DVDO

DVDO-AudioE-1

HDMI 2.0 Audio Extractor

Important Safety Instructions

1. Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

6. Clean this apparatus only with dry cloth.

2. Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated.

7. Unplug this apparatus during lightning storms or when unused for long periods of time.

3. To prevent risk of electric shock or fire hazard due to overheating, do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.

8. Protect the power cord from being walked on or pinched particularly at plugs.

4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Only use attachments / accessories specified by the manufacturer.

5. Do not place sources of naked flames, such as lighted candles, on the unit.

10. Refer all servicing to qualified service personnel.

Table of Contents

Introduction

Overview

DVDO-AudioE-1 is an HDMI2.0 audio extractor with resolutions up to 4K@60Hz (Chroma sub-sampling 4:4:4 8-bit) and HDCP 2.2.

Its digital or analog audio output allows audio to be de-embedded from HDMI input and sent to audio distribution system, such as AVR or Amplifier. Third-gear slide switch for audio setting in EDID has 3 EDID (pass-through, 2.0ch and 5.1ch) presets for EDID management.

By auto-detecting input signal status, it could automatically trigger CEC command to turn on or off TV with CEC support. It can be used in any AV application, such as homes, offices, digital entertainment centers, control centers, conference rooms, schools and corporate training environments which need HDMI audio extraction.

Features

- Supports HDMI input and HDMI output resolutions up to 4K@60Hz 4:4:4 8bit;
- Supports HDCP 2.2 pass through;
- HDMI audio de-embedded out with SPDIF (Toslink) and L/R audio (RCA, white and red);
  - ➤ SPDIF supports: PCM2.0, up to Dolby Digital and DTS 5.1;
  - ➤ L/R output supports: PCM2.0 only;
- Compact appearance, and easy to install;
- Third-gear slide switch for audio setting in EDID: pass-through, 2.0ch and 5.1ch;
- Built in CEC controller from HDMI out;
- Automatic input cable equalization and signal regeneration compensation.

Package Contents

Before you start the installation of the product, please check the package contents as below:

- DVDO-AudioE-1 x 1
- DC 5V 1A Power Supply (with US, UK, EU, AU Pins) x 1
- Mounting Brackets (with Screws) x 2
- User Manual x 1

Specifications

Technical	
Input/Output Video Port	1 x HDMI IN; 1 x HDMI OUT
Input/Output Video Signal Type	HDMI up to 4K@60Hz (4:4:4 8-bit) with HDCP 2.2
Input Resolution Supported	**VESA:** $800x600^8$, $1024x768^8$, $1280x768^8$, $1280x800^8$, $1280x960^8$, $1280x1024^8$, $1360x768^8$, $1366x768^8$, $1440x900^8$, $1600x900^8$, $1600x1200^8$, $1680x1050^8$, $1920x1200^8$ **SMPTE:** $720x480P^{7,8}$, $720x576P^6$, $1280x720P^{6,7,8}$, $1920x1080P^{6,7,8}$, $3840x2160P^{2,3,5,6,8}$, $4096x2160P^{2,3,5,6,8}$ 1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = 60 Hz;
Output Resolution Supported	**VESA:** $800x600^8$, $1024x768^8$, $1280x768^8$, $1280x800^8$, $1280x960^8$, $1280x1024^8$, $1360x768^8$, $1366x768^8$, $1400x1050^8$, $1440x900^8$, $1600x900^8$, $1600x1200^8$, $1680x1050^8$, $1920x1200^8$ **SMPTE:** $720x480P^8$, $720x576P^6$, $1280x720P^{6,8}$, $1920x1080P^{1,2,3,4,5,6,7,8}$, $3840x2160P^{2,3,5,6,8}$, $4096x2160P^{2,3,5,6,8}$ 1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = 60 Hz
Maximum Data Rate	18Gbps
Audio Output	1 x S/PDIF OUT; 1 x AUDIO OUT (L&R)
Audio Format	• **SPDIF OUT:** PCM 2.0, up to Dolby Digital and DTS 5.1 • **AUDIO (L/R) OUT:** PCM 2.0 • **HDMI IN/OUT:** PCM 2.0/5.1/7.1, Dolby True HD and DTS HD Master Audio

