



# OCEAN MATRIX OMX-09HMHM0001 Portable HDMI Signal Generator and Display Emulator User Manual

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## OMX-09HMHM0001 Portable HDMI Signal Generator and Display Emulator OPERATION MANUAL



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## Description:

The OMX-09HMHM0001 is a portable mini HDMI signal generator and display emulator. Both functions are combined into a single compact chassis for convenience. The OMX-09HMHM0001 is capable of generating 4 different video resolutions of up to, and including, 4K@60Hz 4:4:4 and can also emulate and analyze HDCP content. Convenient DIP switches allow for easy control over built-in EDID management and HDCP content selection when used as a signal generator, and LEDs make it easy to view the signal or HDCP status.

## Features:

- HDMI Signal Generator & Display Emulator
- 4-Pin DIP Switch for Setting EDID/Video Resolution and HDCP Functionality
- Supports Four Different Test Patterns
- LEDs Show Signal and HDCP Status
- Supports HDCP 1.4, HDCP 2.2, or HDCP OF

## Specifications:

- Supports 4K@60Hz 4:4:4, 4K@60Hz 4:2:0, 4K@30Hz 4:4:4, or 1080p@60Hz video signal output
- Supports HDCP OFF, HDCP 1.4, or HDCP 2.2 Output
- Input: HDMI In
- Input Connector: 19-Pin Type-A Male HDMI
- Output: HDMI Out
- Output Connector: 19-Pin Type-A Male HDMI
- Power Connector: Micro-USB
- Control: 4-Pin DIP Switch
- Power Supply: 5VDC 1A (USB Power Cord)

## Operation Controls and Functions



1. HDMI Out

2. HDMI In

3. Signal LED:

a. When the OMX-09HMHM0001 is used as an HDMI signal generator, the LED turns red when there is an HDMI signal output.

b. When used as a display emulator, the LED turns green when only a 5V signal is detected, or turns red when 5V and TMDS signals are detected simultaneously, or off when there is no HDMI signal input.

4. **HDCP LED:**

a. When the OMX-09HMHM0001 is used as an HDMI signal generator, the HDCP content can be selected by a 4-pin DIP switch. The LED turns green when HDCP 2.2 is selected, red when HDCP 1.4 is selected, and off when no HDCP.

b. When the OMX-09HMHM0001 is used as a display emulator, The LED turns green when the HDCP content of the HDMI source is HDCP 2.2, red when it is HDCP 1.4, or off when no HDCP.

5. **Power:** Micro USB port for power cord connection. The OMX-09HMHM0001 must be powered on when it is used as a signal generator. When the unit is used as a display emulator, it can be powered by HDMI source. If the HDMI source has not had enough power, both of the SIG LED and HDCP LED will blink.

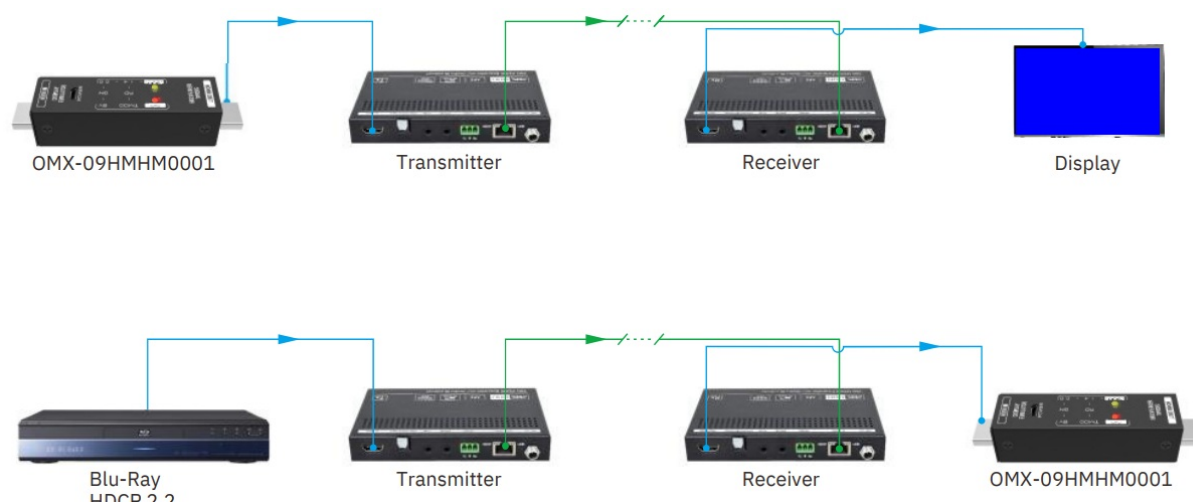
6. **DIP Switch:** When the OMX-09HMHM0001 is used as an HDMI signal generator, switches 1 & 2 are used for built-in EDID selection, and switches 3 & 4 are used for HDCP content selection.



There are four switches (1~4). The switch represents “0” when in the lower position, and it represents “1” while putting the switch in the upper position.

Switch Status (1 &2)	EDIT	
CO	4K@60Hz 444	
01	4K 460Hz 420	
10	41<0. 30Hz 444	
11	1080o460Hz/3D	
Switch Status (3 &4)	<b>HDCP</b>	<b>Test Pattern</b>
00	HDCP 2.2	Red Screen
01	HDCP 1.4	Green Screen
10	HDCP OFF	Blue Screen
11	HDCP OFF	AlternateVVB

## System Diagram



## 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 hazards, do not expose the unit to rain, or 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 walking 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

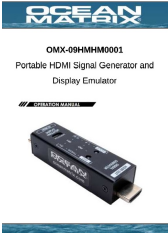
## WARRANTY

1 Year



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## Documents / Resources

	<p><a href="#">OCEAN MATRIX OMX-09MHM0001 Portable HDMI Signal Generator and Display Emulat or [pdf] User Manual</a></p> <p>OMX-09MHM0001, Portable HDMI Signal Generator and Display Emulator</p>
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