



UHD-WPE400R-K

**4K HDMI™ and USB-C Extender with Wall Plate Transmitter
400ft**

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. 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 service life of your equipment.

Please Activate your warranty by registering our product through the link below - **www.orei.com/register**

Technical Support

Need Help?

Our experienced Technical Support Team is here for you to answer your questions, give technical advice or help troubleshoot your project to get you installed on time and on budget. Call, email or chat with us now.

OREI Live Technical Support Hours

US team (US/Canada/Mexico): Monday-Friday, 9 a.m. - 5 p.m. Central Time **Support Email** - info@orei.com |

Support Number - 877-290-5530

Or

Chat Live on www.orei.com

Send us an instant message now. Our Technical Support Team will respond momentarily. Available during live support hours.

Introduction

The UHD-WPE400R-K is an HDMI Extender with a Wall Plate Transmitter that extends media signals up to 400 feet. Compliant with HDMI 2.0b, HDCP 2.2, and DP 1.4, it supports up to 4K@60Hz resolution with 18Gbps bandwidth, and video formats like HDR, Dolby Vision, and HLG. It features a USB C input to connect and send media from a laptop or PC that supports video output through USB C. It supports Bi-directional IR, RS-232, and CEC for versatile control, along with Power over Cable technology, requiring just one power adapter. Ideal for commercial or personal setups, it's perfect for presentations or clean home theater installations.



1. HDCP 2.2 and DP 1.4 compliant
2. Video resolutions up to 4K@60Hz
3. 18Gbps video bandwidth
4. Extend media signals up to 400 feet over a CAT 6/7 cable
5. HDR, Dolby Vision and HLG support
6. USB C input to connect Laptops and PCs
7. Bi-directional IR, RS-232 & CEC for versatile control
8. Power over Cable technology; allows powering the setup from either end
9. Ideal for clean installations in commercial or personal setups

Package Contents

Transmitter Only:

1.	UHD-WPE400R-K (Wall Plate Transmitter)	1 pcs
2.	Power Adapter	1 pcs
3.	2-pin 3.5mm Phoenix Connector (Male)	1 pcs
4.	3-pin 3.5mm Phoenix Connector (Male)	2 pcs
5.	User Manual	1 pcs

Transmitter & Receiver Kit:

1.	UHD-WPE400R-K (Wall Plate Transmitter)	1 pcs
2.	UHD-WPE400R-K (Receiver)	1 pcs
3.	IR Blaster Cable (1.5m)	1 pcs
4.	IR Receiver Cable (1.5m)	1 pcs
5.	2-pin 3.5mm Phoenix Connector (Male)	1 pcs
6.	3-pin 3.5mm Phoenix Connector (Male)	2 pcs
7.	3-pin 3.81mm Phoenix Connector (Male)	1 pcs
8.	Mounting Ear	2 pcs
9.	Machine Screw (KM3*4)	4 pcs
10.	Power Adapter	1 pcs
11.	User Manual	1 pcs

Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution	Up to 4K@60Hz 4:4:4, 2K@60Hz 4:4:4 Including all 3D TV format Including all resolution in computer such as 1920x1200
HDMI Audio Formats	LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus (DD+), DTS-ES, DTS HD Master, DTS HD-HRA, DTS-X
L/R Audio Format	LPCM 2.0CH
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
Color Space	RGB_4:4:4, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0
Color Depth	8-bit,10-bit,12-bit
IR Level	5Vp-p
IR Frequency	Wideband 20K-60KHz
Transmission Distance	Up to 120m/394ft at 4K/2K@60Hz 4:4:4 via CAT6/6a cable Up to 150m/492ft at 1080P@60Hz 4:4:4 via CAT6/6a cable
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)

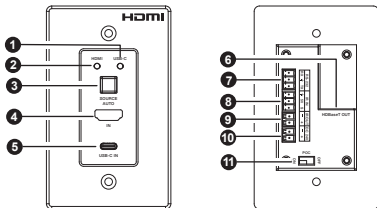
Specifications

Connection	
Transmitter	Input: 1× USB-C [USB Type C, 24-pin female] 1× HDMI [HDMI Type A, 19-pin female] Output: 1× HDBT [RJ45, 8-pin female] Control: 1× RS-232 [3-pin 3.5mm phoenix connector] 1× IR IN [3-pin 3.5mm phoenix connector] 1× IR OUT [2-pin 3.5mm phoenix connector]
Receiver	Input: 1× HDBT [RJ45, 8-pin female] Output: 1× HDMI [HDMI Type A, 19-pin female] 1× AUDIO OUT [3.5mm stereo mini-jack] Control: 1× IR IN [3.5mm stereo mini-jack] 1× IR OUT [3.5mm stereo mini-jack] 1× RS-232 [3-pin phoenix connector] 1× SERVICE [Micro-USB, update port]

Mechanical	
Housing	Transmitter/Receiver: Metal Enclosure
Color	Transmitter: White + Black; Receiver: Black
Dimensions	Transmitter: L: 69.8mm / 2.74in W: 39mm / 1.53in H: 114mm / 4.48in Receiver: L: 140mm / 5.51in W: 65mm / 2.55in H: 18mm / 0.70in
Weight	Transmitter: 203g / 7.16oz Receiver: 155g / 5.46oz
Power Supply	Input: AC 100-240V 50/60Hz; Output: DC 24V/1A (US/EU standard, CE/FCC/UL certified)
Power Consumption	Transmitter: 4.5W (Max); Receiver: 4.7W (Max)
Operation Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Operating Humidity	20%~80% relative humidity, non-condensing
Storage Humidity	10%~90% relative humidity, non-condensing

