OREI UHD14-EX100-K

OREI 4K 1x4 HDMI Extender Splitter Instruction Manual

Model: UHD14-EX100-K | Brand: OREI

1. INTRODUCTION AND OVERVIEW

The OREI UHD14-EX230-K HDMI Splitter and Extender Kit is designed to simplify sharing HDMI media content. It allows distribution of a single HDMI source to four remote locations simultaneously, extending up to 230 feet over a single CAT6 or CAT7 LAN cable. This product fully supports 4K Ultra High Definition media content at up to 60 frames per second and is compliant with both HDMI 2.0b and HDCP 2.2, ensuring compatibility with modern media gear.

The transmitter unit also provides local loopback functionality, allowing you to enjoy the content at the primary location while simultaneously sharing it with all four remote locations. The system employs Power over Cable (PoC) technology, meaning only a single power supply at the transmitter end is needed to operate the entire solution.

Official product video demonstrating the setup and functionality of the OREI 4K 1x4 HDMI Extender Splitter. It covers unboxing, detailed port explanations, features, and a live demonstration of connecting a media player to multiple remote displays.

2. PACKAGE CONTENTS

Upon opening the box, you should find the following items:

- 1x OREI UHD14-EX230-K Transmitter Module
- 4x OREI UHD14-EX230-K Remote Receiver Modules
- 1x 12V 2.5A DC Power Adapter
- 4x Mounting Kits for Receivers
- 1x Bracketing Kit for Transmitter
- 1x User Manual

3. PRODUCT FEATURES

- Distributes a single HDMI source to four displays via CAT6/7 cables, delivering uncompressed 4K@60Hz video up to 60M (197 ft) and 4K@30Hz up to 70M (230 ft) with exceptional clarity.
- Features an HDMI loop-out on the transmitter for connecting a local display and supports high-performance video with 18 Gbps bandwidth and HDCP 2.2 compliance.
- Includes advanced EDID management for enhanced compatibility and smooth communication between source and displays.
- Power over Cable (PoC) design eliminates the need for multiple power adapters—only the transmitter requires power, easy installation.

- Designed for both personal and professional use.
- Full Support of 4K UHD Media Content.
- Splitter & Extender Combined.
- HDMI 2.0b / HDCP 2.2 Compliant.
- 230 Foot Extension of Content.
- Local Loopback & PoC Technology.

FEATURES

- HDCP 2.2 compliant
- Video resolution up to 4K@60Hz
- 18Gbps video bandwidth
- Up to 197ft/60m at 4K@60Hz and up to 230ft/70m at 4K@30Hz
- Loop output to connect a local display
- Power over Cable Technology (PoC)
- Advanced EDID management
- Compact design for easy installation

Easy to Install | **4K @60hz** | **18Gbps**

Key features of the OREI HDMI Extender Splitter.

Compatible with Various Media Devices

HDMI 2.0b | HDCP 2.2

Compatible with various media devices including laptops, Xbox, Sony Playstation, Fire Stick, Blu-Ray/DVD players, Satellite Receivers, Roku, Chromecast, PCs, and Projectors.

AUDIO FORMATS

HDMI Loop Out

LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD

Remote End:

LPCM 2.0, Dolby 5.1, DD+7.1, DTS 5.1

Supported audio formats for HDMI Loop Out (LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD) and Remote End (LPCM 2.0, Dolby 5.1, DD+7.1, DTS 5.1).

4. PRODUCT OVERVIEW (PORTS AND INDICATORS)

Transmitter Unit

The transmitter unit features a full metal enclosure for durability and to minimize interference. It includes ventilation slots to dissipate heat and mounting holes on the bottom for secure installation.

OREI HDMI Extender Splitter Transmitter Unit.

Front Panel:

- **Power Switch:** Toggles the unit ON/OFF.
- **Power Indicator LED:** Lights up after internal self-test, indicating the module is ready.
- **EDID Switches:** Used to adjust frame rate, resolution, and audio style for compatibility between input media and output displays. Refer to the user manual for specific configurations.
- **USB-C Service Port:** Used for updating the firmware of the transmitter.

Rear Panel:

- **HDMI IN:** Connects to your HDMI media source (e.g., Blu-ray player, game console).
- **HDMI LOOP OUT:** An additional HDMI output for connecting a local display at the primary location.
- **CAT OUT (1-4):** Four RJ45 ports for connecting to the remote receiver modules via CAT6/7 LAN cables.
- **DC 12V:** Power input port for the included 12V DC power adapter.

Receiver Unit

The receiver units also feature full metal enclosures with mounting holes on the sides. They do not require individual power supplies due to Power over Cable (PoC) technology.

