

OCEAN MATRIX®

USER MANUAL OMX-HDMI-CAT6

HDMI over Single Cat6 Transmission System with Looping Input



Ocean Matrix

812 Kings Highway • Saugerties, NY 12477
www.oceanmatrix.com

OMX-HDMI-CAT6

HDMI Extender

The Ocean Matrix OMX-HDMI-CAT6 extends high definition audio/video transmission beyond the standard distances of HDMI cable and its inherent limitations. Consisting of a transmitter and a receiver, this system delivers a full 1080P HDMI signal up to 164 feet over a single CAT6 network cable.

The transmitter features a built-in looping HDMI output for local display and monitoring. IR signal transmission allows for remote control of the source at a secondary location via included IR extension cables.

Includes

- One transmitter
- One receiver
- Two 5VDC power adapters
- One IR blaster extension cable- 3.28 ft (1m)
- One IR receiver extension cable - 3.28 ft (1m)

Specifications	
Supported Resolutions	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz
Network Cable	Low resistance and consumption oxygen-free copper core UTP or STP
Transmission Range	1080p resolution up to 164 feet (50m)
IR Remote Control	Supports 20~60KHz standard IR remote controls
Power Supply	5VDC/1A
Power Consumption	Transmitter 3W, Receiver 2W
Working Temperature	32°F - 140°F (0°C- 60°C)
Dimensions (LxWxH)	2.82x2.62x0.97in (71.6x66.6x24.8mm) per unit
Weight	Transmitter 2.93 lb., Receiver 2.84 lb. (83g/80.6g)

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Installation Requirements

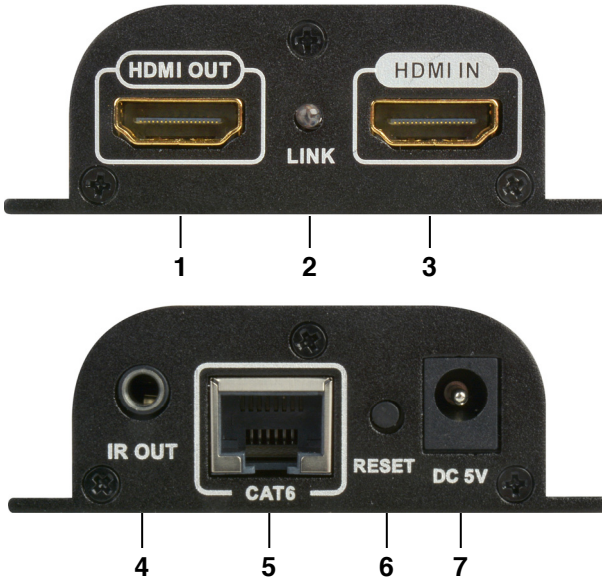
1. HDMI source device such as a video camera, media player, monitoring equipment or computer.
2. HDMI display device such as an SDTV, HDTV, or projector with HDMI port.
3. UTP/STP Cat6/6A/7 cable, in accordance with the IEEE-568B wiring standard.

OMX-HDMI-CAT6 Installation Safety

1. Identify the receiver and the transmitter in order to make proper connections during installation.
2. Do not hot plug/swap when in operation.
3. Use 5VDC power supply only.

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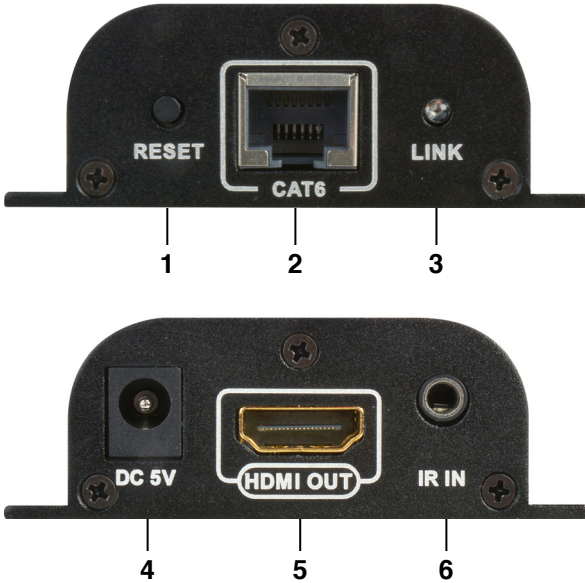
HDMI to RJ45 Transmitter



- 1 HDMI Signal Output
- 2 HDMI Signal Indicator LED
 - HDMI signal input—on
 - No signal—flashes
- 3 HDMI Signal Input
- 4 IR Signal Output
 - Connect IR blaster extension cable
- 5 RJ45 Signal Output
- 6 Reset Button
- 7 5VDC Power Input