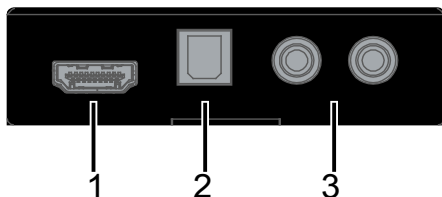| General	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge)/ ±4kV (Contact discharge)
Power Supply	DC 5V 1A
Power Consumption (Max)	2.88W
Device Dimension (W x H x D)	80mm x 22mm x 90mm/3.15'' x 0.87'' x 3.54''
Product Weight	0.23kg/0.51lb

Transmission Distance

Cable Type	Range	Supported Video
HDMI	Input/Output: 15m/49ft	1080P@60Hz 36bpp
	Input: 5m/16ft Output: 10m/33ft	4K@60Hz 4:2:0 24bpp
	Input/Output: 5m/16ft	4K@60Hz 4:4:4 24bpp

Panel Description

Transmitter

<u>Front Panel</u>

No.	Name	Description
1	HDMI OUT	Connect to an HDMI display.
2	S/PDIF OUT	TOSLINK connector, HDMI digital audio de-embedded out, connect to an audio distribution system such as amplifier.
3	AUDIO OUT (L and R)	Stereo RCA connector, HDMI analog audio de-embedded out, connects to L/R channel of audio distribution system such as speaker. **Note:** 2 x RCA for L/R output, supports PCM 2.0 only.

Rear Panel
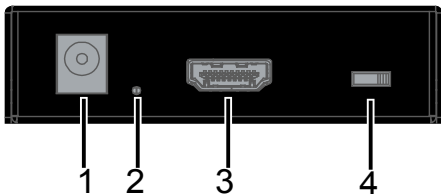
| No.	Name	Description
1	DC 5V	Connect to the power adapter provided.
2	POWER LED	**ON:** The device is powered on. **OFF:** The device is powered off.
3	HDMI IN	Connect to an HDMI source.
4	EDID	Slide Switch for EDID Management. **Note**: More information, please refer to "**EDID Management**" section.

Installation and Wiring

Installation

Note: Before installation, please ensure the device is disconnected from the power source.

Steps to install the device in a suitable location:

1. Attach the installation bracket to the enclosure using the screws provided in the package separately.
2. The bracket is attached to the enclosure as shown.
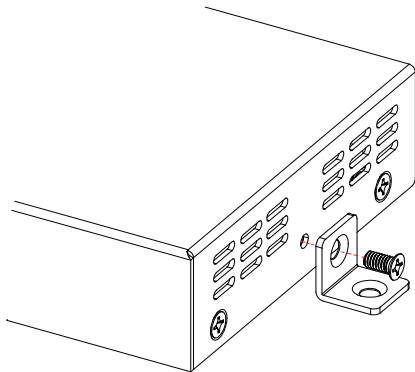
3. Repeat steps from 1 to 2 for the other side of the device.
4. Attach the brackets to the surface you want to hold the device against using the screws (provided by others).

Wiring

Warnings:

- Before wiring, disconnect the power from the receiver.
- During wiring, connect and disconnect the cables gently.

Steps for device wiring:

1. Connect HDMI IN

   Connect an HDMI source (such as Apple TX, STB, Xbox, Media player, Blu-ray player, etc.) to HDMI IN port.

2. Connect HDMI OUT

   Connect an HDMI display (TV, Monitor, Projector, etc.) to HDMI OUT port.

3. Connect to S/PDIF OUT

   Connect a digital audio distribution system (such as an amplifier) to S/PDIF OUT port.

4. Connect to AUDIO OUT (L&R)

   Connect to an analog distribution system (such as a speaker) to AUDIO OUT port.

   Note: Connect L port to left channel, and connect R port to right channel.

5. Connect to the power adapter provided.

6. Power on all devices.

Display

Amplifier

HDMI OUT

S/PDIF
OUT

AUDIO OUT

HDMI IN

Blu-ray Player
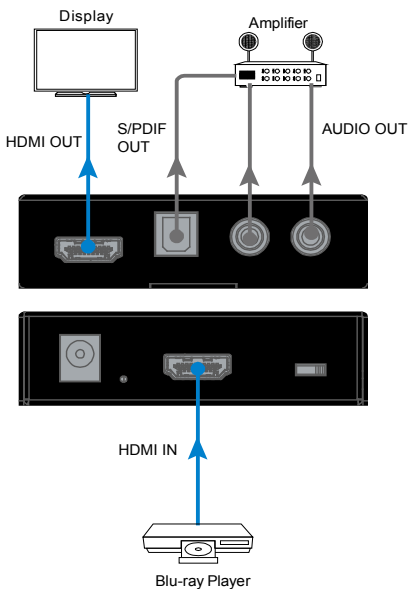
EDID Management

EDID (Extended Display Identification Data) is a data structure provided by a digital display to describe its capabilities to a video source.

