Specifications

EVBMN-M110	Transmitter Unit	Receiver Unit
	EVBMN-110L	EVBMN-110R
Input → Output	HDMI → RJ-45	RJ-45 → HDMI
LED — Status LED	Dual Color x 1	Dual Color x 1
LED — LAN LED	Single Color x 3	Single Color x 3
Video Resolution (max.)	Full HD (1080p@60Hz)	
Extension Distance	100M	
Ethernet Port	RJ-45 x 3	RJ-45 x 3
	10/100 Mbps	
Serial Port	DCE, DB9-F	DTE, DB9-M
	115kbps (max.)	
IR Extension	x 1, IR Transceiver / x 1, IR Receiver	x 1, IR Transceiver / x 1, IR Receiver
Power Supply	DC 12V (Phantom Power)	
Enclosure	Metal	
Weight (gram)	410~420	
H x W x D (mm)	140 x 85 x 34	

*Above video resolution and extension distance are based on a single CAT5e/6 24AWG solid cable without cascade. STP cabling is recommended for environments with high EMI or RFI. For the best performance results, using stranded cabling or other thinner cables, and coiling of excess cable lengths should be avoided.

Cabling Requirements

HDMI transmission running along the Ethernet cabling is particularly susceptible to EMI (electro magnetic interference) or RFI (radio frequency interference). It can be caused by being in close to fluorescent lighting or power cabling. The following are some considerations that you should pay attention to.

1. Place cables away from fluorescent lights, air conditioners, and machines that are likely to generate electrical noise.
2. The shielded cables (FTP, STP) are suggested for they can reduce the interference, and work better to EMI or RFI than UTP cables.
3. For superior video quality, unbundled cables work better than bundled ones. Bundled cable of greater than 3 ft. diameter will have minor effect on the cable length.
4. The solid cable will work better than stranded cable. It may shorten the transmission distance if you use stranded cabling or other cables thinner than 24AWG. That is, solid cable of larger than 24AWG is strongly suggested. Additionally, CAT6 is more recommended.
5. Joined cables can result in signal loss and shortening transmission distance. Therefore, for the optimal transmission distance, we recommend using only one piece of cable (without any immediate joints) between transmitter and receiver units.

Other Notices

1. Due to EMI or RFI, some certain brands/types of displays, like monitors and TVs, may result fuzzy or snowing on screens. In this case, please try to restart the displays.
2. As the system transmits massive data, temperature rises on the unit is a normal phenomenon, so please do not open any components inside by yourself.
3. The unit is a sealed structure; should not be tampered with by anyone other than registered installer.
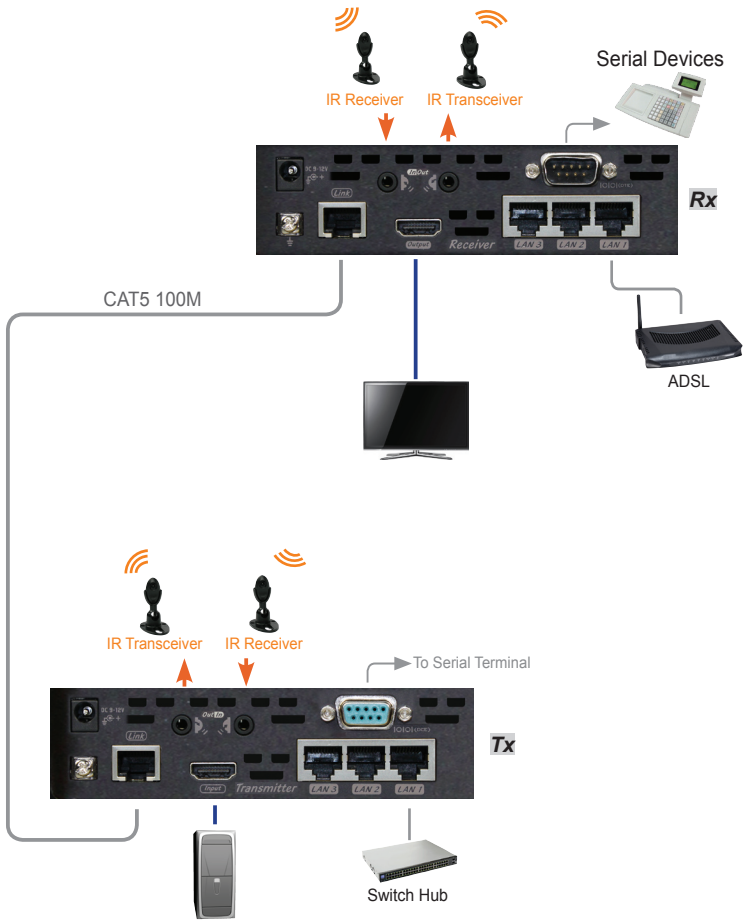
Features

- Send HDMI signal to multimedia display over CAT5e/6 cable of up to 100 meters
- Transmit full uncompressed HD video and audio over cable
- 100BaseT Ethernet Pass-Thru; simultaneously distribute HDMI and Ethernet streaming video from source to display
- Low cost standard CAT5e/6 LAN cable; advanced and inexpensive all-in-one connectivity technology
- HDCP compliant and Blu-ray ready
- Support Deep Color, HD-3D video and HD Audio formats
- Support resolution up to Full HD 1080p / 2048 x 1152
- Bi-directional LAN & Serial & two-way IR control
- IR extension supported
- Support Phantom Power -- single power supply at either one end of two units (Tx & Rx)
- Compact size; easy to set up; simple to install
- Ideal for hospitality (hotels, conference rooms), digital signage (airports, shopping malls), surveillance cameras, whole-home networking and point-to-point consumer applications

Package Contents

● Transmitter Unit	x 1
● Receiver Unit	x 1
● Power Adapter Set	x 1
Power Adapter with necessary AC Cord	
or	
Plug-in Power Adapter	
● User's Manual	x 1
● Foot Pad Set	x 2
● IR External Sensor Kit	x 1
● CAT5 Cable	x 1
● Grounding Wire	x 2

Optional:
- IR External Sensor Kit
- HDMI Cable
- Serial Cable
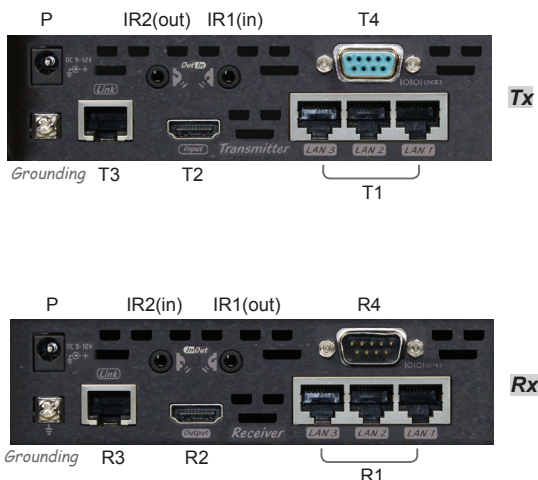
HDMI Extender over CAT5
with IR, Ethernet & Serial Extending

EVBMN-M110
(EVBMN-110L + EVBMN-110R)

Related Products (without Ethernet & Serial function)

Type	100M	70M	Function
Tx + Rx	EVBM-M110	EVBM-M107	CAT5 HDMI Extender Pair
Tx (Splitter)	EVBM-1104L	EVBM-1074L	CAT5 HDMI Splitter (2-in / 4-out) with Auto-sensing function
Tx (Switch-Splitter)	EVBM-S1504L	EVBM-S1474L	CAT5 HDMI Switch-Splitter (4-in / 4-out) with Auto-sensing function

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- The final specification is the actual product based.
- Features and functions may be added or changed after the manual was written. Please visit our website to download the latest version of manual for reference.

PP5-HEM152Z-000 CE FC RoHS

Installation

- Prior to installation, ensure to power off all devices that will be connected to this system.
- Ensure that all devices you will connect are properly grounded.
- Place cables away from fluorescent lights, air conditioners, and machines that are likely to generate electrical noise.

Users can connect the video source to the Transmitter Unit, connect the monitor to the Receiver Unit. Connect to Ethernet devices to the Transmitter and the Receiver Units (LAN ports) and use CAT5e/6 cable (EIA / TIA 568B industry standard compliant) for the connection between the Transmitter (Link Port) and Receiver Unit (Link Port). After all device connections are completed, connect the provided power cord into an appropriate power source and plug the opposite end into the power connector* on the Unit to power up.

CAUTION: The CAT5e/6 cables that connect the Transmitter and Receiver Units carry electrical current and should not be plugged in to other devices, as they may cause damage. We strongly recommend marking the CAT5e/6 cables you are using with this product at both locations for easy identification.

Operation

The LEDs on the Extender Units show the real-time status indicating the linking and communication between the Transmitter Unit and Receiver Unit. Users can identify the present status through the LED indicator on the top.

The quality of the output signal will depend largely upon the quality of video source, cable and display device used. Low quality cables degrade output signal causing elevated noise levels. Please use the proper cable and make sure the display device is capable of handling the resolution and refresh rate selected.

NOTE:

1. The system will disable the video output signal when it detects non-HDCP compliant display(s) on playing the HDCP video source. All the connected output displays MUST be HDCP compliant, when the video source is HDCP compliant.
2. If there's no signal detected from HDMI port, the baud rate will automatically speed down to 9,600 bps.

Connection Pattern

Product Description

Front Panel

Rear Panel

La	LAN LED	Yellow: LAN status (Data communication)
Ls	Status LED	[Tx] Blue: Link status; Green: Power on; Flashing Blue+Green: Power-saving mode [Rx] Blue: Link status; Red: Power on; Flashing Blue+Red: Power-saving mode
T1	R1	RJ-45 Connector	Connect to Ethernet devices
T2	R2	HDMI Connector	[T2] Connect to an HDMI video source [R2] Connect to an HDMI disply
T3	R3	RJ-45 Connector	Use CAT5e/6 for connection between two units.
T4	R4	Serial Port	[T4] (DCE) Connect to a computer [R4] (DTE) Connect to a serial device
IR1(in)		IR Remote Jack	Connect to an IR Receiver
IR1(out)			Connect to an IR Transceiver
IR2(in)			Connect to an IR Receiver
IR2(out)			Connect to an IR Transceiver
P		Power Supply*	Apply power to the unit.

*Phantom Power: Only one power adapter is required to power the entire system. The power adapter may be connected to either the Transmitter Unit or the Receiver Unit.