

Dante® 2CH HDMI™ 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 HDMI™ Input Adapter is an audio transmitter based on the Dante® Ultimo 2x2. It converts two-channel HDMI™ 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 HDMI™ audio to Dante® 2CH digital audio
- ☆ HDMI™ audio 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 HDMI™ Input Adapter
- ② 2x Hook & Loop
- ③ 1x User Manual

4. Specifications

Technical	
Input	Two-channel HDMI™ 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)	
HDMI™ Compliance	HDMI™ 2.0b	
HDCP Compliance	HDCP 2.3	
Video Bandwidth	18Gbps	
Color Depth	8/10/12bit	
Color Space	RGB, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0	
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG	
Input Video Resolutions	All resolutions as specified in HDMI™ 2.0b	
Audio Formats	HDMI™ 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)	

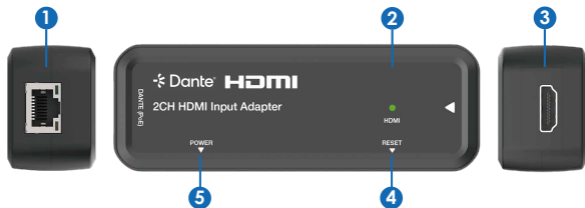
Connection

- 1x HDMI™ IN [Type A, 19-pin female]
- 1x DANTE [RJ45 connector, PoE]
- 1x POWER [USB-C port, 12-pin female]
- 1x RESET button [System reset button]
- 1x HDMI™ LED [Green color, HDMI™ signal indicator]

Mechanical

Housing	Plastic Enclosure
Color	Black
Dimensions	115mm [W] x 40mm [D] x 28 mm [H]
Weight	90g
Power Supply	USB input: 5V/500mA PoE input: PoE IEEE802.3af Class 0
Power Consumption	1.8W (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	HDMI LED (green)	<ul style="list-style-type: none"> • Solid on: Active audio input is detected. • Light flashing: The unit is booting.
3	HDMI port	HDMI signal input port, connected to the HDMI source device. It is used to de-embed HDMI audio.
4	RESET button	Press this button to reset Dante® setting.
5	POWER port	USB-C port with following three functions: (1) USB-C 5V/500mA power input port. (2) MCU FW update port. (3) API commands control port, supporting download user defined EDID.

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

6. API Commands

The adapter supports API commands control. Connect the POWER port to a PC with a USB-C cable. Then, open a serial command tool on PC to send API commands to control the adapter.

The supported commands are as following.

API Commands				
Service port (USB-C virtual RS-232) communication protocol Baud rate: 115200(Fixed) Data bit: 8 Stop bit: 1 Parity bit: none				
Command	Function	Example	Feedback	Factory Default
?	List all commands	?		
help	List all commands	help		
get fw version	Get firmware version	get fw version	MCU: V1.00.01	

Command	Function	Example	Feedback	Factory Default
set reboot	Reboot the device	set reboot	Reboot... System Initializing... Initialization Finished! BOOT: V1.00.01 MCU: V1.00.01	
set reset	Reset to factory defaults	set reset	Sure to RESET to default settings? Type "Yes" after next prompt to confirm...	
get status	Get system status	get status	Please refer to the note for "get status".	
set edid x	Set HDMI input port EDID to (x=0~2) x=0: Internal EDID (4K60, Audio 2CH PCM) x=1: User Defined 1 x=2: User Defined 2	set edid 0 set edid 1 set edid 2	EDID 0: Internal EDID (4K60, Audio 2CH PCM) EDID 1: User Defined 1 EDID 2: User Defined 2	0
get edid	Get HDMI input port EDID	get edid	EDID 1: User Defined 1	
set user edid x <y>	Set user defined EDID (x=0~2) to y x=0: User Defined 1 and User Defined 2 x=1: User Defined 1 x=2: User Defined 2 y=00 FF FF FF (y is 256 bytes EDID data)	set user edid 1 <00 FF FF FF....>	User Defined 1 EDID is loaded	
get edid data x	Get EDID data (x=0~2) x=0: Internal EDID (4K60, Audio 2CH PCM) x=1: User Defined 1 x=2: User Defined 2	get edid data 0	Internal EDID <00 FF FF FF....> User Defined 1 <00 FF FF FF....> User Defined 2 <00 FF FF FF....>	
set hotplug	Toggle HDMI input port hotplug event (low 1s then high)	set hotplug	Hotplug event	

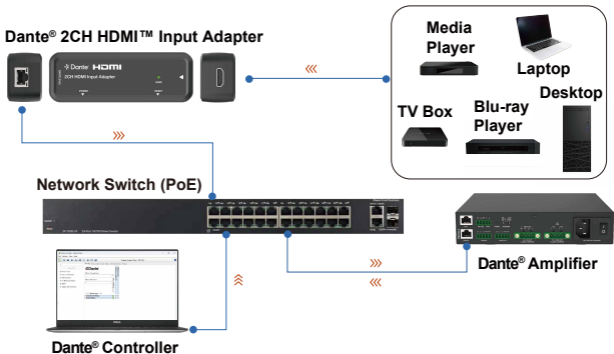
Note: The feedback of the command of “get status” is as following.

```
=====
Status Info Dante 2CH HDMI Input Adapter
MCU: V1.00.01
```

```
Input   Cable      Resolution      ColorSpace      ColorDepth
HDMI    Connected    3840x2160p60Hz YUV 4:4:4      8bit
```

```
Audio           HDCP   EDID
PCM 2CH 48K     2.2    Internal EDID
=====
```

7. Application Example



Trademarks

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