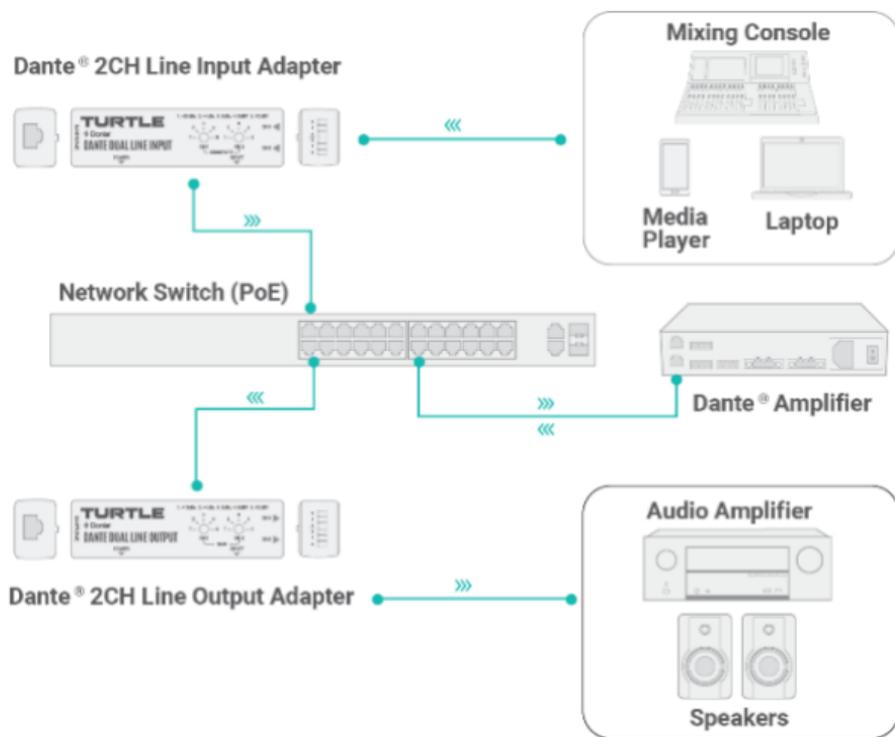
Note: The RESET button can only be used for device reboot, and device reset setting needs to be done through the Dante® Controller.

6. Wiring Configuration

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



7. Application Example



Trademarks

Dante® is registered trademark of Audinate Pty Ltd. All other trademarks are the property of their respective owners.