

OREI UHDS-404VW

OREI UHDS-404VW 4K 4x4 HDMI Matrix Switch & Video Wall Controller Instruction Manual

Model: UHDS-404VW

1. INTRODUCTION

The OREI UHDS-404VW is a versatile 4K 4x4 HDMI Matrix Switch and Video Wall Controller designed to manage and distribute HDMI signals. This device allows users to switch between four HDMI input sources and display them across four HDMI output displays. It also features advanced video wall capabilities, supporting various configurations such as 2x2, 1x4, and 4x1, enabling a single source to be spread across multiple screens or multiple sources to be displayed individually. This manual provides detailed instructions for the proper installation, operation, and maintenance of your UHDS-404VW unit.

2. PACKAGE CONTENTS

Upon opening the package, please verify that all the following items are included:

- 1x OREI UHDS-404VW HDMI Matrix Switch & Video Wall Controller
- 1x Power Adapter
- 1x IR Remote Control
- 1x RS-232 Phoenix Connector
- 1x IR Receiver Cable
- 1x Mounting Ear Set
- 1x User Manual



Includes 1x UHDS-404VW, 1x IR Remote, 1x RS-232 Phoenix Connector, 1x IR Receiver Cable, 1x Power Adapter, User Manual

Image: The OREI UHDS-404VW unit with its included accessories, such as the power adapter, remote control, and various cables.

3. PRODUCT OVERVIEW

3.1 Front Panel



Image: The front panel of the UHDS-404VW unit, displaying LED indicators for power, input status (HD A, HD B), loop status (LP A, LP B), and output status (HD 1, HD 2, HD 3, HD 4).

The front panel features a series of LED indicators that provide real-time status of the device:

- **PWR LED:** Illuminates when the unit is powered on.
- **INPUT LEDs (HD A, HD B):** Indicate active HDMI input sources.
- **LOOP LEDs (LP A, LP B):** Indicate active local loop-out connections.
- **OUTPUT LEDs (HD 1-4):** Indicate active HDMI output displays.

3.2 Rear Panel



Image: The rear panel of the UHDS-404VW unit, showing ports for LAN, RS-232 control, service (Micro USB), audio outputs (analog 3.5mm, digital Toslink), HDMI inputs (HD A, HD B), loop outputs (LP A, LP B), HDMI outputs (HD 1-4), ground, and DC 12V power input.

The rear panel houses all the necessary connection ports:

- **LAN Port:** For network control via TCP/IP.
- **RS-232 CTL Ports:** For serial control via RS-232.
- **SERVICE Port (Micro USB):** For firmware updates.
- **AUDIO OUTPUTS:** Includes analog (3.5mm) and digital (Toslink) options for external audio systems.
- **HDMI INPUTS (HD A, HD B):** Connect your HDMI source devices.
- **LOOP OUT Ports (LP A, LP B):** For local monitoring of input signals.
- **HDMI OUTPUTS (HD 1-4):** Connect to your display monitors for video wall or matrix configurations.
- **GROUND:** Grounding terminal.
- **DC 12V:** Power input for the included power adapter.

4. SETUP INSTRUCTIONS

Follow these steps to set up your OREI UHDS-404VW:

1. **Connect HDMI Output Displays:** Connect your four display monitors to the HDMI OUTPUTS (HD 1-4) on the rear panel of the UHDS-404VW. Ensure correct sequencing for video wall functionality (e.g., top-left to HD1, top-right to HD2, bottom-left to HD3, bottom-right to HD4 for a 2x2 setup).
2. **Connect HDMI Input Sources:** Connect your HDMI source devices (e.g., Blu-ray player, gaming console, laptop) to the HDMI INPUTS (HD A, HD B) on the rear panel.
3. **Connect Local Loop Out (Optional):** If you wish to monitor the input signal locally, connect an additional monitor to one of the LOOP OUT ports (LP A or LP B).
4. **Connect Audio Output (Optional):** If using external audio, connect your amplifier or audio system to the desired AUDIO OUTPUT (analog or digital).
5. **Connect Control (Optional):** For advanced control, connect an Ethernet cable to the LAN port for TCP/IP control, or use the provided RS-232 Phoenix connector for serial control.
6. **Apply Power:** Connect the included 12V DC power adapter to the DC 12V port on the rear panel and plug it into a standard wall outlet. The PWR LED on the front panel will illuminate, and the unit will perform a self-test.

