OMX-HDMI-2-IP
HDMI Over IP Extender/HDMI to CAT5/CAT6 Converter
Supports up to 8 Receivers

CONFIGURATION & TROUBLESHOOTING TIPS

SPECIFICATIONS

HDMI Resolutions
Input
480i@60Hz; 480p@60Hz; 576i@50Hz; 576p@50Hz;
720p@50/60Hz; 1080i@50/60Hz; 1080p@50/60Hz;
Output
480p@60Hz; 576p@50Hz; 720p@50/60Hz; 1080p@50/60Hz

Video Color Formats
24 Bit/Deep color
30 Bit/Deep color
36 Bit Deep Color

Transmission Distance
Cat6 up to 394 ft/120m
Cat5e up to 328 ft/100m
Cat5 up to 262 ft/80m

Input/Output Cable Length
16 ft / 5m (AWG26 HDMI1.3 standard cable)

- HDCP Support: HDCP1.2
- Max Transmission Rate: 10.2Gbps
- Network Bandwidth Utilized: 80Mbs
- Audio Signal Format: L/R Stereo Audio
- TMDS Signal: 0.5-1.5Vp-p (TMDS)
- DDC Signal: 5Vp-p(TTL)
- Twisted Pair Interface: Cat5e/6
- Cabling Standards: TIA/EIA568 B
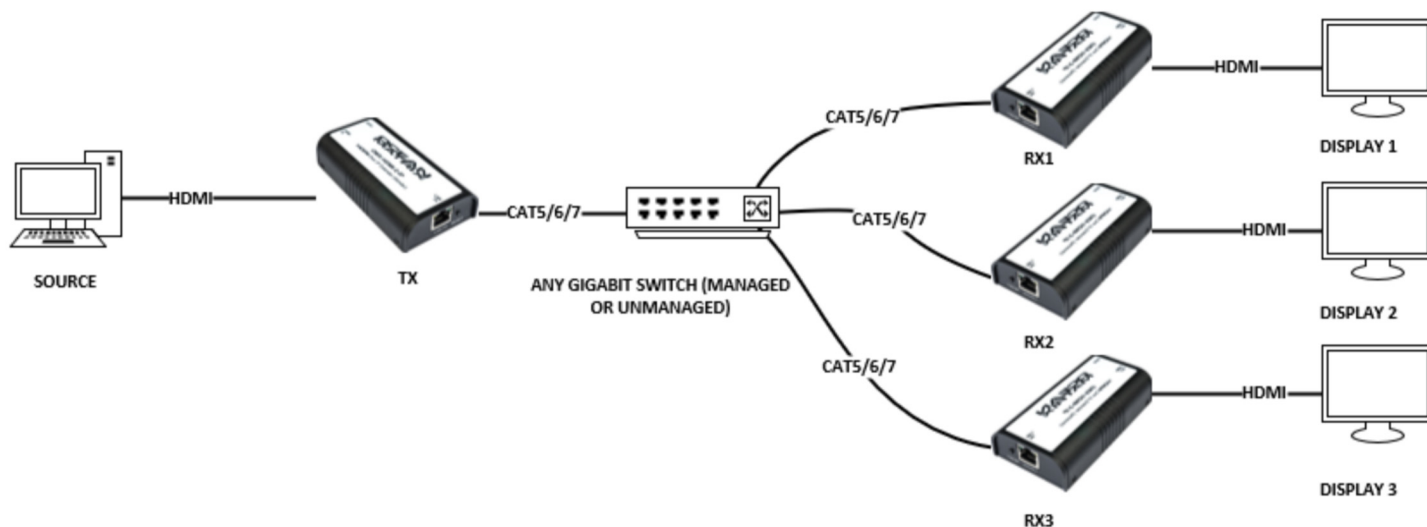- Power Supply: 5VDC/1A
- Power Consumption: <3.6W

Note: Cannot be used for extending non-HDCP-encrypted signal.

