



**OMX-07HMHM0006**

Ocean Matrix 4K@60Hz 4:4:4 HDMI 4x4  
Matrix & Video Wall Controller with EDID  
Management

**/// OPERATION MANUAL**



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## Description:

The Ocean Matrix OMX-07HMHM0006 is an HDMI 4x4 matrix and video wall controller that supports up to 4K@60Hz 4:4:4 resolutions. The unit can function as a 4x4 seamless matrix switcher and also supports ten video wall modes. The OMX-07HMHM0006 also features a web browser interface module for control and configuration of the matrix when used as a stand-alone unit or with a third party control system. The OMX-07HMHM0006 can be controlled via the front-panel push buttons, IR remote control, RS-232 interface, and TCP/IP.

## Features:

- HDMI 2.0b and HDCP 2.2 / 1.4 Compliant
- Seamless Video Switching
- Video Input Supports all Industry Standard Resolutions Including GA-WUXGA (up to 1920x1200 @60Hz) and 480i-4K (3840x2160 @60Hz 4:4:4, 4096x2160 @60Hz 4:4:4)
- HDMI Output Supports Upscaling or Downscaling to any Resolution, up to 4096x2160@60Hz 4:4:4
- Supports LPCM, DD, DD+, DTS, Dolby TrueHD, and DTS HD-master Audio
- Built-In EDID Management
- Control and Configure the Matrix Through the Web Interface Module
- Control via Front Panel Buttons, Infrared Remote Control, RS-232 and TCP/IP

## Specifications:

- Inputs: 4 x HDMI Input (Type A, 19-pin Female)
- Outputs: 4 x HDMI Output (Type A, 19-pin Female)
- Control Interface: 1 x RS-232 (3-pin - 3.81mm Phoenix Terminal), 1 x TCP/IP (RJ45), 1 x IR EXT (3.5mm Stereo Mini Jack)
- HDMI Compatibility: HDMI 2.0
- HDCP Compatibility: HDCP 2.2 / HDCP 1.4
- Video Bandwidth: 18Gbps
- Video Resolution: Input: VGA-WUXGA (up to 1920x1200@60Hz), 480i-4K (3840x2160@60Hz 4:4:4, 4096x2160@60Hz 4:4:4) Output: 4096x2160p60, 4096x2160p50, 3840x2160p60, 3840x2160p50, 3840x2160p30, 1920x1080p60, 1920x1080p50, 1920x1080i60, 1920x1080i50, 1920x1200p60rb, 1360x768p60, 1280x800p60, 1280x720p60, 1280x720p50, 1024x768p60, auto
- Color Space: RGB, YCbCr 4:4:4/4:2:2, YUV 4:2:0
- Color Depth: 8-bit, 10-bit, 12-bit
- HDMI Audio Format: LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio
- Dimensions (LxWxH): 10.625 x 6.5 x 1.192in
- Weight: 2.625lbs (1189g)
- Power Supply: AC 100~240V 50/60Hz
- Power Consumption: 19.56W
- Operating Temperature: 32-104°F (0-40°C)
- Storage Temperature: 32 - 104°F (0 - 40°C)



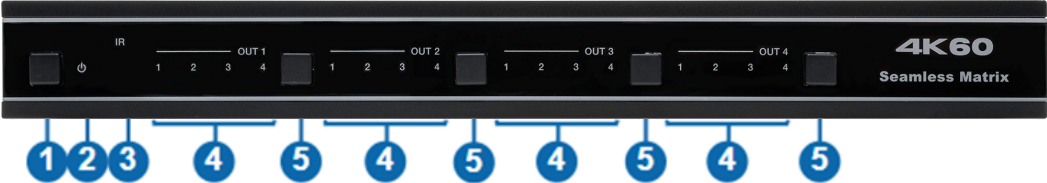
# Item Includes:

- 1 x OMX-07HMHM0006
- 1 x Matrix IR Remote
- 1 x 3pin-3.81mm Phoenix Connector (male)
- 1 x 20-60KHz IR Wideband Receiver Cable (1.5 meters)
- 2 x Mounting Ears
- 4 x Machine Screws (KM3\*4)
- 1 x 12V/2.5A Locking Power Adapter



# Operation Controls and Functions:

## Front:

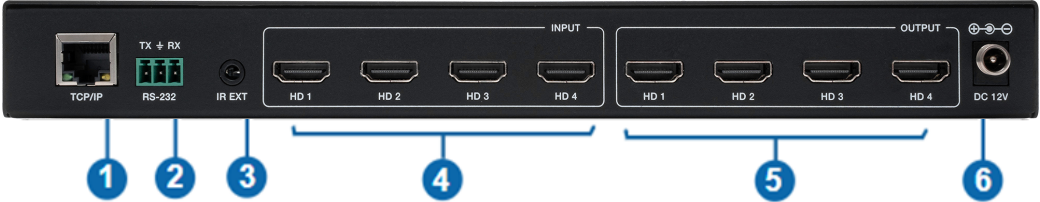


#	Name	Function description
1	Power Button	<ul style="list-style-type: none"><li>• Press button to power on the device</li><li>• Press and hold this button to enter the standby mode</li></ul>
2	Power LED	The LED will illuminate green when the product is working normally, and red when the product is on standby
3	IR Window	IR receiver window, it only receives the IR remote signal from this product
4	Signal source LED	Signal source indicator for the OUT 1 - OUT 4 port
5	Input source switching button	Input source switching button for the OUT 1- OUT 4 port