UHDS-404VW

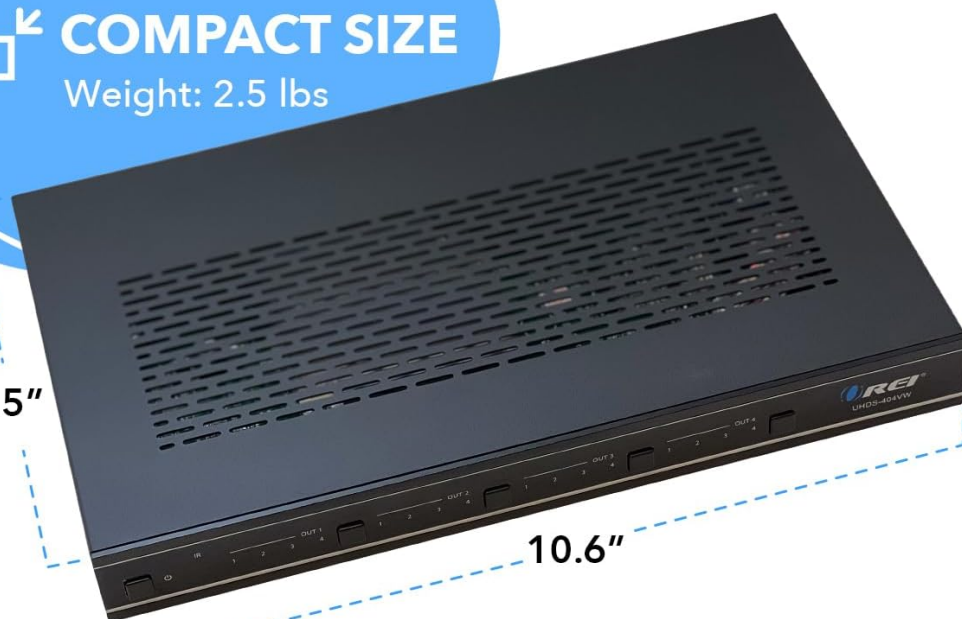
TECHNICAL SPECIFICATIONS



COMPACT SIZE

Weight: 2.5 lbs

6.5"



1.18"

10.6"



WARRANTY

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



Image: Example of a 4x4 matrix configuration, where each of the four input sources is displayed on a different output screen.

10 OUTPUT MODE SETTINGS



2x2
Single source on all displays



1x2-2
2 sources on 2 displays each (Horizontal)



1x2
One source on 2 horizontal displays,
other displays show a different source



Matrix
Each display shows a different source



2x1-2
2 sources on 2 displays each (Vertical)



2x1
One source on 2 vertical displays,
other displays show a different source



1x3
3 displays spread horizontally



1x4
4 displays spread horizontally



3x1
3 displays spread
vertically



4x1
4 displays spread
vertically

Image: Example of a 2x2 video wall configuration, where a single input source is seamlessly displayed across four screens.

5. OPERATING MODES

The UHDS-404VW supports multiple display modes, configurable via the IR remote, Web GUI, or RS-232 commands:

- **2x2 Video Wall:** A single source is displayed across four screens, forming one large image.
- **Matrix Mode:** Each display shows a different source, allowing for independent viewing.
- **1x2 Horizontal:** One source displayed on two horizontal screens, or two sources on two displays each.
- **2x1 Vertical:** One source displayed on two vertical screens, or two sources on two displays each.
- **1x3 Horizontal:** Three displays spread horizontally.
- **1x4 Horizontal:** Four displays spread horizontally.
- **3x1 Vertical:** Three displays spread vertically.
- **4x1 Vertical:** Four displays spread vertically.

Horizontal
& Vertical
Bezel
Adjustment

4x4 Matrix with Video Wall Controller



Image: Visual representation of the ten different output mode settings available for the UHDS-404VW, demonstrating various ways to arrange content across multiple screens.

5.1 Bezel Adjustment

The unit's software allows for horizontal and vertical bezel adjustment to minimize the visible lines where displays overlap in video wall configurations. This feature helps create a more seamless viewing experience.

2x2 Video Wall

Select display modes via IR remote,
Web GUI or RS-232 commands



Blu Ray Players, Game Consoles, Media Players,
Satellite Receivers, Computers, Laptops

Image: The UHDS-404VW unit with its remote control, illustrating the concept of horizontal and vertical bezel adjustment for optimizing video wall displays.

