

Specifications

EVBMN-M210		Transmitter Unit (Tx)	Receiver Unit (Rx)
		EVBMN-210L	EVBMN-210R
Input → Output		HDMI → RJ-45	RJ-45 → HDMI
Power over HDBaseT™**		PSE (Power Source Equipment)	PD (Powered Device)
LED	Status LED	Dual Color x 1	Dual Color x 1
	LAN LED	Single Color x 3	Single Color x 3
Video Resolution (Max.)		UHD (3840 x 2160 @ 30Hz)	
Extension Distance*		Full HD 1920 x 1080 @ 100M UHD 3840 x 2160 @ 70M	
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
Slide Switch		Auto Power Saving / Normal / Long Reach	
Power Supply		DC 12V	
Enclosure		Metal	
H x W x D (mm)		140 x 85 x 34	
Weight (g)		1195 (each unit)	

*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.

NOTE:

Rextron EVBMN-M210, Transmitter Unit (PSE) and Receiver Unit (PD) is compatible with HDBaseT™ PoH standard. It only need to connect power adapter to Tx and it will automatically transmit power to Rx. If user may want to use other brand's Tx or Rx, please make sure whether it is compatible with HDBaseT™ PoH standard. Moreover, Transmitter Unit should be PSE and Receiver Unit should be PD, or it may not work. It is highly recommended use Rextron's Tx connecting to Rextron's Rx for optimal transmission quality.

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.

Cabling Requirements

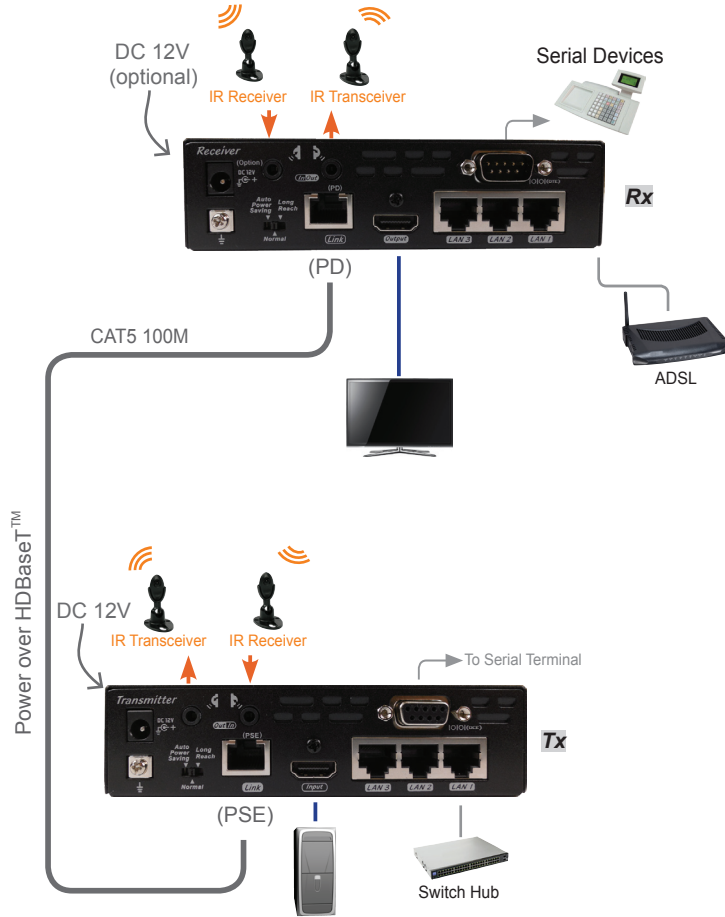
HDMI transmission running along the Ethernet cabling is particularly susceptible to EMI (electro magnetic interference) or RFI (radio frequency interference). It can be caused by being in close to fluorescent lighting or power cabling. The following are some considerations that you should pay attention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

Connection Pattern



Features

- Compatible with HDBaseT™ PoH standard
- Send HDMI signal to multimedia display over CAT5e/6 cable of up to 100 meters
- Uses HDBaseT™ Technology
- 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
- 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

Exclusive 5Play™ Feature

- Transmit full uncompressed HD video and audio over CAT5e/6 cable
- Support LPCM 7.1 Audio, Dolby® TrueHD and DTS-HD Master Audio™ pass-through
- 100BaseT Ethernet Pass-Thru; simultaneously distribute HDMI and Ethernet streaming video from source to display
- Multiple interface options allow controlling the unit by Hotkey control and Serial control
- Transmitter Unit deliver DC power to Receiver Unit over CAT5e/6 cable

Package Contents

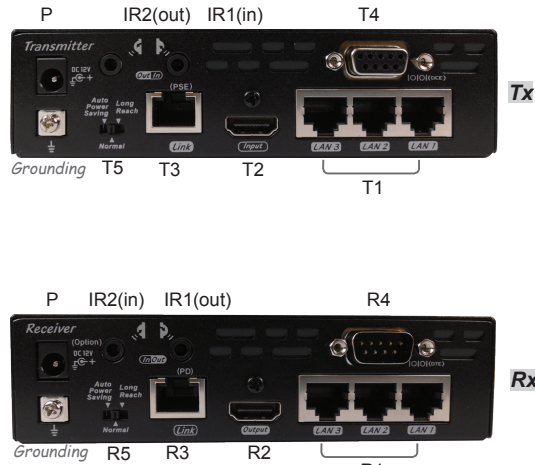
- Transmitter Unit x 1
- Receiver Unit x 1
- Power Adapter Set x 1
 - Power Adapter with necessary AC Cord
 - or
 - Plug-in Power Adapter
- User's Manual x 1
- Foot Pad Set x 2
- CAT5 Cable x 1
- Grounding Wire x 2
- Optional:
 - IR External Sensor Kit
 - Serial Cable
 - HDMI Cable

Product Description

Front Panel

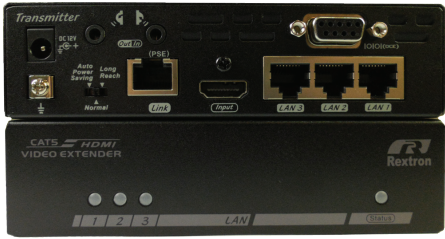


Rear Panel



User's Manual

HDMI Extender over CAT5 with IR, Ethernet & Serial Extending (Power over HDBaseT™)



EVBMN-M210 (EVBMN-210L + EVBMN-210R)



■ 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-HEM257Z-000



La	LAN LED		<u>Yellow</u> : LAN status (Data communication)
Ls	Status LED		[Tx] <u>Blue</u> : Link status; <u>Green</u> : Power on; Flashing <u>Blue+Green</u> : Power-saving mode [Rx] <u>Blue</u> : Link status; <u>Red</u> : Power on; Flashing <u>Blue+Red</u> : 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 display
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
T5	R5	Slide Switch*	Please set on the same position for Tx and Rx
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.

*Please set both of slide switches on the same position to reach the goal.
Normal: The extension distance of HDMI signal over CAT5/6 is up to 100M for 1080p and 70M for 4Kx2K.
Long Reach: The extension distance of HDMI signal over CAT5/6 will be increased up to 150M for 1080p, but the unit can not transmit 4Kx2K resolution.
Auto power saving: The extension distance of HDMI signal over CAT5/6 is the same as "Normal", but the unit can automatically save energy for increasing efficiency use.
**Power over HDBaseT™ (PoH): Only Transmitter Unit is required to connect to power adapter and power the entire system. The PoE standard is based on the IEEE 802.3at standard.