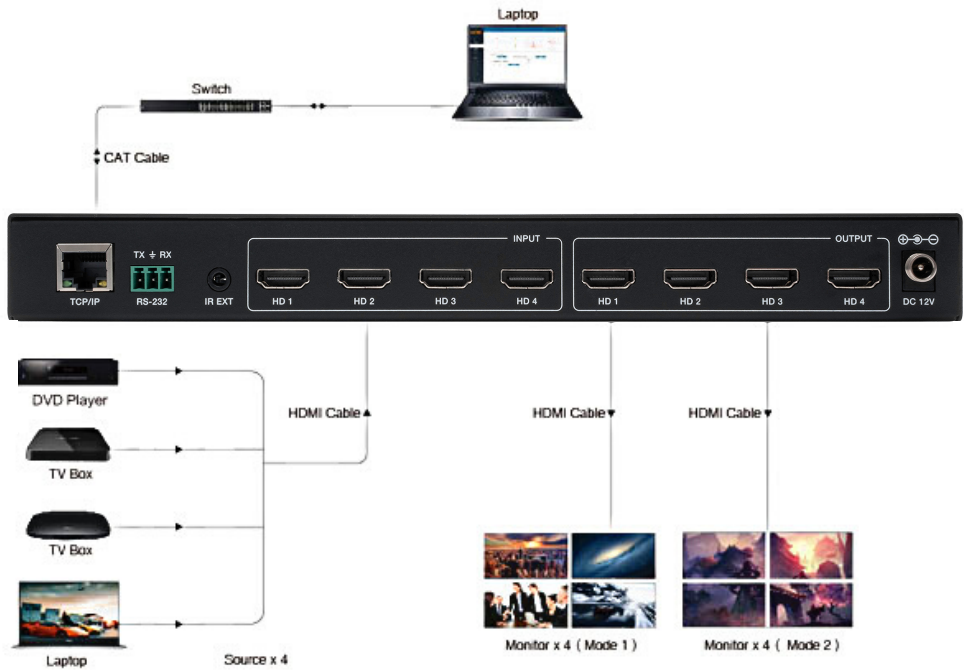


# Operation Controls and Functions:

## Rear:

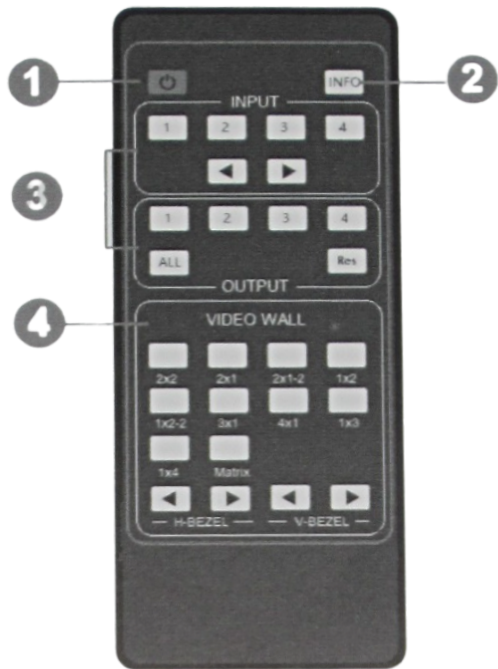


No	Name	Function description
1	TCP/IP	The link port for TCP/IP control, connected to an active Ethernet link with an RJ45 cable to control the Matrix via Web
2	RS-232	RS-232 serial command control port, connect to a PC or control system to control the Matrix
3	IR EXT	If the IR receiver window of the unit is blocked or the unit is installed in a closed area out of infrared line of sight, the IR receiver cable can be inserted to the "IR EXT" port to receive the IR remote signal
4	HDMI INPUT	HDMI signal input port, connected to signal source device
5	HDMI OUTPUT	HDMI signal output port, connected to HDMI display device
6	DC 12V	DC 12V/2.5A power input port



