

HDMI over IP Extender with Loop Out (150m)



User Manual

VER 1.0

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, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

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1. Introduction

HDMI over IP Extender is based on AV over IP solution for distribution of one HD content to one HD display device or to multiple HD display devices over a standard network switcher, and extends distance up to 492ft / 150m between encoder and decoder via a CAT5e/6 cable. It offers configurable high quality, low-bandwidth H.265 compression video. The resolution is up to 1920x1200@60Hz. It also supports HDMI loop output on transmitter.

HDMI over IP Extender includes two units: Encoder and Decoder. Encoder is responsible for obtaining HDMI signals for encoding, transmitting via CAT5e/6 cables. It supports HDMI loop output; Decoder is responsible for signal decoding and outputting HDMI signals to HD displays. The product supports one-way IR control signal transmission. It offers the most convenient solution for HDMI extension over a single CAT5e/6 cable and is the perfect solution for any application.

2. Features

- ☆ HDMI 1.3 and HDCP 1.4 compliant
- ☆ Support 6.75Gbps video bandwidth
- ☆ Video resolution is up to 1920×1200@60Hz
- ☆ Extend distance up to 492ft / 150m between encoder and decoder via a single CAT5e/6 cable
- ☆ Adopt standard H.265 encoding / decoding
- ☆ Support standard IP switcher / router / hub
- ☆ Support one-way IR control signal transmission
- ☆ Compact design for easy and flexible installation

3. Package Contents

- ① 1× HDMI over IP Extender (Encoder)
- ② 1× HDMI over IP Extender (Decoder)
- ③ 1× IR Blaster cable (1.5 meters)
- ④ 1× 20~60KHz IR Receiver cable (1.5 meters)
- ⑤ 2× 5V/1A Power Adapters
- ⑥ 1× User Manual

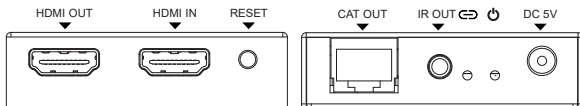
4. Specifications

Technical	
HDMI Compliance	HDMI 1.3
HDCP Compliance	HDCP 1.4
Video Bandwidth	6.75Gbps
Video Resolution	640x480@60Hz~1920x1200@60Hz
HDMI Audio Formats	LPCM 2.0CH, 32KHz, 44.1KHz, 48KHz
IR Frequency	20Hz ~ 60KHz
Compression Technology	H.265
Request for Switcher /Router	Support IGMP, Support DHCP
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	8-bit
ESD Protection	Human body model—±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Encoder	Input: 1×HDMI IN [Type A 19-pin female] Output: 1×HDMI OUT [Type A 19-pin female] 1×CAT OUT [RJ45 connector] Control:1×IR OUT [3.5mm Stereo Mini-jack]
Decoder	Input: 1×CAT IN [RJ45 connector] Output: 1×HDMI OUT [Type A 19-pin female] Control:1×IR IN [3.5mm Stereo Mini-jack]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	88mm (W) × 61.2mm (D) × 16.5mm (H)
Weight	Encoder: 158g, Decoder: 155g
Power Supply	Input: AC100 - 240V 50/60Hz, Output: DC 5V/1A (US/EU standard, CE/FCC/UL certified)
Power Consumption	Encoder: 2.55W, Decoder: 3.7W
Operation Temperature	-10°C ~ 50°C / 14°F ~ 122°F

Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)
Resolution / Distance	1920x1200@60Hz - Feet / Meter
CAT 5e/6 cable	492ft / 150 meters
Resolution / Cable length	1920x1200@60Hz - Feet / Meter
HDMI IN / OUT	50ft / 15 meters

5. Operation Controls and Functions

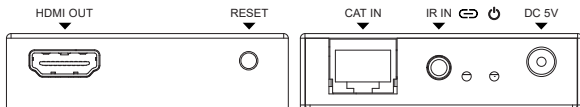
5.1 Encoder Panel



Name	Function Description
HDMI OUT	HDMI Loopout port for connecting the HDMI display device.
HDMI IN	HDMI source input port for connecting the HDMI source device.
RESET button	Press and hold the button for 3 seconds to reset the product. The EDID will restore default status: 1920*1080@60Hz.
CAT OUT	The CAT OUT port is connected to the CAT IN port on Decoder or connected to switcher / router / hub with CAT cable for sending signal to receiver.
IR OUT	Connect to the IR blaster cable. The IR blaster signal is from IR IN on the Decoder.