Ports and Indicators:

- **CAT IN:** RJ45 port for connecting to the Transmitter via a CAT6/7 LAN cable. This port also supplies power to the receiver.
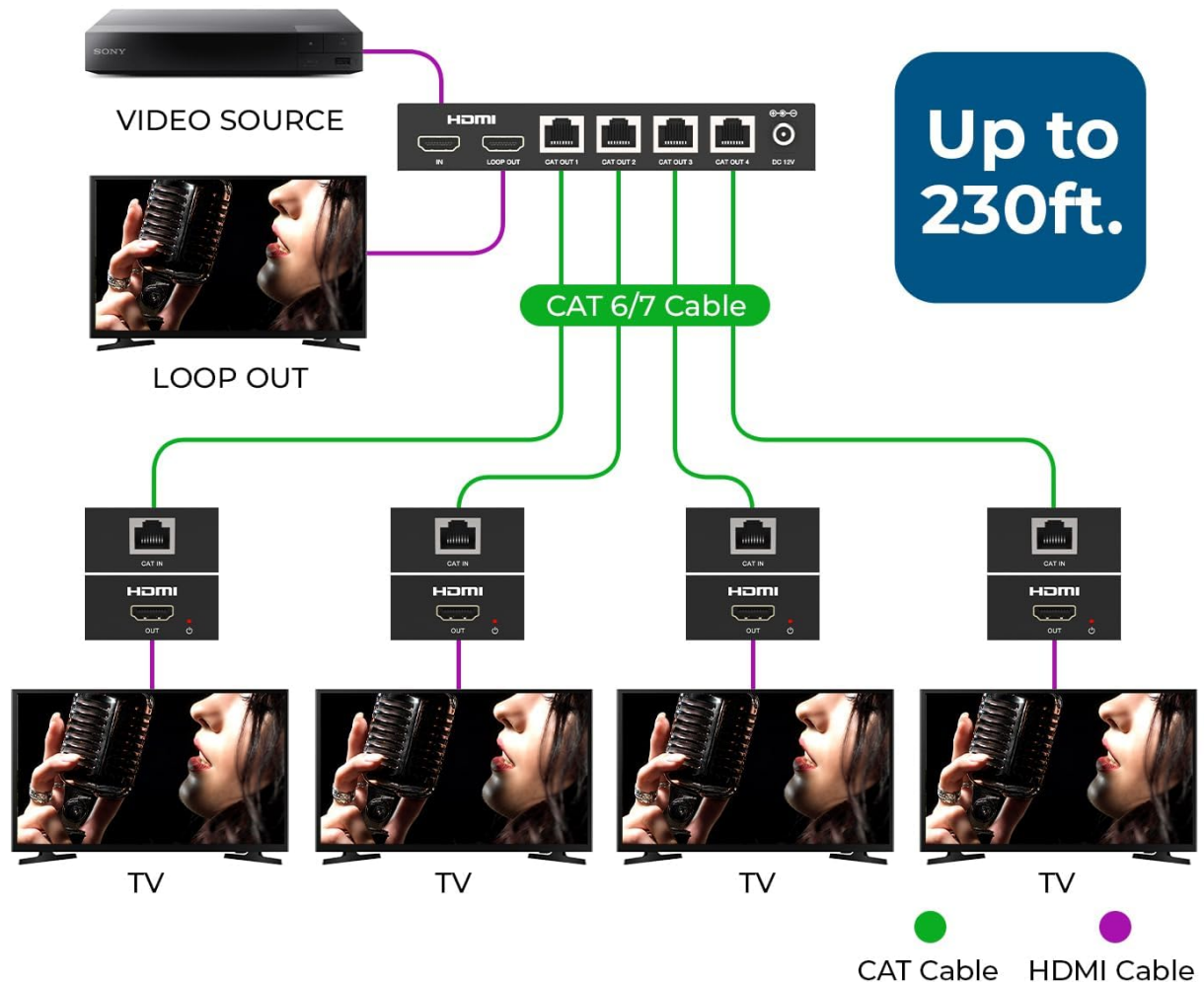
- **HDMI OUT:** Connects to your local display (e.g., TV, monitor) at the remote location.
- **Power Indicator LED:** Lights up when the receiver receives power and completes its self-test.

5. SETUP AND INSTALLATION

Follow these steps to set up your OREI 4K 1x4 HDMI Extender Splitter:

1. **Connect HDMI Source:** Disconnect your media player or HDMI source from its local monitor. Connect the HDMI output of your media player/source to the **HDMI IN** port on the Transmitter unit.