The device features EDID management, should any device compatibility issues occur during installation, please refer to the table below and set up the EDID slide switch manually.

EDID

PASS 2.0CH 5.1CH
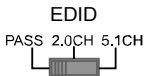
By default, the slide switch is set to "PASS" position.

Position	Descriptions
PASS (Default)	Allows EDID pass-through from the display to the source for optimal video and audio outputs to the display.
2.0CH	Transfers 2.0CH EDID of 4KCVH2H to the source for Optimum video and 2.0CH audio outputs to the display.
5.1CH	Transfers 5.1CH EDID of 4KCVH2H to the source for Optimum video and 5.1CH audio outputs to the display.

Note:

- If EDID Copy fails, a fixed 1920 x 1080P@60Hz 2.0CH would be provided to source device.
- In order to achieve a better user experience, please refer to the following audio support descriptions and examples for EDID setting during installation.

<u>Examples:</u>

1. Set the EDID switch to **PASS** (default) position——Copy EDID from HDMI OUT.

Display's EDID	HDMI Output Audio	SPDIF Output Audio	L/R Output Audio
Dolby /DTS 7.1	Dolby/DTS 7.1	No Signal	No Signal

Display's EDID	HDMI Output Audio	SPDIF Output Audio	L/R Output Audio
Dolby/DTS 5.1	Dolby/DTS 5.1	Dolby/DTS 5.1	No Signal
PCM 7.1	PCM 7.1	PCM 2.0	PCM 2.0
PCM 5.1	PCM 5.1	PCM 2.0	PCM 2.0
PCM 2.0	PCM 2.0	PCM 2.0	PCM 2.0

In "PASS" position, when connected to a TV with 1080P, DTS 5.1 EDID, the device transmits the 1080P, DTS 5.1 signal to the TV, S/PDIF output audio is DTS 5.1, while L/R output has no audio signal.

2. Set the EDID to 2.0CH position——for 2.0CH audio output.

Display's EDID	SPDIF Output Audio	L/R Output Audio
Dolby/DTS 7.1 Dolby/DTS 5.1 PCM 7.1/5.1/2.0	PCM 2.0	PCM 2.0

In "2.0CH" position, when connected to a TV with 1080P, DTS 5.1 EDID, the device transmits the 1080P, PCM 2.0 signal to the TV, both S/PDIF and L/R output audio are PCM 2.0.

3. Set the EDID to 5.1CH position——for 5.1CH audio output

Display's EDID	HDMI Output Audio	SPDIF Output Audio	L/R Output Audio
Dolby /DTS 7.1	Dolby/DTS 5.1	Dolby/ DTS 5.1	No Signal
Dolby/DTS 5.1	Dolby/DTS 5.1	Dolby/ DTS 5.1	No Signal
PCM 7.1	PCM 5.1	PCM 2.0	PCM2.0
PCM 5.1	PCM 5.1	PCM 2.0	PCM2.0
PCM 2.0	PCM 2.0	PCM 2.0	PCM2.0

In "5.1CH" position, when connected to a TV with 1080P, PCM 7.1 EDID, the device transmits the 1080P, PCM 5.1 signal to the TV, both S/PDIF and L/R output audio are PCM 2.0.

Warranty Terms and Conditions

For the following cases we shall charge for the service(s) claimed for the products if the product is still remediable and the warranty card becomes unenforceable or inapplicable.

1. The original serial number (specified by us) labeled on the product has been removed, erased, replaced, defaced or is illegible.

2. The warranty has expired.

3. The defects are caused by the fact that the product is repaired, dismantled or altered by anyone that is not from an authorized service partner. The defects are caused by the fact that the product is used or handled improperly, roughly or not as instructed in the applicable User Guide.

4. The defects are caused by any force majeure including but not limited to accidents, fire, earthquake, lightning, tsunami and war.

5. The service, configuration and gifts promised by salesman only but not covered by normal contract.

6. We preserve the right for interpretation of these cases above and to make changes to them at any time without notice.

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