Operation Controls and Functions

Transmitter Panel



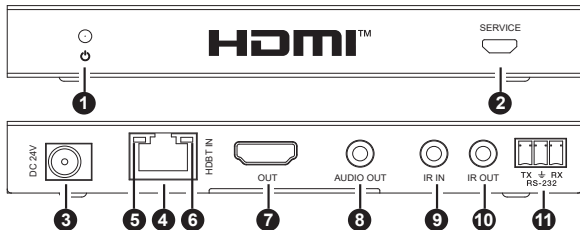
No.	Name	Function Description
1.	USB-C LED	The Green LED will light up when USB-C is selected as the input.
2.	HDMI LED	The Green LED will light up when HDMI is selected as the input.
3.	SOURCE/ AUTO button & indicator	Press to switch between the two input sources. Long press for 3 seconds to enable or disable auto switching function. The indicator will be Blue when auto switching is enabled.
4.	HDMI IN	Connect a media device such as a DVD Player, set-top box, etc.
5.	USB-C IN	Connect a media device such as a Laptop

Operation Controls and Functions

No	Name	Function Description
6.	HDBaseT OUT	Connect a CAT6/7 cable. The other end connects to the Receiver.
7.	RS-232	Control the device through a laptop or PC using RS-232 commands.
8.	IR IN	Connect an IR cable to receive the signal
9.	IR OUT	Connect an IR cable to transmit the signal
10.	DC 24V	Wire the unit through the 2-pin phoenix to power the device. If the Transmitter has active power, the Receiver would not need a power supply.
11.	PoC ON/ OFF	Turn on/off the Power over Cable function.

Operation Controls and Functions

Receiver Panel



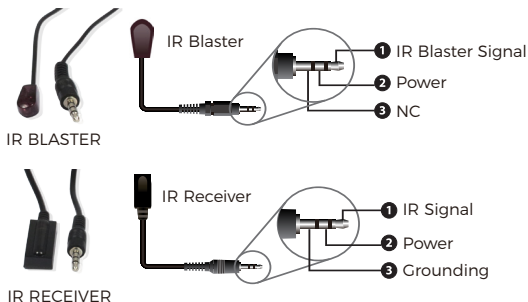
No.	Name	Function Description
1.	Power LED	The LED will light up Red when the Receiver is powered on.
2.	SERVICE	Firmware update port.
3.	DC 24V	Connect the included power adapter. If the Receiver has active power, then the Transmitter would not need a power supply.
4.	HDBT IN	Connect a CAT6/7 cable. The other end connects to the Transmitter.

Operation Controls and Functions

No	Name	Function Description
5.	Connection Signal Indicator	▪ On: Transmitter and receiver are in good connection status. ▪ Flashing: Transmitter and receiver are in poor connection status. ▪ Off: Transmitter and receiver are not connected.
6.	Data Signal Indicator	▪ On: HDMI signal with HDCP. ▪ Flashing: HDMI signal without HDCP. ▪ Off: No HDMI signal.
7.	HDMI OUT	Connect a display device such as a TV, Monitor, etc.
8.	AUDIO OUT	Connect an audio device like a soundbar or speakers
9.	IR IN	Connect the included IR Receiver cable
10.	IR OUT	Connect the included IR Blaster cable
11.	RS-232	Control the device through a laptop or PC using RS-232 commands.

Operation Controls and Functions

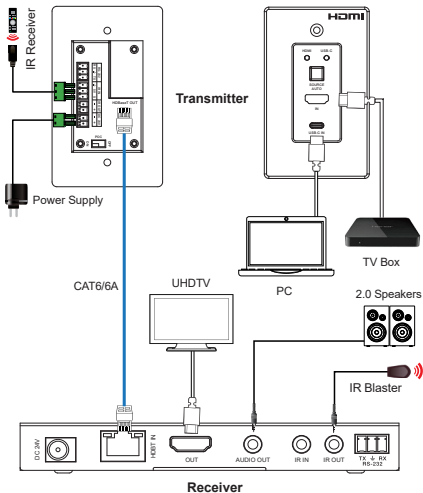
IR Receiver and Blaster Cables are defined as below:



Note:

When the angle between the IR receiver and the remote control is $\pm 45^\circ$, the transmission distance is 0-5 meters; when the angle between the IR receiver and the remote control is $\pm 90^\circ$, the transmission distance is 0-8 meters.

Application Example



HDMITM
HIGH-DEFINITION MULTIMEDIA INTERFACE

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FAQs & Troubleshooting

1. No video output on the Receiver

Please confirm the following details

1. What is the status of the Green and Yellow lights on the CAT port on the Receiver end?
2. Try changing the CAT cable. We recommend using a shielded CAT 6 cable.
3. Try lowering the resolution from the media source.

2. Can I connect this to my home network?

No, this model requires a direct connection between the Transmitter and the Receiver. They cannot be connected to a network switch.

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.

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