2. **Power the Transmitter:** Connect the included 12V DC power adapter to the **DC 12V** input port on the Transmitter. Plug the power adapter into a standard wall outlet. Finger-tighten the locking collar on the barrel connection to ensure a secure fit.

3. **Connect Remote Displays:** Connect an HDMI cable from each of your remote displays (up to four) to the **HDMI OUT** port on each respective Receiver unit. Ensure you use high-quality HDMI cables for optimal 4K performance.

4. **Connect LAN Cables (CAT6/7):** Connect CAT6 or CAT7 LAN cables from the **CAT OUT (1-4)** ports on the Transmitter to the **CAT IN** ports on each of the four Receiver units. These cables transmit both video/audio signals and power (PoC) to the Receivers. For optimal performance, shielded CAT6/7 cables are recommended.

5. **(Optional) Local Loop Out:** If you wish to view the content at the primary location, connect an HDMI cable from the **HDMI LOOP OUT** port on the Transmitter to a local monitor.

6. **Power On:** Turn on the Transmitter unit using the power switch. The power indicator LED on the Transmitter will light up after an internal self-test. The power indicator LEDs on the Receiver units will also light up once they receive power and complete their self-test.

7. **Automatic Adjustment:** The system will automatically detect the resolution of the media content and the output displays, making necessary adjustments to provide the best possible picture.

TRANSMIT MEDIA SIGNALS TO A DISTANT HDMI DISPLAY

VIDEO SOURCE

LOOP OUT

HDMI
IN LOOP OUT CAT OUT 1 CAT OUT 2 CAT OUT 3 CAT OUT 4 DC 12V

Up to 230ft.

CAT 6/7 Cable

CAT IN — HDMI OUT

TV   **TV**   **TV**   **TV**

● CAT Cable   ● HDMI Cable

Typical setup diagram for the OREI HDMI Extender Splitter.

Power over Cable (PoC) technology simplifies installation by powering receivers via the CAT cable.

6. OPERATING INSTRUCTIONS

Once all connections are made and the units are powered on, the OREI 4K 1x4 HDMI Extender Splitter operates automatically. The system will detect the input signal and the capabilities of the connected displays to provide the best possible video and audio output.

- **Automatic Operation:** The extender splitter is designed for plug-and-play functionality. No complex configuration is typically required for standard setups.
- **EDID Management:** If you encounter display issues such as no picture, incorrect resolution, or audio problems, utilize the EDID switches on the Transmitter's front panel. These switches allow you to manually adjust the EDID settings (Extended Display Identification Data) to ensure compatibility between your source device and displays. Refer to the detailed EDID table in the full user manual for specific switch positions and their corresponding settings.
- **Power Cycling:** In case of minor glitches or signal loss, power cycling the Transmitter (turning it off and then on again) can often resolve the issue.

7. TECHNICAL SPECIFICATIONS

- **Product Dimensions:** 8.5 x 4 x 1.5 inches
- **Item Weight:** 2 pounds
- **Item Model Number:** UHD14-EX100-K
- **Color:** Black
- **Connector Type:** HDMI
- **Video Resolution:** Supports up to 4K@60Hz (4:4:4)
- **Bandwidth:** 18 Gbps
- **HDCP Compliance:** HDCP 2.2
- **Extension Distance:** Up to 197 ft (60m) for 4K@60Hz, Up to 230 ft (70m) for 4K@30Hz
- **Cable Type:** CAT6/7 (Shielded recommended for optimal performance)
- **Power:** Power over Cable (PoC), single 12V power adapter at Transmitter

UHD14-EX230-K
TECHNICAL SPECIFICATIONS

COMPACT & LIGHTWEIGHT

DIMENSIONS:
Transmitter:
L: 150mm / 5.9in
W: 70mm / 2.75in
H: 24.5mm / 0.96in
Receiver:
L: 81mm / 3.18in
W: 49mm / 1.92in
H: 25mm / 0.98in

Weight:
TX: 302g / 10.65oz
RX: 116g / 4.09oz

Material: **Metal Enclosure**

Color: **Black**

Tx ›› Rx

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

WARRANTY

Detailed technical specifications for the OREI HDMI Extender Splitter.