LINK LED	The LED will flash blue when encoder is connected to decoder or connected to switcher / router / hub.
POWER LED	The LED will illuminate blue when the encoder is powered on.
DC 5V	Plug the DC 5V/1A power supply into the unit and connect the adapter to an AC outlet.

5.2 Decoder Panel



Name	Function Description
HDMI OUT	HDMI output port for connecting the HDMI display device.
RESET button	<ul style="list-style-type: none"> ■ Press and hold the button for 3 seconds to reset the product to the factory default status. ■ Short press the button to copy EDID from decoder display device to encoder's HDMI source device.
CAT IN	The CAT IN port is connected to the CAT OUT port on Encoder or connected switcher / router / hub with CAT cable for receiving encoder signal.
IR IN	Connect to wideband IR receiver cable. The IR signal is sent to IR OUT port on the Encoder.
LINK LED	The LED will flash blue when decoder is connected encoder or connected switcher / router / hub.
POWER LED	The LED will illuminate blue when the Decoder is powered on.
DC 5V	Plug the DC 5V/1A power supply into the unit and connect the adapter to an AC outlet.

6. Application Example

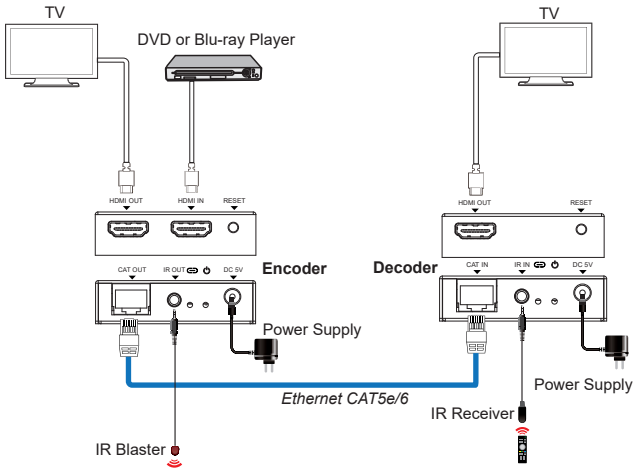


Figure 1: Encoder connects directly Decoder

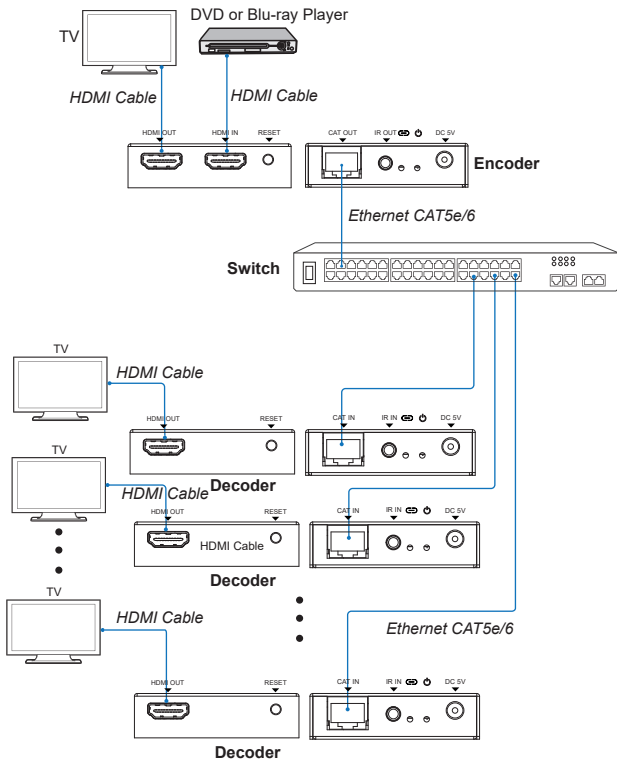


Figure 2: Encoder connects Decoder via switcher
(one Encoder to multiple Decoders)