



DPHD-912

**8K DP|HDMI™ Audio Extractor
(3.5mm, Optical)**

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USER MANUAL

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Thank you for purchasing this product

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

Important Safety Note – Surge Protection Recommended

This product contains sensitive electronic components that may be damaged by electrical spikes, surges, lightning strikes, or static discharge. To protect and extend the service life of your equipment, we strongly recommend using a surge protection device.

Warranty Registration

Activate your warranty by registering your product at:

→ www.orei.com/register

Need Technical Support? We're Here to Help.

Our experienced Technical Support Team is available to answer your questions, offer expert advice, and help troubleshoot any issues to keep your project on track—on time and on budget.

Live Support Hours (US/Canada/Mexico):

🕒 Monday–Friday | 9:00 a.m. – 5:00 p.m. Central Time

Contact Us:

✉ Email: info@orei.com

📞 Phone: 877-290-5530

💬 Chat Live: www.orei.com

Send us an instant message—our team typically responds within moments during live support hours.

Introduction

The DPHD-912 audio extractor features OREI's latest DP|HD combo technology, allowing a single input port to accept either DisplayPort or HDMI™ signals for maximum flexibility. It is designed to extract audio from HDMI™- or DP-compliant sources such as computers, media players, set-top boxes, and streaming devices, and output the audio simultaneously through optical (SPDIF) and 3.5mm stereo ports.

Compliant with HDMI™ 2.0b, DisplayPort 1.4 (ALT Mode), and HDCP 2.3, the DPHD-912 supports high-resolution video up to 8K@30Hz and 4K@120Hz via DisplayPort, and 4K@60Hz via HDMI™, with bandwidth support of 32.4Gbps (DP) and 18Gbps (HDMI™). It also passes through advanced video formats including HDR, HDR10, HDR10+, Dolby Vision, and HLG, along with CEC support for compatible devices.

For audio output, the optical port supports LPCM 2CH, Dolby Digital 2/5.1, and DTS 2/5.1, while the 3.5mm port delivers analog LPCM 2.0 audio. An EDID management switch ensures reliable compatibility across different source and audio device combinations. Housed in a compact and durable enclosure, the DPHD-912 is well suited for both home and professional AV installations.

1. **DisplayPort/HDMI™ Combo Connector** – Supports both DP and HDMI™ interfaces on input and output ports for maximum installation flexibility.
2. **HDCP 2.3 & DisplayPort 1.4 Alt mode Compliant** – Ensures compatibility with the latest media and content protection standards.
3. **Ultra-High Video Resolutions** – Up to 8K@30Hz, 4K@120Hz for DP input and 4K@60Hz for HDMI™ input.
4. **High Bandwidth** – Supports 32.4Gbps (DP) and 18Gbps (HDMI™) video bandwidth.
5. **Advanced HDR Pass-Through** – Supports HDR10, HDR10+, Dolby Vision, and HLG formats.
6. **Automatic Interface Detection** – Automatically recognizes DP/HDMI™ signals on both input and output ports.
7. **4-Way Signal Conversion** – Fully supports DP->DP, DP->HDMI™, HDMI™->DP, and HDMI™->HDMI™ conversions.
8. **Audio Extraction** – Extracts audio from HDMI™/DP sources to optical or L/R analog audio outputs.
DP/HDMI™ Audio: LPCM 7.1CH, Dolby TrueHD, DTS-HD Master Audio
Optical Audio: LPCM 2.0, Dolby Digital 2/5.1CH, DTS 2/5.1CH
Analog Audio: LPCM 2.0
9. **CEC Pass-Through** – Maintains device control signals across the converter.

Package Contents

10. **Compact & Flexible Design** – Space-saving form factor ideal for professional AV, home theater, and mixed-signal display setups.