8. Troubleshooting

If you encounter issues with your OREI 4K 1x4 HDMI Extender Splitter, please refer to the following troubleshooting steps:

- **No Picture/Signal:**

    - Ensure all HDMI and CAT cables are securely connected to both the Transmitter and Receiver units, as well as to the source and display devices.
    - Verify that the power adapter is correctly plugged into the Transmitter and a working power outlet. Check if the power indicator LEDs on both the Transmitter and Receivers are illuminated.
    - Confirm that your HDMI source device (e.g., Blu-ray player, game console) is powered on and actively outputting a signal.
    - Adjust the EDID switches on the Transmitter. Try different EDID modes to find one that is compatible with all connected displays. Refer to the user manual for the EDID switch settings.
    - Test with shorter or different CAT6/7 cables to rule out cable issues.
    - Ensure all connected devices (source, extender, displays) are HDCP compatible.

- **Flickering or Intermittent Signal:**

    - Replace CAT6/7 cables with high-quality, shielded cables, especially for longer runs.
    - Check that your cable lengths do not exceed the specified maximums (197 ft for 4K@60Hz, 230 ft for 4K@30Hz).
    - Ensure all cable connections are tight and secure.

- **No Audio:**

    - Verify the audio settings on your source device and display.
    - Check the EDID settings on the Transmitter, particularly those related to audio formats. Adjust as necessary.

9. Maintenance

To ensure the longevity and optimal performance of your OREI 4K 1x4 HDMI Extender Splitter, follow these maintenance guidelines:

- **Environment:** Keep the device in a cool, dry, and well-ventilated area. Avoid exposing it to direct sunlight, high temperatures, or excessive humidity.
- **Cleaning:** Clean the device with a soft, dry cloth. Do not use liquid cleaners, aerosols, or abrasive solvents, as these may damage the unit.
- **Ventilation:** Ensure that the ventilation slots on the unit are not blocked to prevent overheating.
- **Cable Management:** Organize cables neatly to prevent strain on ports and accidental disconnections.

10. Warranty and Support

OREI stands behind the quality of its products. The OREI 4K 1x4 HDMI Extender Splitter comes with a **12-Month Manufacturer's Warranty** from the date of purchase.

In addition, OREI provides **Lifetime Technical Support** for this product. If you encounter any issues, have questions about setup, or require assistance with troubleshooting, please do not hesitate to contact OREI customer support.
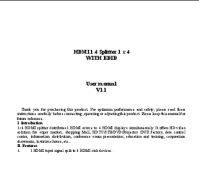
OVER 10 YEARS EXPERIENCE

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FULL 1 YEAR LIMITED WARRANTY

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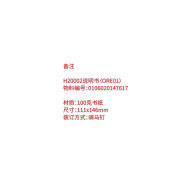
BASED IN THE U.S.A

WE OFFER LIFETIME LOCAL SUPPORT

OREI commitment to quality and support.

For warranty claims or technical support, please visit the official OREI website or refer to the contact information provided in your user manual.

Related Documents - UHD14-EX100-K

	[OREI HDMI 1.4 Splitter 1x4 User Manual](#) User manual for the OREI HDMI 1.4 Splitter 1x4, detailing its features, specifications, package contents, front and rear panel controls, and application examples.
	[OREI HDS-104 4K@60Hz 1x4 HDMI Splitter User Manual](#) User manual for the OREI HDS-104, a 1x4 HDMI splitter supporting 4K@60Hz, HDR, 3D, and 7.1 channel audio. Includes features, specifications, operation, application example, and troubleshooting.

	[OREI UHDS-104 1x4 HDMI 18Gbps Splitter User Manual](#) User manual for the OREI UHDS-104 1x4 HDMI 18Gbps Splitter, detailing its features, specifications, operation, and application examples for high-quality HDMI distribution.
	[OREI UHDS-104A: 1x4 HDMI 2.0 Splitter with Scaler and Audio Extraction User Manual](#) User manual for the OREI UHDS-104A 1x4 HDMI 2.0 Splitter. Learn about its features, technical and mechanical specifications, operation controls, and application examples for 4K@60Hz video and audio extraction.
	[OREI UHDS-102 1x2 HDMI 18Gbps Splitter User Manual for 4K@60Hz Video Distribution](#) User manual for the OREI UHDS-102, a 1x2 HDMI 18Gbps splitter supporting 4K@60Hz (4:4:4) resolution and 18Gbps bandwidth for high-performance audio-video distribution. Includes features, specifications, and operational guidance.
	[OREI ipcolor 4K HDR HDMI 1x8 Splitter Extender Over 70 Meter Cat6 User Manual](#) This user manual provides detailed information on the OREI ipcolor 4K HDR HDMI 1x8 Splitter Extender, including features, specifications, function settings, and connection diagrams. It supports zero latency transmission, up to 4K@60Hz resolution, and transmission distances up to 70 meters over Cat6/6A/7 cables.