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OREI UHD14-EX230-K

OREI UHD14-EX230-K HDMI 1x4 Splitter & Extender Instruction Manual

Model: UHD14-EX230-K | Brand: OREI

1. INTRODUCTION

The OREI UHD14-EX230-K is an advanced HDMI 1x4 Splitter and Extender system designed for distributing a single HDMI source to four remote displays over a single CAT6/7/8 network cable. This system supports 4K@60Hz resolution, HDCP 2.2, EDID management, and features an HDMI loop-out for local monitoring. It also includes bi-directional IR control and utilizes Power-over-Cable (PoC) technology, eliminating the need for external power adapters at the receiver units.

2. PACKAGE CONTENTS

Verify that all items are present in your package:

- 1x OREI UHD14-EX230-K HDMI Transmitter (Sender)
- 4x OREI UHD14-EX230-K HDMI Receivers
- 1x 12V DC Power Adapter
- 1x IR Blaster Cable (for Transmitter)
- 4x IR Receiver Cables (for Receivers)
- 10x Mounting Ears (for Transmitter and Receivers)
- 1x User Manual

Extend
the signal
up to
230ft.



*Includes
1x UHD14-EX230-K-1 Transmitter,
4x Receiver, 4x IR Receiver Cable,
1x IR Blaster Cable, 1x Power Adapter
and User Manual*

Image: All components included in the OREI UHD14-EX230-K kit, neatly arranged on a table.

3. SETUP INSTRUCTIONS

Follow these steps to set up your OREI HDMI Splitter & Extender system:

1. **Connect HDMI Source to Transmitter:** Connect your HDMI source device (e.g., DVD player, game console, media player) to the HDMI IN port on the Transmitter unit using a high-quality HDMI cable.
2. **Connect Local Display (Optional):** If you wish to monitor the content locally, connect an HDMI display to the HDMI LOOP OUT port on the Transmitter unit using another high-quality HDMI cable.
3. **Connect CAT Cables:** Connect one end of a single CAT6/7/8 network cable to each of the OUT 1-4 RJ45 ports on the Transmitter. Connect the other end of each CAT cable to the CAT IN port on each of the four Receiver units. Ensure secure connections for optimal performance.
4. **Connect Remote Displays:** Connect an HDMI display to the HDMI OUT port on each Receiver unit using high-quality HDMI cables.
5. **Connect IR Cables:** For IR control, connect the IR Blaster cable to the IR OUT port on the Transmitter. Position the IR Blaster eye near the IR sensor of your HDMI source device. Connect the IR Receiver cables to the IR IN ports on each Receiver unit. Position the IR Receiver eye in a location where it can receive signals from your remote control.
6. **Apply Power:** Plug the included 12V DC power adapter into the DC12V port on the Transmitter unit, then plug the adapter into a standard wall outlet. The Receiver units will receive power via the CAT cables (PoC), so no separate power adapters are needed for them.

7. **Power On:** Turn on the Transmitter unit using its power switch. The power indicator LED will light up. The Receiver units will power on automatically.



Image: A detailed diagram illustrating the connection of the HDMI source to the Transmitter, CAT cables to Receivers, and HDMI displays to Receivers, including optional loop-out and IR connections.

Your browser does not support the video tag.

Video: An instructional video demonstrating the unboxing, overview of the transmitter and receiver modules, and a step-by-step guide on how to connect the OREI 1x4 HDMI Extender Splitter system.

4. OPERATING INSTRUCTIONS

The OREI UHD14-EX230-K is designed for plug-and-play operation. Once all connections are made and power is supplied to the Transmitter, the system will automatically detect and configure the optimal video resolution for your connected displays.

- **Automatic EDID Management:** The system features automatic EDID management to ensure compatibility between your HDMI source and various displays. It will negotiate the best possible resolution and audio format.
- **IR Control:** Use your original remote control at any of the remote display locations. The IR Receiver will capture the signal and transmit it back to the Transmitter, which then uses the IR Blaster to control your source device. This allows full control of your source from any connected display.
- **Low Latency:** The system is engineered for ultra-low latency, making it suitable for applications requiring minimal delay, such as gaming or live presentations.

5. FEATURES

The OREI UHD14-EX230-K offers a robust set of features for high-quality HDMI distribution:

- **4K@60Hz HDMI Over Ethernet:** Seamlessly transmits one HDMI source to four HDMI displays.
- **Extended Range:** Extends 4K@60Hz up to 200 ft or 4K@30Hz up to 230 ft over a single CAT6/7/8 network cable.
- **Built-in Splitter:** Distributes the HDMI signal to four outputs simultaneously.
- **HDMI Loop-Out:** Provides an additional HDMI output on the Transmitter for local monitoring.
- **HDCP 2.2 Compliant:** Ensures compatibility with protected content.