Point to Point
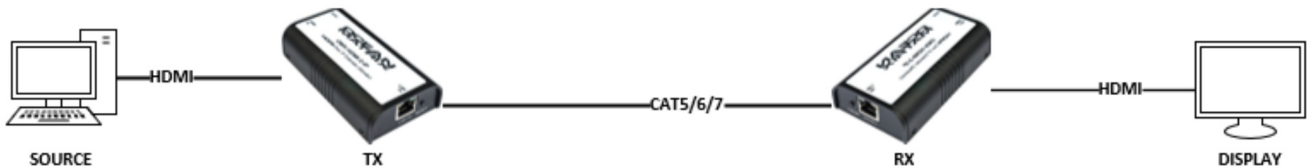
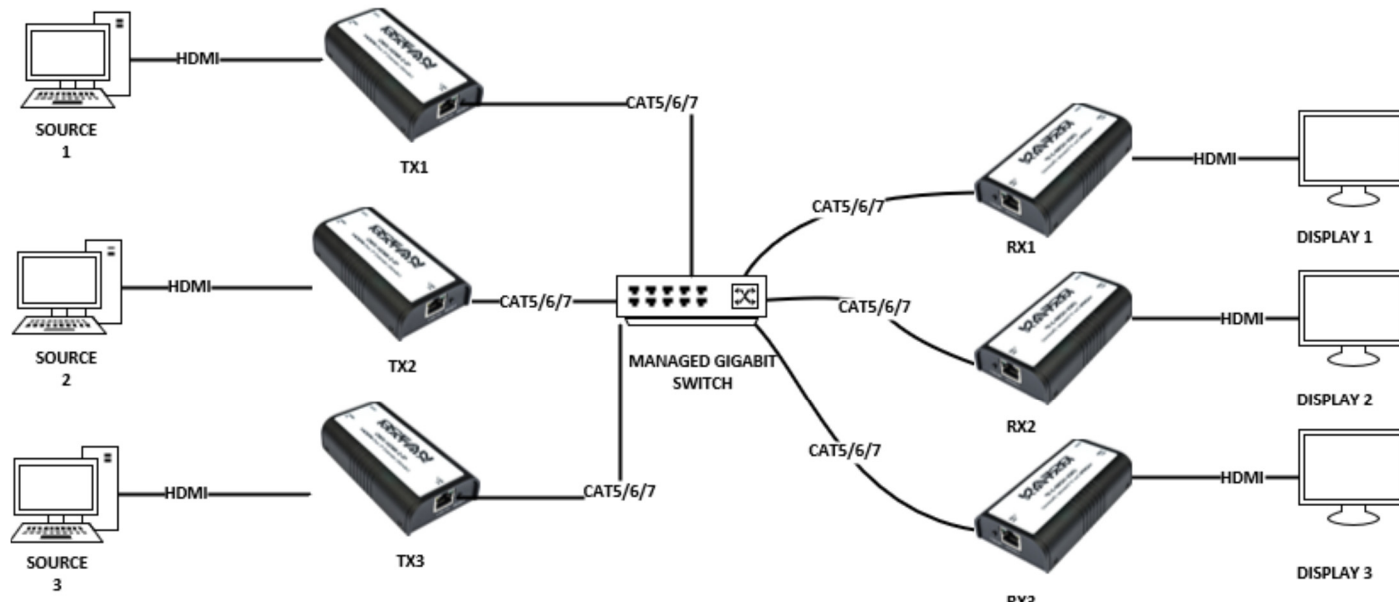| Step 1	Connect source to transmitter with an HDMI cable
Step 2	Connect transmitter to receiver with a Cat5/6e cable
Step 3	Connect receiver to display with an HDMI cable
Step 4	Play video from source.

Point to Multi-Point

Default TX settings	IP: 192.168.168.55 - MAC Address: 00:0b:78:00:60:01
Default RX settings	IP: 192.168.168.56 - MAC Address: 00:0b:78:00:60:02
Step 1	Assign an IP address to the computer : Control Panel → Network Connections → Local Area Connections Status → Properties → Internet Protocol (TCP/IP). Type in IP address field: 192.168.168.X (0-255) and Subnet mask : 255.255.255.0. Press OK to save the configuration. Please note: The IP address of PC should be different from the IP address of TX and RX.
Step 2	Use an Ethernet Cable to connect the computer and the transmitter. Click: Start Menu → Run → input ''CMD'' → input ''ping 192.168.168.55''
Step 3	Use an Ethernet Cable to connect the computer and the Receiver. Click: Start Menu → Run → input ''CMD'' → input ''ping 192.168.168.56'' Go to your browser and type the receiver IP in the address field (192.168.168.56) A control page will open up. Click ''System'' on the left menu bar. Here you can set your IP and subnet mask and MAC address for each receiver. repeat this step for each receiver using the example settings below. IP and MAC will increase last byte by 1 for each receiver (192.168.168.56<---last byte)

Receiver 1	IP: 192.168.168.**56** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**02**
Receiver 2	IP: 192.168.168.**57** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**03**
Receiver 3	IP: 192.168.168.**58** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**04**
Receivers > 3	IP: 192.168.168.**(+1)** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**(+1)**
Step 4	Click 'Apply' to save these settings
Step 5	Connect transmitter and receivers as in the diagram above using a LAN switch.

Multi-Point to Multi-Point

For Multipoint setup, each transmitter/receiver grouping must be on its own VLAN.

