

800374

HDMI Extender

over single 50m UTP Cables with IR Control



User manual

VER:1.0

1. INTRODUCTION

The HDMI Extender over Single Cat5e/6 with IR extends high definition video and audio signals and IR, at a distance of up to 50m over a single Cat5e/6 cable. Features EQ management, supports Network cable length matching settings. With only one cost effective Cat5e/6 cable, high definition sources with HDMI outputs can be connected to high definition displays with HDMI inputs over long distances. Deep color video, DTS-HD or Dolby TrueHD audio is supported and compatible with the extender. In addition, the extender is also equipped with pass-through which allows for source control.

The extender includes two units: transmitting unit and receiving unit. The transmitting unit is used to capture the HDMI input with IR signals and carries the signals via one cost effective Cat5e/6 cable. The receiving unit is responsible for equalizing the transmitted HDMI signal and reconstructing IR control signals. The extender offers the most convenient solution for HDMI extension over a single Cat5e/6 with long distance capability.



2. Package Contents

HDMI Transmitter -----	1pc
HDMI Receiver -----	1pc
Windband IR Tx cable -----	1pc
Windband IR Rx cable -----	1pc
5V1A DC Power Supply Adaptor -----	1pc
Product Manual -----	1pc



3. Features

- * Allows HDMI Audio/Video and IR signals to be transmitted over a single Cat5e/6 cable.
- * Supports EQ management, network cable length matching settings.
- * Support Power over cable function.
- * Transmitters support 1xHDMI loop out, receiver support 2*HDMI out.
- * Transmission Range: Extends 1080p resolution up to 50m over a single Cat5e or Cat6 cable.
- * Works with HDMI and HDCP compliant devices
- * Supports up to 1080p High Definition resolution.
- * Compact design for an easy and flexible installation.



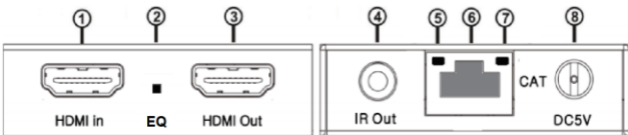
4. Specifications

SPECIFICATIONS	
Video Bandwidth:	Single-link 165Mhz [4.95Gbps]
Video Support:	480i/480p/720p/1080i/1080p@60
Audio Support:	Surround Sound (up to 7.1 ch) or stereo digital audio
Transmission Range:	HD [1080p 24-bit color] - up to 50m [164ft]
Input TMDs Signal:	3.3 volts
Input DDC Signal:	5.0 volts/P-P
ESD Protection:	Human Body model: +/- 8 kV (air-gap discharge) +/- 4 kV (contact discharge)
HDMI connector:	Type A 19 pin female
RJ-45 connector:	WE/SS 8P8C
3.5mm connector:	(TX and RX) IR Receiver/IR Blaster
MECHANICAL SPECS	
Housing:	Metal enclosure
Power Supply:	5V1A DC
Power consumption:	1.5 watts (TX); 1.0 watts (RX)
Operation temperature:	32~104 ° F
Storage temperature:	-4 ~140 ° F
Relative humidity:	20~90 % RH (no condensation)



5. Panel Descriptions

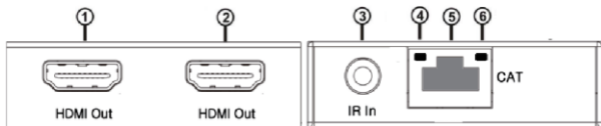
5.1 Transmitting unit



- 1. HDMI OUT:** HDMI Loop out for Local Display cascading via additional HDMI loop out port.
- 2. EQ:** Network cable length matching settings.
- 3. HDMI IN:** This slot is where you connect the HDMI output port of your source equipment such as DVD/Blu-ray players or Set-Top-Box with an HDMI cable.
- 4. IR OUT:** Connect the IR Blaster cable included in the package for IR signal transmission.
Place the IR blaster in direct line-of-sight of the equipment to be controlled.
- 5. Power LED:** This LED illuminates when the device is connected with power supply.
- 6. CAT OUT:** Connect the CAT output of the transmitter with the CAT input of the receiver with CAT5E/6 cable.

- 7.Link LED:**This LED will illuminate when the device is connected to HDMI source.
- 8. DC 5V:** Connect from 5V DC power supply into the unit and connect the adaptor to an AC outlet.

5.2 Receiver unit



- 1&2. HDMI out:** Two slots are to connect the HDMI input port of your display such as an HDTV.
- 3. IR IN:** Connect to the IR Receiver for IR signal reception. Ensure that remote being used is within the direct line-of-sight of the IR receiver.
- 4.Power LED:**This LE illuminate when the device is connected with power supply.
- 5. LAN IN:** Connect the CAT input of the receiver with the CAT output of the transmitter with CAT5E/6 cable.
- 6.Link LED:**This LED will illuminate when the device is connected to HDMI source.

6. Connect and Operate

1. Connect a source such as a Blu-Ray Player, game console, A/V Receiver, Cable or Satellite Receiver, etc. to the HDMI input on the Transmitting unit.
2. Connect a display such as an HDTV or HD Projector to the HDMI output on the Transmitting and Receiving unit.
3. Connect a single Category 5e/6 up to 50m to the output of the Transmitting unit, and the other end to the input of the Receiving unit.
4. For power, plug the Transmitting unit with the included power supply.

At this point the display connected should display the source signal connected to the extender set. If no signal is being displayed, press the transmitter EQ button. A 24 Hz vertical refresh rate may work better than 60 Hz or higher. Use the source remote at the receiver emitter to test IR functionality. If the IR remote function is not responding, check the emitters to ensure they are placed correctly and are plugged into the correct IR jacks on the Extender set receiving and transmitting units.



Wideband IR(30KHz---60KHz) introduction



IR RECEIVER

IR BLASTER

IR BLASTER (TX)

To control the source: Plug IR Blaster into IR TX port of transmitter unit;
place blaster in front of the IR eye of the source.

IR RECEIVER (RX)

To control the source: Plug IR Receiver into IR RX port of receiver unit;
place receiver at or near display.

7.Connection diagram

Connection Diagram



Cascade Diagram

