HDMI Extender over single 50m/164ft UTP Cables with IR Control

User Manual

Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Table of Contents

1. Introduction

The HDMI Extender over Single Cat6 with IR extends high definition video and audio signals and IR, at a distance of up to 164ft/50m over a single Cat6 cable. With only one cost effective Cat6 cable, high definition sources with HDMI outputs can be connected to high definition displays with HDMI inputs over long distances. DTS-HD or Dolby True HD 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 Cat6 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 Cat6 with long distance capability, and is the perfect solution for any application.

2. Features

- ✧ Allows HDMI Audio/Video and IR signals to be transmitted over a single Cat6 cable.
- ✧ Support copy EDID from receiver display.

- ✧ Transmission Range:
  - Extends 4K2K@30Hz up to 164ft/50m over a single Cat6 cable.
  - Extends 1080P@60Hz up to 196ft/60m over a single Cat6 cable.
- ✧ Works with HDMI and HDCP compliant devices.
- ✧ Support power over cable function(Transmitter or Receiver).
- ✧ Compact design for an easy and flexible installation.

3. Package Contents

- ✧ 1x HDMI Transmitter
- ✧ 1x HDMI Receiver
- ✧ 2x Windband IR Tx cable
- ✧ 2x Windband IR Rx cable
- ✧ 1x 12V1A DC Power Supply Adaptor
- ✧ 1x Product Manual

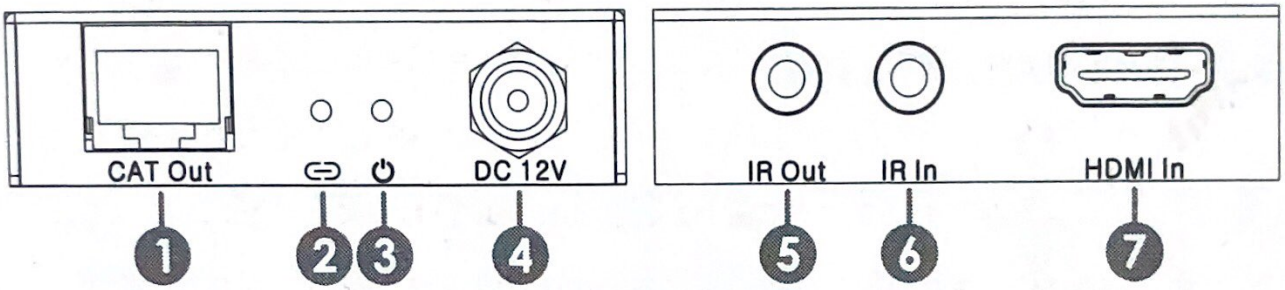
4. Specifications

Technical	
HDMI Compliance	HDMI 1.4
HDCP Compliance	HDCP 2.2
Video Bandwidth	10.2 Gbps
Video Resolutions	up to 4K2K@24/30Hz

Color Space	RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	8-bit
HDMI Audio Formats (Pass-through)	LPCM 2/5.1/7.1CH, Dolby Digital, DTS 5.1, Dolby Digital+, DolbyTrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X
ESD Protection	Human body model — ±8kV (air-gap discharge) & ±4kV
	(contact discharge)
Connections	
Transmitter	Inputs: 1x HDMI Type A [19-pin female] Outputs: 1x RJ45, 2x3.5mm mini jack
Receiver	Inputs: 1x RJ45, 2x3.5mm mini jack Outputs: 1x HDMI Type A [19-pin female]
Mechanical	
Housing	Metal
Color	Black
Dimensions	TX: 88mm [W] x61mm [D] x17mm [H] RX: 88mm [W] x61mm [D] x17mm [H]
Weight	TX: 144g RX: 144g
Power Supply	DC 12V/1A Adaptor (US/EU standards, CE/FCC/UL certified)
Power Consumption	TX: 1.0W RX: 1.5W
Operation Temperature	32 - 104°F / 0 - 40°C
Storage temperature	4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

5.Operation Controls and Functions

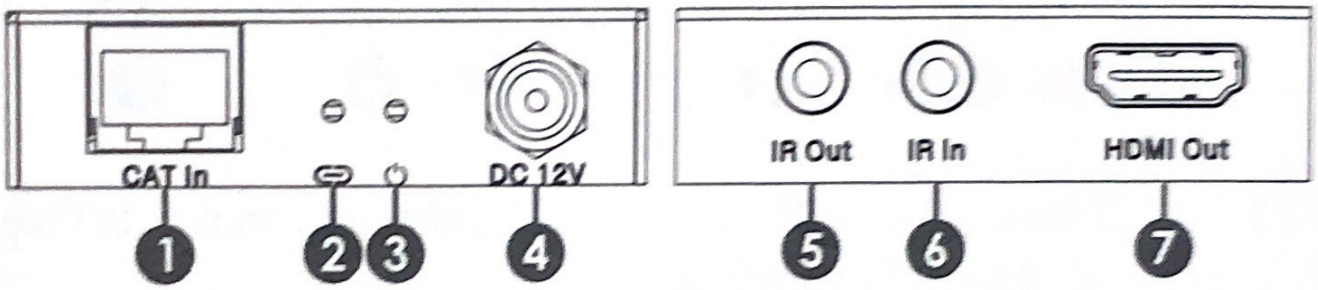
5.1 Transmitter Panel



1. **CAT:** Connect the CAT output of the transmitter with the CAT input of the receiver with CAT6 cable.
2. **Link LED:** This LED will illuminate when the device is connected to HDMI source.
3. **Power LED:** This LED will illuminate when the device is connected with power supply.
4. **DC 12V:** Connect from 12V DC power supply into the unit and connect the adaptor to an AC outlet.
5. **IR out:** Connect the IR Blaster cable included in the package for IR signal transmission. Pace the IR blaster in direct line-of-sight of the equipment to be controlled.
6. **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.