Default TX settings	IP: 192.168.168.55 - MAC Address: 00:0b:78:00:60:01
Default RX settings	IP: 192.168.168.56 - MAC Address: 00:0b:78:00:60:02
Step 1	Assign an IP address to the computer : Control Panel → Network Connections → Local Area Connections Status → Properties → Internet Protocol (TCP/IP). Type in IP address field: 192.168.168.X (0-255) and Subnet mask : 255.255.255.0. Press OK to save the configuration. Please note: The IP address of PC should be different from the IP address of TX and RX.
Step 2	Use an Ethernet Cable to connect the computer and the transmitters/receivers. Click: Start Menu → Run → input ''CMD'' → input ''ping 192.168.168.55 ('56' for receiver)'' You will receive a reply if the connection is established. Go to your browser and type the first transmitter/receiver IP in the address field (192.168.168.55 ('56' for receiver)) A control page will open up. Click ''System'' on the left menu bar. Here you can set your IP and subnet mask and MAC address for each transmitter/receiver. Repeat this step for each transmitter/receiver using the example settings below. IP and MAC will increase last byte by 1 for each transmitter/receiver (192.168.168.56<---last byte)

Transmitter 1	IP: 192.168.168.**55** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**01**	Transmitter 3	IP: 192.168.168.**59** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**05**
Receiver 1	IP: 192.168.168.**56** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**02**	Receiver 3	IP: 192.168.168.**60** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**06**
Transmitter 2	IP: 192.168.168.**57** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**03**	Transmitters > 3	IP: 192.168.168.**(+1)** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**(+1)**
Receiver 2	IP: 192.168.168.**58** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**04**	Receivers > 3	IP: 192.168.168.**(+1)** Subnet: 255.255.255.0 MAC: 00:0b:78:00:60:**(+1)**
Step 3	Click 'Apply' to save these settings
Step 4	Connect transmitters and receivers like the diagram above using a LAN switch

TROUBLESHOOTING

Issue	Question	Explanation
No Picture	1. Are you using on a VLAN (Virtual Local Area Network)? 2. Is the signal destination HDCP (High-bandwidth Digital Content Protection) compliant? 3. Does the source signal match one of these resolutions?: 480i@60Hz; 480p@60Hz; 576i@50Hz; 576p@50Hz; 720p@50/60Hz; 1080i@50/60Hz; 1080p@50/60Hz; 4. How long are your cable runs?	1. If using with a VLAN, make sure it is IGMP (Internet Group Management Protocol) capable and ports have UDP (User Datagram Protocol) enabled 2. The output of the OMX-HDMI-2-IP is automatically encrypted with HDCP. There will be no picture if the destination device is not HDCP compliant (capture cards mostly) 3. Source resolution must be supported by the OMX-HDMI-2-IP in order to display 4. Maximum Length: Cat5 262 ft, Cat5e 328 ft. Cat6 393 ft. If HDMI cables exceed 50 feet, try a shorter cable
No Picture and Message saying "Searching TX"	Is the transmitter power supply connection loose?	If the power supply connection is loose on the transmitter, the receiver may not be able to make a connection consistently. Secure the connection or replace the power supply (Item# OMX-DC5V21MM).
Intermittent picture—picture randomly drops in and out	Are you running your signal through any other devices in the chain?	This is usually an EDID (Extended Display Identification Data) issue. The display needs to send its table of acceptable resolutions (EDID) all the way back to the source device each time a connection is requested in order for the source to choose the best possible output resolution. There is a window of time in which this must take place depending on the equipment. If the signal takes too long for some reason (network traffic, cable length/speed, latency in other connected equipment) there will be no display. If you are constantly having this problem, we suggest an EDID emulator which will store the correct resolution settings at the display side, eliminating the need to go to the source for that information. If you are running through a network, we suggest a dedicated network switch be used to prevent potential drop outs. To check if the switch may be the issue, take the switch out of the equation and try a point to point setup to see if the drop outs occur.

SAFETY PRECAUTIONS

- To prevent fire or shock hazard, do not expose this equipment to dust or high humidity. Do not use in an unprotected outdoor installation or in areas classified as overly damp or wet.

- The installation temperature 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.

- Do not place the unit on an unstable base and avoid heavy impact.

- Proper ventilation is required for permanent installation. Do not block enclosure openings as they protect the unit from overheating.

- Prior to cleaning, turn the power off and unplug the unit from all connections. Do not use liquid or aerosol cleaners.

- Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.

- Enclosure entry is dangerous. Never push objects of any kind, including liquids, through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.

- Do not open or service this unit yourself as opening or removing covers may expose you to dangerous voltage and other hazards.

- There are no user-serviceable parts inside the units. If service is required, contact your authorized dealer or repair service company.