Package Contents

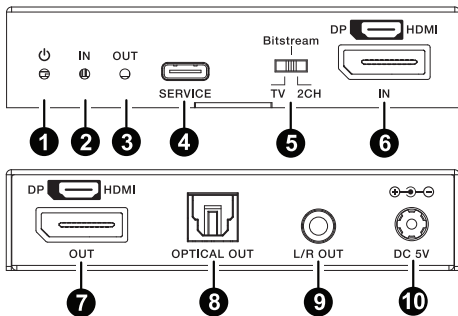
1.	DPHD-912	1 pcs
2.	Power Adapter	1 pcs
3.	User Manual	1 pcs

Technical	
HDMI™ Compliance	HDMI™ 2.0b (IN) / HDMI™ 2.1b (OUT)
DP Compliance	DisplayPort 1.4 ALT Mode
HDCP Compliance	HDCP 2.3/2.2/1.x
Video Bandwidth	HDMI™ IN: 18Gbps HDMI™ OUT: 48Gbps DP: 32.4Gbps
Video Resolution	DP Input & DP/HDMI™ Output: 640x480p60Hz, 800x600p60Hz, 1024x768p60Hz, 1280x1024p60Hz, 1360x768p60Hz, 1440x900p60Hz, 1440x1050p60Hz, 1680x1050p60Hz, 1920x1200p60Hz, 480i60Hz, 480p60Hz, 576i50Hz, 576p50Hz, 720p50Hz, 720p60Hz, 1080i50Hz, 1080i60Hz, 1920x1080p24/25/30/50/60/100/120Hz, 3840x2160p24/25/30/50/60/100/120Hz, 4096x2160p24/25/30/50/60/100/120Hz, 5120x2160p24/25/30/50/60/100/120Hz, 7680x4320p24/25/30Hz HDMI™ Input & DP/HDMI™ Output: 640x480p60Hz, 800x600p60Hz, 1024x768p60Hz, 1280x1024p60Hz, 1360x768p60Hz, 1440x900p60Hz, 1440x1050p60Hz, 1680x1050p60Hz, 1920x1200p60Hz, 480i60Hz, 480p60Hz, 576i50Hz, 576p50Hz, 720p50Hz, 720p60Hz, 1080i50Hz, 1080i60Hz, 1920x1080p24/25/ 30/50/60/100/120Hz, 3840x2160p24/25/30/50/60Hz, 4096x2160p24/25/30/50/60Hz
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	8/10/12-bit
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG

Specifications

Audio Format	DP/HDMI™ Audio: LPCM 7.1CH, Dolby True HD, DTS-X, ATMOS and DTS-HD Master Optical Audio: LPCM 2.0, Dolby Digital 2/5.1CH, DTS 2/5.1CH Analog Audio: LPCM 2.0
Audio Sampling Rate	192kHz
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
Connection	
Input	1× DP/HDMI™ [combo connector]
Output	1× DP/HDMI™ [combo connector] 1× L/R [3.5mm stereo mini-jack] 1× OPTICAL [S/PDIF]
Control	1× SERVICE [USB-C, update port]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	L: 90mm / 3.54in W: 72mm / 2.83in H: 20mm / 0.79in
Weight	166g / 5.86oz
Power Supply	DC 5V/1A
Power Consumption	2.4W (Max)
Operation Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Operating Humidity	20% ~ 80% relative humidity, no condensation
Storage Humidity	10% ~ 90% relative humidity, no condensation

Operation Controls and Functions



No.	Name	Function Description
1.	Power LED	The green LED lights up, when the device is powered on.
2.	IN LED	The green LED lights up, when the DP/HDMI IN port is connected to an active source device.
3.	OUT LED	The green LED lights up, when the DP/HDMI OUT port is connected to an active display device.
4.	SERVICE	Used for firmware update.
5.	TV/Bitstream /2CH dial switch	Switch between 3 EDID presets. TV: Copy EDID form TV. Bitstream: Copy TV video EDID + 5.1CH audio EDID. 2CH: Copy TV video EDID + 2.0CH audio EDID.

DisplayPort/HDMI Combo Connector

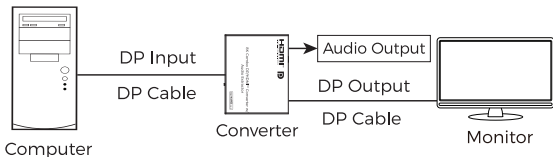
No.	Name	Function Description
6.	DP/HDMI IN	Connect a media source device such as Computer, Streaming device, etc.
7.	DP/HDMI OUT	Connect a display device such as a TV, Monitor, etc.
8.	OPTICAL OUT	Connect an audio device such as soundbar, AVR, etc.
9.	L/R OUT	Connect an audio device such as headphone, soundbar, etc.
10.	DC 5V	Connect the included power adapter.