6. SPECIFICATIONS

- **Inputs:** 4 HDMI
- **Outputs:** 4 HDMI
- **Resolution Support:** Up to 4K@60Hz 4:4:4 (4096x2160), backward compatible with 1080p/720p.
- **HDMI Standard:** HDMI 2.0
- **HDCP Compliance:** HDCP 2.2
- **Audio Support:** Pass-through for PCM, Dolby Digital, Dolby TrueHD, DTS-HD Master.
- **Control Options:** IR Remote, Front Panel buttons, TCP/IP, RS-232.
- **Local Loopback Function:** Allows monitoring of input content.
- **EDID Management:** Advanced EDID settings for device compatibility.
- **Dimensions:** 14 x 1.25 x 3 inches
- **Item Weight:** 2 pounds
- **Enclosure:** Full metal for durability.

7. TROUBLESHOOTING

If you encounter issues with your OREI UHDS-404VW, please refer to the following common troubleshooting steps:

- **No Video/Audio:** Ensure all HDMI cables are securely connected and are of high quality (HDMI 2.0 or higher for 4K content). Verify that the power adapter is correctly connected and the PWR LED is illuminated. Check the input and output status LEDs on the front panel.
- **Incorrect Display/Resolution:** Confirm that your source device and displays support the selected resolution. Utilize the EDID management features via the control software to optimize compatibility.
- **Video Wall Alignment Issues:** Use the bezel adjustment feature in the control software to fine-tune the alignment of your video wall displays. Ensure monitors are physically arranged correctly.
- **Control Issues:** Verify network connectivity for TCP/IP control or serial cable connection for RS-232. Ensure the correct control software/commands are being used.
- **Firmware Update:** If persistent issues occur, check the OREI website for the latest firmware updates and follow the provided instructions for updating via the SERVICE port.

8. MAINTENANCE

To ensure the longevity and optimal performance of your UHDS-404VW, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the unit. Avoid using liquid or aerosol cleaners.
- **Ventilation:** Ensure the unit has adequate ventilation. Do not block the ventilation slots on the sides to prevent overheating.
- **Storage:** Store the unit in a cool, dry place away from direct sunlight and extreme temperatures when not in use for extended periods.
- **Cable Management:** Keep cables organized and free from kinks or excessive tension to prevent damage.

9. WARRANTY AND SUPPORT

The OREI UHDS-404VW comes with a **1 Year Full Warranty**. For technical assistance or warranty claims, please contact OREI Support. Refer to the included warranty card for detailed terms and conditions.

10. How-To VIDEO

For a visual guide on setting up and using your OREI UHDS-404VW, please watch the official instructional video below:

Video: An instructional video demonstrating the unboxing, features, and setup of the OREI UHD-204VW (UHDS-404VW) Video Wall Processor.

	<p>OREI UHDS-404VW 4K@60Hz 4x4 Seamless HDMI Matrix with Video Wall User Manual</p> <p>This user manual provides detailed information on the OREI UHDS-404VW, a 4K@60Hz 4x4 seamless HDMI matrix switcher with video wall capabilities. It covers features, specifications, operation, control methods (front panel, IR, RS-232, Web GUI), EDID management, video wall configurations, and application examples.</p>
	<p>OREI UHDS-402A 4x2 HDMI 2.0 Matrix Switcher User Manual</p> <p>User manual for the OREI UHDS-402A 4x2 HDMI 2.0 Matrix Switcher with Audio Extractor, Scale, ARC, and EDID functions. Details features, specifications, operation, and troubleshooting.</p>
	<p>OREI UHDS-104 1x4 HDMI 18Gbps Splitter User Manual</p> <p>User manual for the OREI UHDS-104 1x4 HDMI 18Gbps Splitter, detailing its features, specifications, operation, and application examples for high-quality HDMI distribution.</p>
	<p>OREI UHD-404 18Gbps 4x4 HDMI Matrix User Manual - 4K@60Hz, HDR, HDCP 2.2</p> <p>User manual for the OREI UHD-404 18Gbps 4x4 HDMI Matrix Switch. Features 4K@60Hz resolution, HDR, HDCP 2.2 compliance, EDID management, and IR remote control. Learn about specifications, features, operation, and application examples.</p>
	<p>OREI UHDS-202 18Gbps 2x2 HDMI Matrix Switcher with Audio Extractor User Manual</p> <p>User manual for the OREI UHDS-202, an 18Gbps 2x2 HDMI Matrix Switcher with Audio Extractor. This guide details features, technical and mechanical specifications, front and rear panel operations, IR remote functions, frequently asked questions, and application examples for seamless audio-visual distribution.</p>
	<p>OREI Ultra HD Video Wall Processor User Manual</p> <p>User manual for the OREI Ultra HD Video Wall Processor (VER 1.0), detailing its features, specifications, operation controls, PC tool usage, safety instructions, and connection diagrams for video wall setups.</p>