

# MVE-AH1H1-01GQ ENHANCED HDMI® Extender over Cat5e/6

Manual













- Extend HDMI signals up to 230ft (70m) at 1080p over a single Cat5e/6 cable
- Supports resolutions from 480i up to 4Kx2K/UHD
- Plug and play operation comes as a complete set
- Bi-directional IR for remote control extension
- Includes one (1) 24VDC locking power supply set can be powered at either end

## ENFORCER Enhanced HDMI® Extender over Cat5e/6

#### Introduction:

The ENFORCER Enhanced HDMI Extender over Cat5e/6 extends the range of HDMI signals by using an active transmitter and receiver to send video and audio over a single Cat5e/6 cable. 1080p HDMI signals can be transmitted up to 230ft (70m) between the two units with zero signal loss, while 4Kx2K/UHD HDMI signals can be transmitted up to 130ft (40m). The extender supports IR signals using the included IR transmitter and receiver, allowing the user to use a remote control from one end of an installation to control a device such as a TV or media player at the opposite end of the installation. A single power supply can power both devices from either end of the installation.

#### Features:

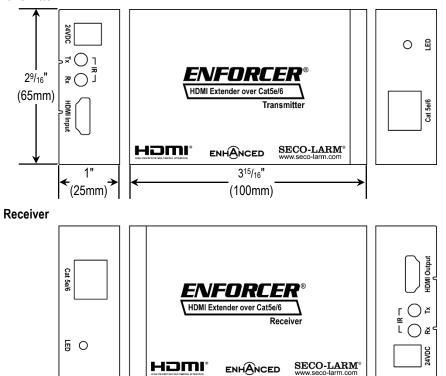
- · Signal Strength Active operation ensures that the signal strength will remain strong over the length of the cable.
- Distance The Enhanced HDMI Extender over Cat5e/6 can transmit a clear HDMI signal up to 230ft (70m).
- Formats Supported The Enhanced HDMI Extender over Cat5e/6 support both progressive and interlaced formats: 4K/1080p/1080i/720p/576p/576i/480p/480i.
- Plug and Play The Enhanced HDMI Extender over Cat5e/6 comes as a complete set consisting of a transmitter, receiver, power supply, and IR adapters. No adjustments or settings need to be made. The unit is ready to use right out of the box.
- Zero Signal Loss Integrated circuits in the transmitter and receiver clean, buffer, and amplify the HDMI signal.
   This prevents signal loss and ensures a clear signal regardless of the length of the cable up to the maximum range.
- Bi-Directional IR –Send IR signals from the source to the monitor or from the monitor to the source for discrete
  operation of devices.
- Connect Multiple Units Repeat up to four sets to extend HDMI range up to 918ft (280m).

## **Specifications:**

Model		MVE-AH1H1-01GQ
Input video signal		3.3V
Input DDC signal		5Vp-p (TTL)
Maximum single link range		4Kx2K@30Hz
Deep color		48-bit
Video formats supported		High-speed HDMI with 3D, HDCP 1.2
Audio formats supported		LPCM, Dolby-AC3, DTS 7.1, DSD
Output video		HDMI
Resolutions supported		4K/1080p/1080i/720p/576p/576i/480p/480i
Range – 1080p	Cat6	Up to 230' (70m)
	Cat5e	Up to 196' (60m)
Range – 4K	Cat6	Up to 130' (40m)
	Cat5e	Up to 98' (30m)
Video amplifier bandwidth		10.2Gbps
Video input connector		HDMI Type A 19-pin female
Maximum input cable length		24AWG: 50' (15m); 26AWG: 32' (10m); 28AWG: 16' (5m)
Cat5e/6 wiring standard		T568-B
IR pass-through		30~50kHz
Operating voltage		24VDC
Power supply		1A@24VDC (1 adapter) (2.1mm plug)
ESD protection (human body model)		±8kV (air-gap discharge), ±4kV (contact discharge)
Current draw	Transmitter	150mA@24VDC
	Receiver	250mA@24VDC
Operating temperature		32°~104° F (0°~40° C)
Operating humidity		20~90% RH (no condensation)
Dimensions		3 <sup>15</sup> / <sub>16</sub> "x2 <sup>9</sup> / <sub>16</sub> "x1" (100x65x25mm)
Weight		7.1-oz (200g) (each)

#### Overview:

#### **Transmitter**



## Parts List:

1x Transmitter 1x Receiver 1x Manual

2x IR Transmitters 2x IR Receivers 1x 24VDC Locking power adapter

4x Mounting brackets 8x Mounting bracket screws

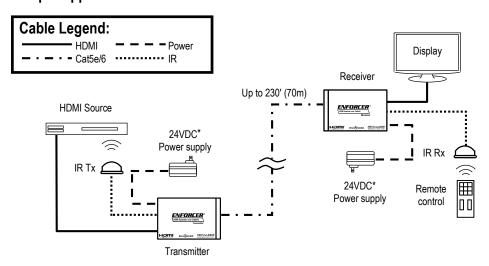
### Installation:

- 1. Determine where the transmitter and receiver will be wired as well as how much Cat5e/6 cable will be necessary.
- 2. Connect the HDMI cable to both the transmitter and the source device.
- 3. Connect the HDMI cable to both the receiver and the display.
- 4. Connect the Cat5e/6 cable to both the receiver and transmitter units.

Note: For best results, use Cat6 or better cable.

- 5. Connect the 24VDC adapter to either the transmitter or receiver.
- 6. Determine which device, if any, will be controlled by the remote control. Install the IR transmitter to the IR-TX port of the extender nearest the device to be controlled, pointing the IR transmitter at the device. Install the IR receiver to the IR-RX port of the other extender unit. Point the remote control at the IR receiver when in use.
- 7. Switch on the HDMI source and display to verify that the system is functioning properly.
- 8. If necessary, use the included brackets and screws to mount the extender to a wall or desk.

# **Sample Application:**



<sup>\*</sup> Power supply can be installed at either end

HDMI device does not function

# Troubleshooting:

correctly

- Use T568-B wiring standard
- Make sure the maximum lengths are not exceeded for either the type of HDMI or Cat5e/6 cable used (see specifications chart for both cables)
- Make sure the source and the display are powered.
- Test the Cat5e/6 cable between the receiver and transmitter and make sure it is functional.
- Make sure that there are no problems with the HDMI source, HDMI cables, or HDMI display by plugging the source directly into the display using an HDMI cable
- Make sure that the transmitter and receiver are plugged into the correct units
- Make sure the HDMI source is compatible with the HDMI display.

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