# Operation Controls and Functions:

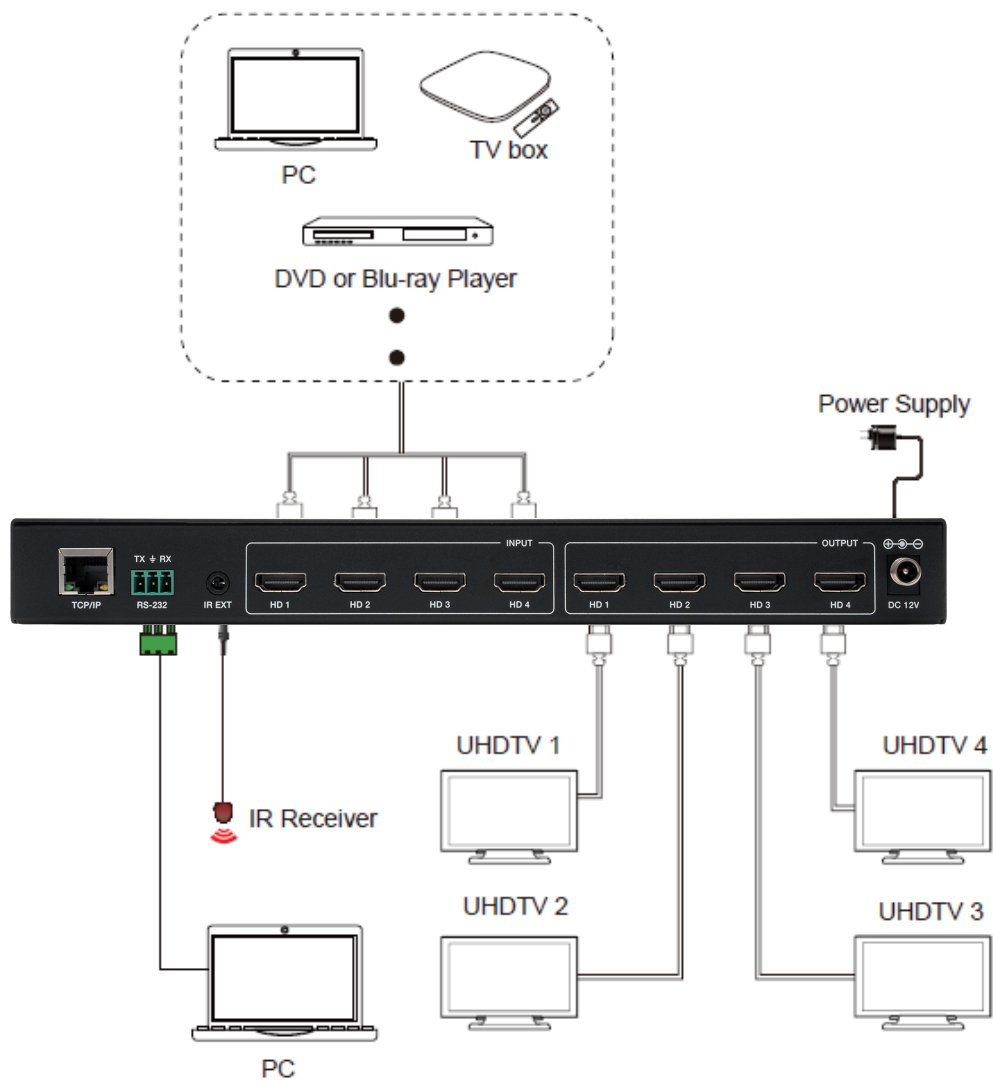
## Remote:



No	Name
Power on or Standby	Power on the matrix or set it to standby mode
Info	Press this button to display the serial port baud rate and IP address in the upper right corner of the screen
Input / Output	<ul style="list-style-type: none"><li>• <b>Input 1/2/3/4:</b> Select the signal output channel</li><li>• <b>&lt; , &gt;:</b> Select the last or next signal input channel</li><li>• <b>Output 1/2/3/4:</b> Select the signal output channel</li><li>• <b>All:</b> Select all ouput channels simultaneously.</li><li>• <b>Res:</b> Press this button to switch output channel resolution</li><li>• Matrix mode: press <b>Output 1/2/3/4</b> or <b>All</b>, then press <b>Res</b> to switch the output resolution circularly</li><li>• Video wall mode: Press <b>Res</b> directly to switch the output resolution for four output channels simultaneously</li><li>• <b>Operation Instruction:</b> You need to press the Output button firstly and press the Input button to select the corresponding input source. For example, press Output-x (x means output button from 1 to 4, including "All" button), then press Input-y (y means input button from 1 to 4)</li></ul>
Video Wall	<p><b>Video Wall mode selection:</b> Press the video wall mode button directly to enter corresponding mode.</p> <p><b>Source selection for the video wall group:</b> Press <b>Output 1/2/3/4</b> or <b>&lt;/&gt;</b> to select the video wall group firstly, then press <b>Input 1/2/3/4</b> or <b>&lt;/&gt;</b> to select the input source.</p> <p><b>Bezel Adjustment:</b> Press <b>&lt;/&gt;</b> of H-Bezel / V-Bezel to adjust the bezel.</p>



# Operation Controls and Functions:



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# PRODUCT SERVICE

## Damage requiring service:

- The unit should be serviced by qualified service personnel if:
  - (a) The DC power supply cord or AC adaptor has been damaged
  - (b) Objects or liquids have gotten into the unit
  - (c) The unit has been exposed to rain
  - (d) The unit does not operate normally or exhibits a marked change in performance; The unit has been dropped or the cabinet is damaged.
- (2) Servicing Personnel: Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- (3) Replacement parts: When parts need replacing ensure the servicer uses parts specified by the manufacturer. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- (4) Safety check: After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

## SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install the unit:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit

## WARRANTY

1 Year



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