



4K@60Hz HDMI™ Extender - 230ft (Cat6)

UHD-IPC165-K

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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.

Registration Page

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 UHD-IPC165-K is a high-performance HDMI™ extender that transmits uncompressed 4K@60Hz video and high-quality audio over a single CAT6/6a cable, extending the signal up to 70 meters (230 feet). It supports HDMI™ 2.0 and HDCP 2.2 standards, with 18Gbps video bandwidth for uncompromised signal quality with support for advanced audio formats including LPCM 2.0, Dolby 5.1, DD+ 7.1, and DTS 5.1.

Its bi-directional Power over Cable (PoC) technology simplifies installation by requiring power at only one end. Compact and reliable, this unit is ideal for classrooms, conference rooms, digital signage, and demonstration setups.



Features & Package Contents

1. **HDMI™ 2.0 & HDCP 2.2 Compliant** – Ensures compatibility with the latest content protection protocols.
2. **Video Resolutions up to 4K@60Hz** – Transmits ultra-high-definition video with full HDMI™ 2.0 compliance.
3. **Transmission Range** – Sends media signals up to 70m (230ft) over a single CAT6/6a cable.
4. **18Gbps Video Bandwidth** – Delivers uncompressed, zero-latency AV performance.
5. **Bi-directional PoC Support** – Requires only one power source on either the transmitter end or the receiver end.
6. **Advanced Audio Support** – Compatible with LPCM 2.0, Dolby 5.1, DD+ 7.1, and DTS 5.1 formats.
7. **EDID Pass-through** – Ensures seamless handshaking between source and display devices.
8. **Versatile Applications** – Ideal for video conferencing, multimedia teaching, signage, and demonstrations.

Package Contents

1.	UHD-IPC165-K Transmitter	1 pcs
2.	UHD-IPC165-K Receiver	1 pcs
3.	Power Adapter	1 pcs
4.	User Manual	1 pcs

Specifications

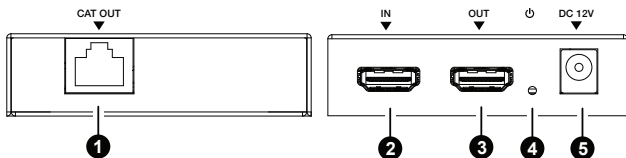
Technical	
HDMI™ Compliance	HDMI™ 2.0
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution (Input & Output)	480i60, 576i50, 480p60, 576p50, 720p50/60, 1080i50/60, 1080p 24/25/30/50/60, 3840x2160@24/25/30/60; 640x480@60, 1024x768@60, 1280x768@60, 1280x800@60, 1280x1024@60, 1360x768@60, 1440x900@60, 1680x1050@60, 1920x1200@60RB;
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	8/10/12-bit
Audio Formats	LPCM 2.0, Dolby 5.1, DD+ 7.1, DTS 5.1
Transmission Distance	70m/230ft for 4K@60 over CAT6/6a cable
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)

Specifications

Connection	
Transmitter	Input: 1× HDMI™ [Type A, 19-pin female] Output: 1× HDMI™ [Type A, 19-pin female] 1× CAT [RJ45]
Receiver	Input: 1× CAT [RJ45] Output: 1× HDMI™ [Type A, 19-pin female]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter / Receiver: L: 74mm / 2.91in W: 68mm / 2.68in H:20mm / 0.79in
Weight	Transmitter:162g / 5.71oz; Receiver:159g / 5.60oz
Power Supply	DC 12V/1A
Power Consumption	3.12W (Max)
Operating 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, non-condensing
Storage Humidity	10%-90% relative humidity, non-condensing

Operation Controls and Functions

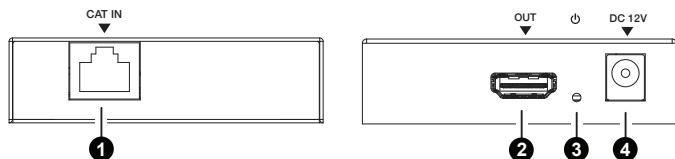
Transmitter Panel



No.	Name	Function Description
1.	CAT OUT	Connect a CAT 6/7 cable. The other end connects to the Receiver.
2.	IN	Connect a media source device such as DVD player, Streaming device, etc.
3.	OUT	Connect a display device such as TV, Monitor, etc.
4.	Power LED	The green LED will light up when Transmitter is powered on.
5.	DC 12V	Connect the included power adapter.

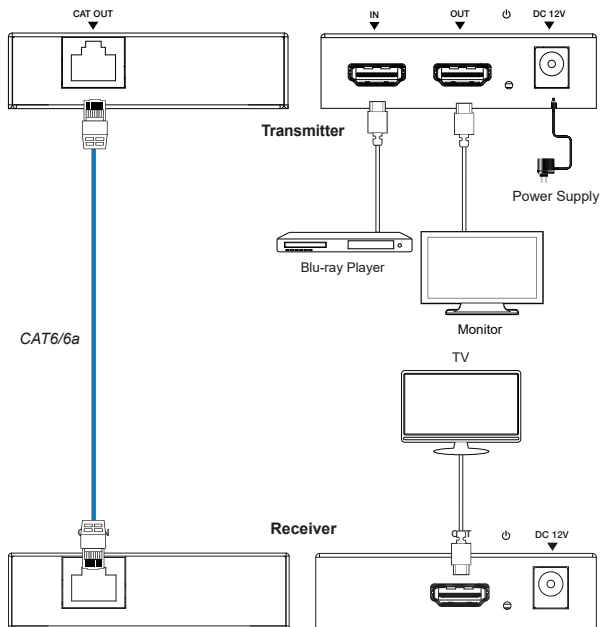
Operation Controls and Functions

Receiver Panel



No.	Name	Function Description
1.	CAT IN	Connect a CAT 6/7 cable. The other end connects to the Transmitter.
2.	OUT	Connect a display device such as TV, Monitor, etc.
3.	Power LED	The green LED will light up when Receiver is powered on.
4.	DC 12V	Connect the included power adapter.

Application Example



HDMI™
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 output on the Receiver

Please confirm the following details

1. What is the status of the Power LED on the Transmitter and Receiver end?
2. Does the HDMI OUT on the Transmitter output a signal?
3. Try changing the CAT cable. We recommend using shielded CAT 6 cable.

2. No audio output but video works

Please confirm the following details

1. Does the HDMI OUT on the Transmitter exhibit the same problem?
2. Try changing the audio format from the source?

3. 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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