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RJ45 to HDMI Receiver



1 Reset Button

2 RJ45 Signal Input

3 RJ45 Indicator LED

- HDMI signal transmission—on
- No signal—flashes

4 5VDC Power Input

5 HDMI Signal Output

6 IR Signal Input

- Connect IR receiver extension cable

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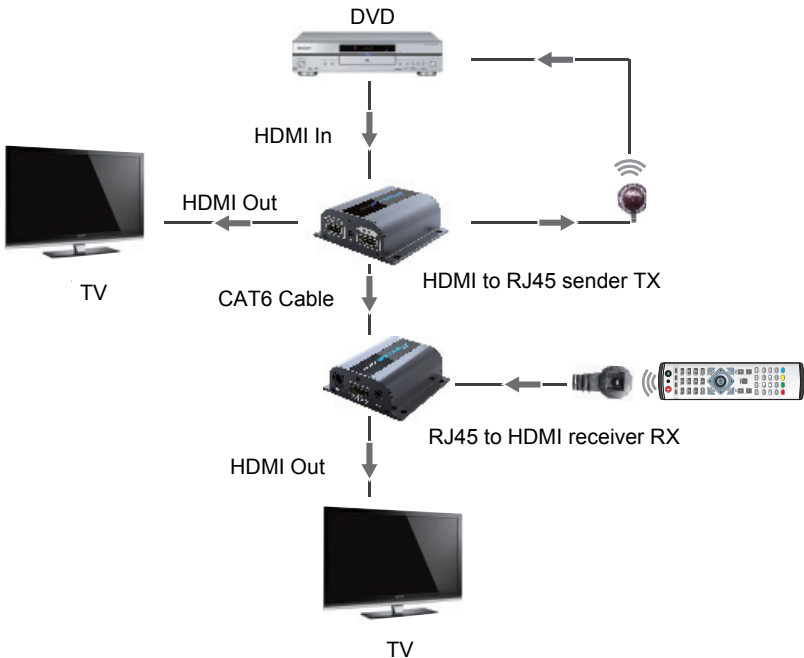
Installation Procedures

Cat6 Network Cable—follow the IEEE-568B wiring standard:

1. Orange/White
2. Orange
3. Green/White
4. Blue
5. Blue/White
6. Green
7. Brown/White
8. Brown

Connection

1. Connect TX HDMI input to source device HDMI output
2. Connect TX HDMI output to HDTV HDMI input
3. Connect TX CAT6 to RX CAT6
4. Connect RX HDMI output to HDTV HDMI input
5. Turn the power ON



OMX-HDMI-CAT6

IR User Guide

1. Plug the IR blaster extension cable into the IR-OUT port of the Transmitter TX.
2. Plug the the IR receiver extension cable into the IR-IN port of the Receiver RX.
3. Place the emitter of the IR blaster as close as possible to the IR receiver of the signal source device.
4. Direct the IR remote controller of the signal source device towards the IR receiver (connected to the RX of HDMI extender), to remote control source media playback.

Troubleshooting

No image/audio output or degraded signal

- Press RX RESET button to reset the device.
- Use a shorter network cable.

RX LINK LED is flashing consistently

- Ensure the network cable connection follows IEEE-568B wiring standard.
- Ensure TX has an HDMI signal input.
- Reset TX & RX and reconnect.

RX LINK LED is on but there is no image output

- Press RX RESET button to reset the device.
- Ensure the HDMI cable is correctly connected.
- Ensure you are using a CAT6 network cable.



SAFETY PRECAUTIONS



1. To prevent fire or shock hazard, do not expose this equipment to high humidity and/or dust. Do not use in an unprotected outdoor installation nor any area classified as overly damp or wet.
2. The temperature for installation should be kept between 32°F to 140°F (0°C to 60°C). Avoid direct sunlight exposure or extreme changes of temperature over a short period of time.
3. Do not disassemble the unit or place it on an unstable base.
4. Do not drop the unit and avoid heavy impact.
5. This unit should not be permanently installed unless proper ventilation is provided. Any enclosure openings must not be blocked or covered as they protect the unit from overheating.
6. Before cleaning, turn off the power and unplug the unit from all connections. Use a damp cloth. Do not use liquid cleaners nor aerosol cleaners.
7. Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.
8. Enclosure entry is dangerous. Never push objects of any kind, including liquids, into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
9. Do not attempt to open or service this unit yourself as opening or removing covers may expose you to dangerous voltage and other hazards.
10. There are no user-serviceable parts inside the unit. If the unit requires service contact your authorized dealer, or an authorized repair service company.

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