7 **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.

5.2 Reciver Panel



1 **CAT:** Connect the CAT input of the receiver with the CAT output of the transmitter with CAT5E/6 cable.

2 **Lock LED:** This LED will illuminate when the HDMI signal from the transmitter is stable.

3 **Power LED:** This LED will illuminate when the device is connected with power supply.

4 **DC 12V:** Connect from 12V DC power supply into the unit and connect the adaptor to an AC outlet.

5 **IR out:** Connect the IR Blaster cable included in the package for IR signal transmission. Pace the IR blaster in direct line-of-sight of the equipment to be controlled.

6 **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.

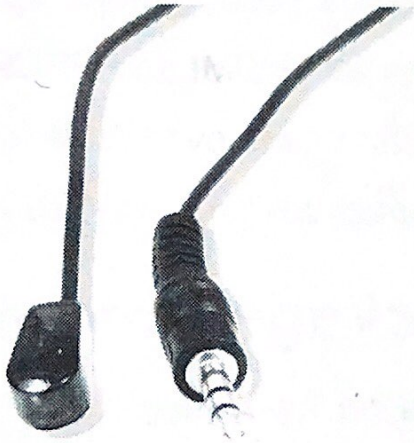
7 **HDMI out:** This slot is to connect the HDMI input port of your display such as an HDTV.

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 Receiving unit.
3. Connect a single Category6 up to 164ft/50m to the output of the Transmitting unit, and the other end to the input of the Receiving unit.
4. For power, plug both the Transmitting unit and Receiving unit with the included power supplies.
5. Power on each device in the same sequence (receiver and transmitter will already be powered when either unit is plugged in.)

Wideband IR(30KHz—60KHz) introduction

IR RECEIVER



IR BLASTER

IR BLASTER (TX)

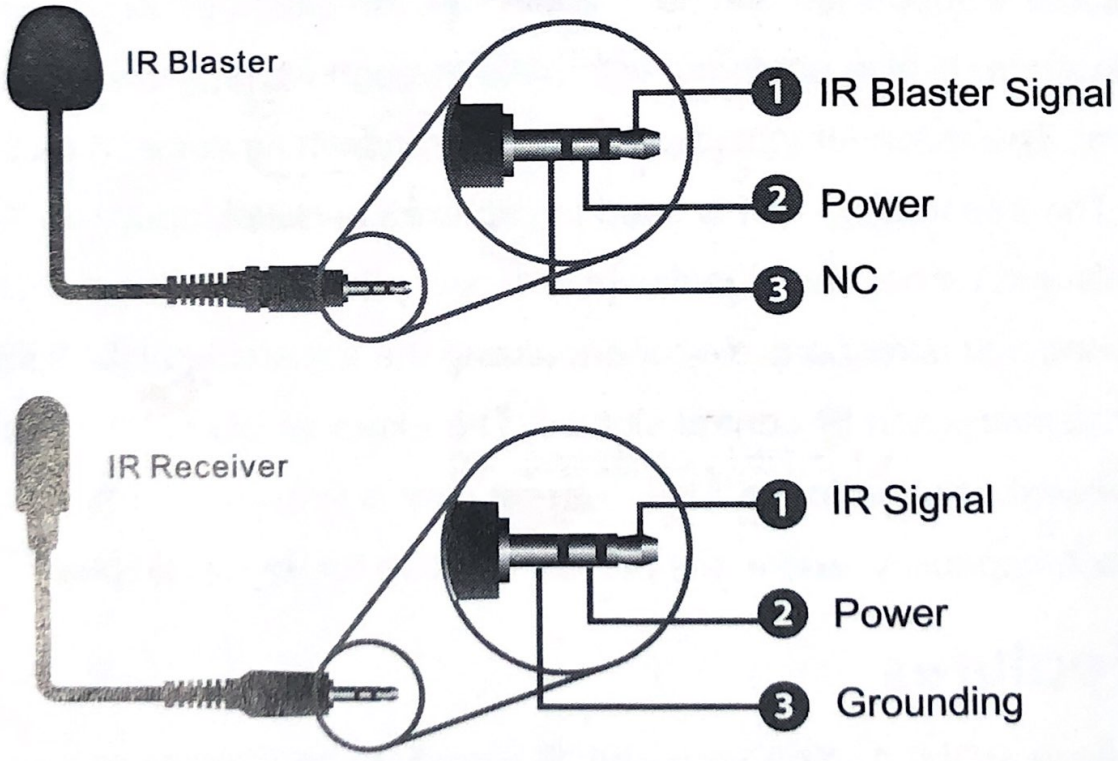
To control the source: Plug IR Blaster into IR TX port of transmitter unit; place blaster in front of the IR eye of the source.

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

IR RECEIVER (RX)

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

To control the display: Plug IR Receiver into IR RX port of transmitter unit; place receiver in position where it is able to receive remote signals.



6.Connection Diagram