DisplayPort/HDMI Combo Connector

OREI's latest DP|HD combo technology uses a single hybrid connector that supports both DisplayPort and HDMI video interfaces, allowing flexible installation and mixed display configurations.

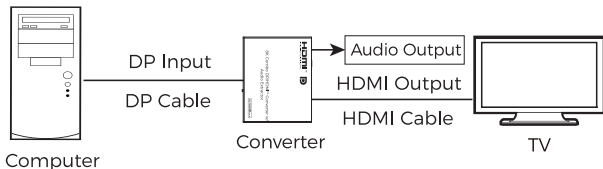
Below are four possible connection scenarios, along with the corresponding video resolutions supported in each setup.

DP to DP (Up to 8K@30Hz):

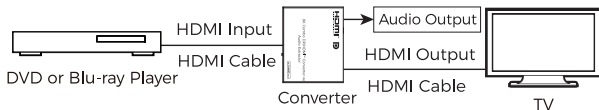


DisplayPort/HDMI Combo Connector

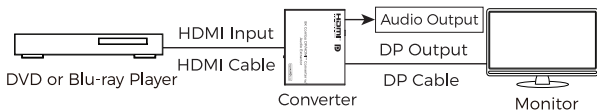
DP to HDMI (Up to 8K@30Hz):



HDMI to HDMI (Up to 4K@60Hz):



HDMI to DP (Up to 4K@60Hz):



DisplayPort/HDMI Combo Connector

Note:

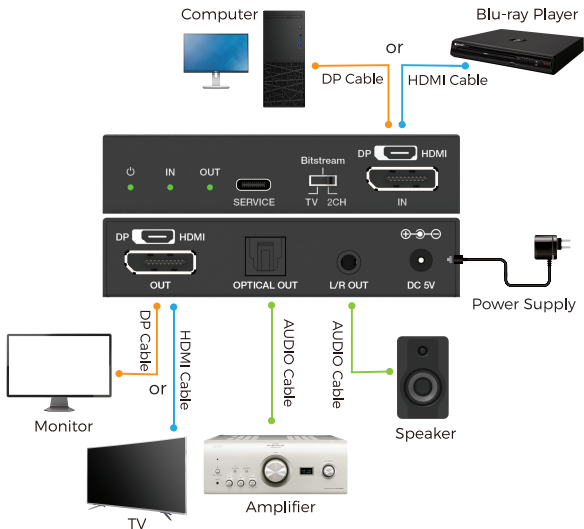
When inserting an HDMI cable into the input or output port, align it slightly to the right, as shown below. The DisplayPort connector occupies the full width of the combo port, while the HDMI connector uses only the right half. Ensure the cable is inserted correctly to prevent damage to the port.



Automatic Recognition:

The port automatically detects whether a DisplayPort or HDMI cable is connected. For example, when a DisplayPort source is connected to the input, the device will automatically recognize the DP signal and process it for output.

Application Example



HDMITM
HIGH-DEFINITION MULTIMEDIA INTERFACE

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

FAQs & Troubleshooting

1. No video on display

- Verify the source resolution is supported by the display.
 - Try switching the EDID mode.
- Make sure you are using HDMI 2.1 or DP 1.4 or higher cables.

2. Analog audio output has no sound

- Analog output supports LPCM 2.0 only.
- Ensure the source device is set to output stereo.

3. No signal when converting DP to HDMI or HDMI to DP

- Ensure the display supports the video resolution being sent from the source.
 - Make sure you are using HDMI 2.1 or DP 1.4 or higher cables.
 - Try switching the EDID mode.

4. CEC not functioning

CEC is an HDMI-only feature and is not supported over DisplayPort. If either the input or the output device uses DisplayPort, CEC will not function. CEC passthrough works only when both the source and display are HDMI-based devices with CEC support enabled.

Still have some questions?

Please feel free to contact us at: info@orei.com. OR Fill out the form on the 'Contact Us' page on the website.

Our team will be more than happy to help you.

OREI Live Technical Support Hours

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