- **Advanced EDID Management:** Optimizes display compatibility and performance.
- **Bi-directional IR Control:** Allows control of the source device from remote locations and vice-versa.
- **18 Gbps HDR Pass-Through:** Supports HDR, HDR10, HDR10+, Dolby Vision, and HLG for stunning visuals.
- **Power-over-Cable (PoC):** Powers Receiver units directly from the Transmitter via CAT cable, simplifying installation.
- **Plug-and-Play:** Requires no software or drivers for installation.
- **Durable Metal Enclosure:** Provides robust protection for the units.

FEATURES



- HDCP 2.2 compliant
- Video resolutions up to 4K@60Hz
 - 18Gbps video bandwidth
 - Up to 230ft/70m at 4K@60Hz
 - Loop Output
- Power over Cable Technology
 - Plug and Play

*Easy
to
Install*

4K
@60hz

18Gbps

Image: A visual summary of the OREI UHD14-EX230-K's key features, including HDCP 2.2 compliance, 4K@60Hz video resolution, 18Gbps bandwidth, 230ft extension, loop output, PoC, and plug-and-play functionality.

6. SPECIFICATIONS

Specification	Detail
Model Number	UHD14-EX230-K
Video Resolution	Up to 4K@60Hz (4:4:4)
HDMI Compliance	HDMI 2.0
HDCP Compliance	HDCP 2.2
Bandwidth	18 Gbps
Extension Distance (CAT6/7)	4K@60Hz up to 200 ft, 4K@30Hz up to 230 ft
IR Control	Bi-directional
Power Supply	DC 12V/2A (Transmitter only, PoC for Receivers)
Transmitter Dimensions	7.09 x 4.06 x 0.90 inches (180 x 103 x 23 mm)
Receiver Dimensions	3.93 x 3.46 x 0.90 inches (100 x 88 x 23 mm)
Transmitter Weight	13.76 oz (390g)
Receiver Weight	7.01 oz (199g)
Color	Black
Compatible Devices	Gaming Console, Monitor, Projector, Television, Media Players, Computer Systems, Streaming Devices

UHD14-EX230-K-1

TECHNICAL SPECIFICATIONS

COMPACT & LIGHTWEIGHT



DIMENSIONS:

Transmitter:

L: 180mm / 7.09in

W: 103mm / 4.06in

H: 23mm / 0.90in

Receiver:

L: 100mm / 3.93in

W: 88mm / 3.46in

H: 23mm / 0.90in



Material:
Metal Enclosure



Color:
Black

Weight:

TX: 390g / 13.76oz

RX: 199g / 7.01oz



*Lifetime OREI Tech Support &
12-Month Manufacturer's Warranty*



WARRANTY

Image: A graphic detailing the compact and lightweight design of the OREI UHD14-EX230-K units, including dimensions, weight, material (metal enclosure), and color (black).

7. TROUBLESHOOTING

• No Picture/Signal:

- Ensure all HDMI and CAT cables are securely connected.
- Verify the Transmitter unit is powered on and its power indicator is lit.
- Check if the CAT cables are of high quality (CAT6/7/8) and within the specified length limits.
- Try connecting the HDMI source directly to a display to confirm the source is working correctly.
- Power cycle all devices (source, extender, displays).

• Poor Picture Quality:

- Ensure you are using high-quality HDMI and CAT cables.
- Check cable lengths against specifications; excessive length can degrade signal quality.
- Verify that your displays support the output resolution of your source.

• IR Control Not Working:

- Ensure IR Blaster and IR Receiver cables are correctly plugged into their respective ports (IR OUT

on Transmitter, IR IN on Receivers).

- Position the IR Blaster eye directly over or very close to the IR sensor of your source device.
- Ensure the IR Receiver eye at the remote location is unobstructed and facing your remote control.

- **Intermittent Signal:**

- Check for loose cable connections.
- Ensure CAT cables are not bent sharply or damaged.
- Minimize electromagnetic interference by keeping CAT cables away from power lines or other electronic devices.

8. MAINTENANCE

To ensure the longevity and optimal performance of your OREI UHD14-EX230-K system, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the units. Avoid using liquid or aerosol cleaners.
- **Ventilation:** Ensure adequate airflow around the units to prevent overheating. Do not block ventilation openings.
- **Environment:** Operate the units in a dry environment, away from direct sunlight, high temperatures, and humidity.
- **Cable Management:** Organize cables neatly to prevent damage and ensure stable connections.

9. WARRANTY AND SUPPORT

The OREI UHD14-EX230-K comes with a 1-year OREI manufacturer's warranty, ensuring reliable AV distribution. Additionally, OREI provides lifetime technical support for this product.

- **Warranty Coverage:** Covers defects in materials and workmanship under normal use for one year from the date of purchase.
- **Technical Support:** For any technical assistance or troubleshooting, please contact OREI customer support. Refer to the included user manual for contact details or visit the official OREI website.