

Operating Manual

A 3138 HDMI over IP Extender Cat5e/6 Transmitter

A 3139 HDMI over IP Extender Cat5e/6 Receiver



Note: Please read this manual thoroughly to get the most out of the product and ensure long-term, trouble-free use. Keep this manual for future reference.

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 1G network switcher, and extends distance up to 150m between transmitter and receiver via a Cat5e/6 cable. It offers configurable high quality, low-bandwidth H.265 compression video. The resolution is up to 1920x1200@ 60Hz YCbCr 4:4:4. It also supports HDMI loop output on transmitter.

HDMI over IP Extender requires two units: Transmitter and Receiver. Transmitter is responsible for obtaining HDMI signals for encoding, transmitting via CAT 5e / 6 cables. It supports HDMI loop output; Receiver 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.

Features

- HDCP 1.4 complaint
- Supports 6.75Gbps video bandwidth
- Video resolution is up to 1920x1200@60Hz YCbCr 4:4:4
- Extend distance up to 150m between encoder and decoder via Cat5e/6 cable
- Adopts Standard H.265 encoding/decoding
- Supports 1G standard IP switcher / router / hub
- Supports one-way IR control signal transmission
- Compact design for easy and flexible installation

In the Box

1× HDMI over IP Extender (Transmitter)

or (sold separately)

1× HDMI over IP Extender (Receiver)

1× IR Blaster cable (1.5 meters)

1× 20-60KHz IR Receiver cable (1.5 meters)

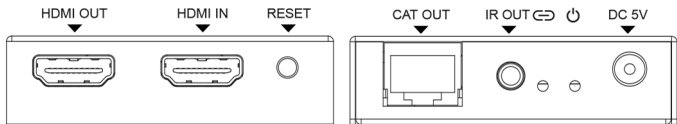
2× 5V/1A Power Adapters

1× User Manual

Specifications

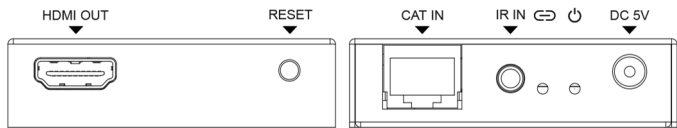
Technical	
HDCP Compliance	HDCP 1.4
Video Bandwidth	6.75Gbps
Video Resolution	640x480@60Hz~1920x1200@60Hz
HDMI Audio Formats	LPCM 2.0CH, 32KHz, 44.1KHz, 48KHz
IR Frequency	20Hz ~ 60KHz
Compression Technology	H.265
Request for Switcher /Router	Support 1 GMP, Support DHCP
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	12-bit
ESD Protection	Human body model—±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Transmitter	Inputs: 1×HDMI Type A [19-pin female] Outputs: 1×HDMI Type A [19-pin female] 1×CAT OUT [RJ45 connector] Control: 1×IR OUT [3.5mm Stereo Mini-jack]
Receiver	Inputs: 1×CAT IN [RJ45 connector] Outputs: 1×HDMI Type A [19-pin female] Control: 1×IR IN [3.5mm Stereo Mini-jack]
Mechanical	
Housing	Metal Enclosure
Silkscreen Color	Black
Dimensions	88mm (W) × 61.2mm (D) × 16.5mm (H)
Weight	155g
Power Supply	Input: AC100 - 240V 50/60Hz, Output: DC 5V/1A (US/EU standard, CE/FCC/UL certified)
Power Consumption	Encoder: 1.5W, Decoder: 1.25W
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
CAT 5e/6 cable	150 meters
Resolution / Cable length	1920x1200@60Hz
HDMI IN / OUT	15 meters

Operation Controls and Functions - Transmitter 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	<ul style="list-style-type: none">• Short press the button to reset the product. The EDID will restore default status: 1920*1080@60Hz.• Long press the button for 3 seconds to copy EDID from Reciver display device to Transmitter HDMI source device.
CAT OUT	The CAT OUT port is connected to the CAT IN port on Receiver 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 Receiver. 3/ 6
LINK LED	The LED will flash blue when Transmitter is connected to Receiver or connected to switcher / router / hub.
POWER LED	The LED will illuminate blue when the Transmitter is powered on.
DC 5V	Plug the DC 5V/1A power supply into the unit and connect the adapter to an AC outlet.

Operation Controls and Functions - Receiver Panel



Name	Function Description
HDMI OUT	HDMI output port for connecting the HDMI display device.
RESET button	<ul style="list-style-type: none">• Short press the button to reset the product. The EDID will restore default status: 1920*1080@60Hz.• Long press the button for 3 seconds to copy EDID from Reciver display device to Transmitter HDMI source device.
CAT IN	The CAT IN port is connected to the CAT OUT port on Transmitter or connected switcher / router / hub with CAT cable for receiving transmitter 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 reciever is connected to transmitter or connected to switcher / router / hub.
POWER LED	The LED will illuminate blue when the Transmitter is powered on.
DC 5V	Plug the DC 5V/1A power supply into the unit and connect the adapter to an AC outlet.

Application Example 1

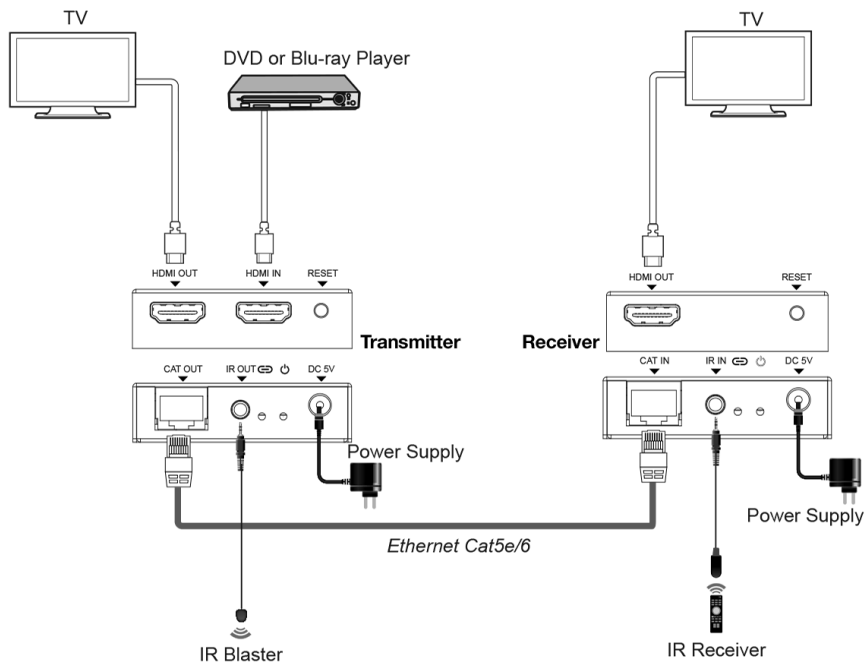


Figure 1: Encoder connects directly Decoder

Application Example 2

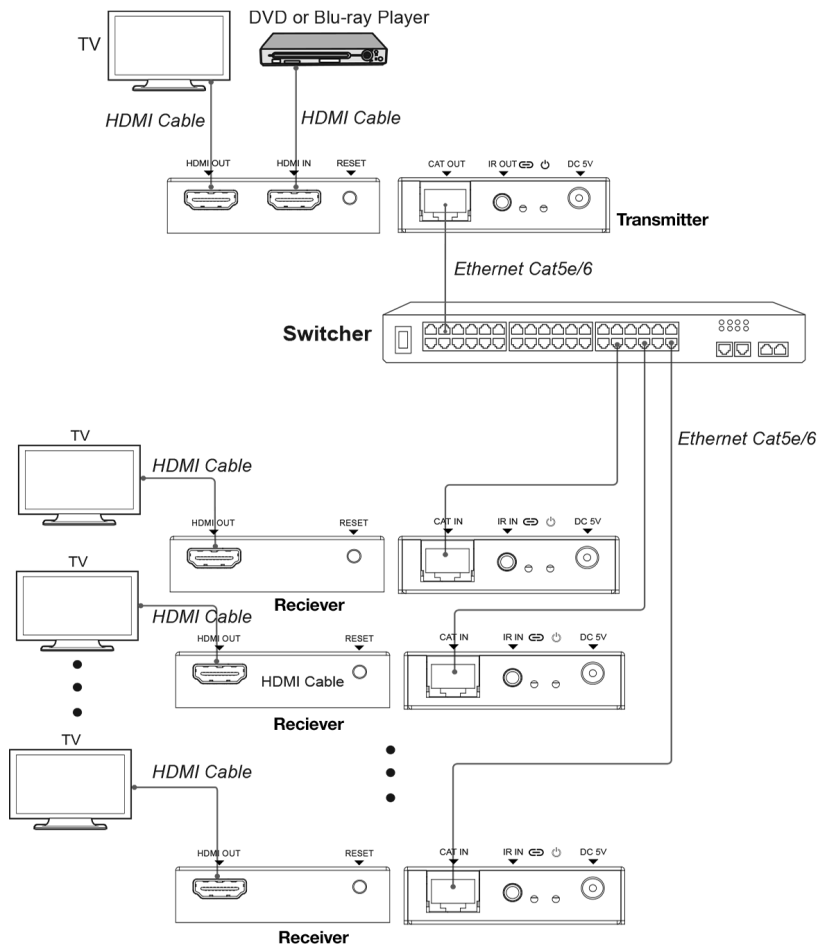


Figure 2: Transmitter connects via network switch to multiple receivers.