

HDMI Extender over single 50m/164ft UTP Cables

STR50C-HDV

Extends high definition video and audio signals and IR, at a distance of up to 164ft/50m over a single Cat5e/6 cable. Features EDID management, which allows and encourages source and display “handshake” for seamless integration. 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 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 t signals via one cost effective Cat5e/6 cable. T 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, and is the perfect solution for any application.

Features:

- > Allows HDMI Audio/Video and IR signals to be transmitted over a single Cat5e/6 cable.
- >Support copy EDID from receiver display or loop out display
- >Allows for cascading via additional HDMI loop out port.
- Support Power over cable function.
- >Transmission Range: Extends 1080p resolution up to 164ft/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.



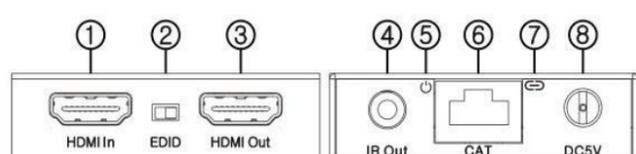
HDMI Extender

Specifications:

- Video bandwidth:** Single-link 165Mhz [4.95Gbps]
 - Video Support:** 480i/480p/720p/1080i/1080p @60
 - Audio Support:** Surround Sound [up to 7.1ch] 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:+/-8kV [air-gap discharge] +/-4kV [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:** [1]5V1A DC
 - Power consumption:** 1.5 watts [TX];1.0 watts[RX]
 - Operation temperature:** 32~140° F
 - Storage temperature:** -4~140° F
 - Relative humidity:** 20-90%RH(no condensation)

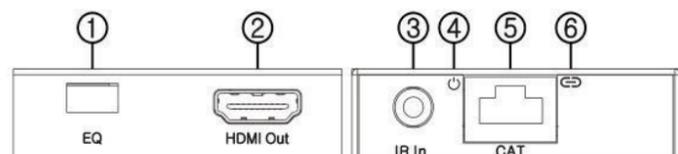
Panel descriptions:

1. Transmitting unit



- ① **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.
- ② **EDID:** The switcher can switch copy EDID function, switch to right position, the extender will copy hdmi loop out display EDID information to source. Switch to left position, the extender will copy Receiver display EDID to source
- ③ **HDMI out:** This slot is to connect the HDMI input of your display such as an HDTV
- 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 will illuminate when the device is connected with power supply
- ⑥ **CAT:** 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 **DC5V:** Connect from 5V DC power supply into the unit and connect the adaptor to an AC outlet.

2. Receiver unit



- ① **EQ switcher:** HDMI Receiver equalizer switcher
- ② **HDMI out:** This slot is 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 LED will illuminate when the device is connected with power supply
- ⑤ **CAT:** Connect the CAT input of the receiver with the CAT output of the Transmitter with CAT5E/6 cable
- ⑥ **Lock LED:** This LED will illuminate when the HDMI signal from the Transmitter is stable.

3.RX Equalizer distance adjust

If you see flickering or blinking image on th display, adjust the EQ switch to improve the cable skew. MAX stands for the strongest HDMI signal level for the longest possible transmission length while MIN stands for the weakest HDMI signal level for short transmission length. Adjust the signal level from MIN to MAX until desired video quality is displayed.

Recommended EQ setting	
Position	Cable Length
	under 15m (49.5ft)
	15-30m (49.5 ft- 99ft)
	30-40m (99ft- 132ft)
	40-50m(132ft-164ft)

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 Category 5e/6 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.) At this point the display connected should display the source signal connected to the extender set. If no signal is being displayed, check the receiver EQ switcher. If a display is having difficulty receiving a signal, see EDID section and perform EDID learning or access the display's menu and adjust the resolution(lowest to highest until signal is displayed). A 24 Hz vertical refresh rate may work better than 60 Hz o 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.

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

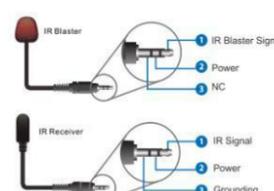


IR BLASTER (TX)

To control the source: Plug IR Blaster into IR TX port 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.



Connection diagram:

