DR UTP STR150C HDMI Over IP Extender User Manual

Contents

DR UTP STR150C HDMI Over IP Extender

Product Information

Specifications

- **HDMI Compliance:** HDMI 1.4
- **HDCP Compliance:** HDCP 1.4
- **Video Bandwidth:** 6.75Gbps
- **Video Network Bandwidth:** 1G
- **Video Resolution:** This product does not support interlaced signals
- **Audio Formats:** Input: PCM 2.0ch, 2.1ch, Output: PCM 2.0ch, 5.1ch, 7.1ch
- **Sample Frequency:** 32kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz
- **IR Frequency:** Wideband 20Hz ~ 60KHz
- **IR Level:** 5Vp-p
- **Compression Technology:** EZCast
- **Color Space:** RGB, YCbCr 4:4:4, YCbCr 4:2:2
- **Color Depth:** Input: 8/10/12-bit; Output: 8-bit
- **Transmission Distance:** 150m/492ft
- **ESD Protection:** Yes
- **Housing:** Metal Enclosure
- **Silkscreen Color:** Black
- **Dimensions:** Encoder: 158g, Decoder: 155g
- **Power Supply:** Input: AC100 – 240V 50/60Hz Output: DC 5V/1A (US/EU standard, CE/FCC/UL certified)

Product Usage Instructions

Introduction

The HDMI over IP Extender includes two units: Encoder and Decoder. The Encoder obtains HDMI signals for encoding and transmits them via CAT6 cables with HDMI loop output support. The Decoder decodes the signal and outputs HDMI signals to HD displays. It also supports one-way IR control signal transmission.

Features

- Supports transmission from encoder to decoder via a single CAT6 cable
- Adopts the third-generation EZCast video transmission protocol
- Supports 1G standard 2L Switch
- Supports one-way IR control signal transmission (from Decoder to Encoder)
- Supports various PCM audio formats and sample frequencies
- Compact design for easy and flexible installation

3. Package Contents

- HDMI over IP Extender (Encoder)
- HDMI over IP Extender (Decoder)
- IR Blaster cable (1.5 meters)
- IR Wideband Receiver cable (1.5 meters)
- 5V/1A Power Supply (x2)
- User Manual (x2)

Frequently Asked Questions

- **Q: What is the maximum transmission distance supported by this product?**
  - A: The HDMI over IP Extender supports a transmission distance of up to 150m or 492ft.
- **Q: Does this product support interlaced signals?**
  - A: No, this product does not support interlaced signals.
- **Q: Can I use surge protection systems with this product?**
  - A: Yes, surge protection systems are highly recommended to protect the sensitive electrical components of the product.

Thank you for purchasing this product

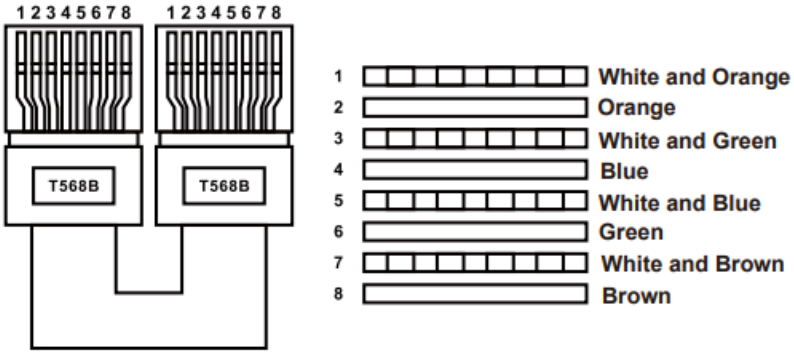
For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

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.

Caution

The product requires the use of UTP connectors. Please connect in direct interconnection method and do not cross-connect



Direct Interconnection Method

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 Switch, and extends distance up to 150m/492ft between encoder and decoder via a CAT6 cable. It offers configurable high quality, low-bandwidth EZCast compression video. The video resolution is up to 1920×1200@60Hz. It also supports HDMI loop output on encoder. HDMI over IP Extender includes two units: Encoder and Decoder. Encoder is responsible for obtaining HDMI signals for encoding, and transmitting via CAT6 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 CAT6 cable and is the perfect solution for any application.

Features

- HDMI 1.4 and HDCP 1.4 compliant
- Support 6.75Gbps video bandwidth
- Video resolution is up to 1920×1200@60Hz
- Extend transmission distance up to 150m/492ft between encoder and decoder via a single CAT6 cable
- Adopt the third-generation EZCast video transmission protocol
- Support 1G standard 2L Switch
- Support one-way IR control signal transmission (from DEC to ENC)
- Support PCM 2.0ch-32kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz
- Compact design for easy and flexible installation

Package Contents

Qty	Item
1	HDMI over IP Extender (Encoder)
1	IR Blaster cable (1.5 meters)
1	5V/1A Power Supply
1	User Manual

or/and

Qty	Item
1	HDMI over IP Extender (Decoder)
1	IR Wideband Receiver cable (1.5 meters)
1	5V/1A Power Supply
1	User Manual

Specifications

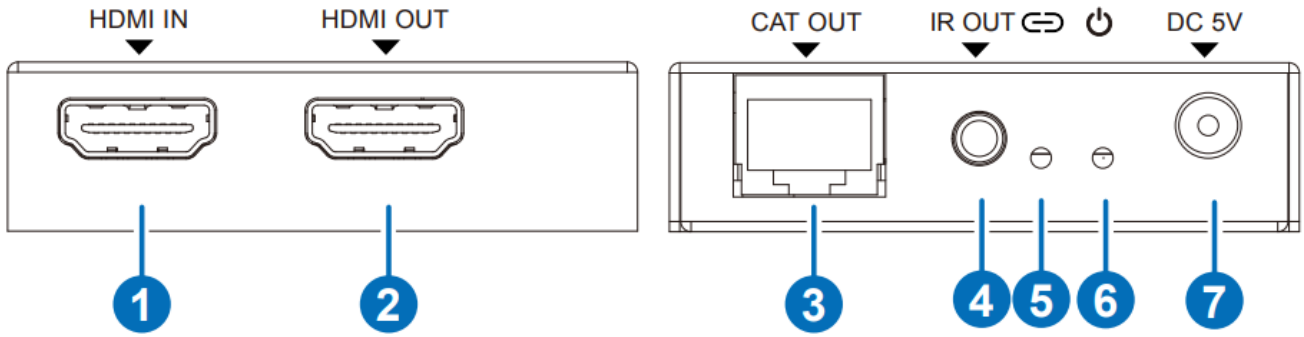
Technical	
HDMI Compliance	HDMI 1.4
HDCP Compliance	HDCP 1.4
Video Bandwidth	6.75Gbps
Video Network Bandwidth	1G
Video Resolution	Up to 1920×1200@60Hz **Note:** This product does not support interlaced signals, that is, i-standard signals.
HDMI Audio Formats	**Input:** PCM 2.0ch, 2.1ch, 5.1ch, 7.1ch **Output:** PCM 2.0ch
Sample Frequency	32kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz
IR Frequency	Wideband 20Hz ~ 60KHz
IR Level	5Vp-p
Compression Technology	EZCast
Request for Switch	Transmitting data through the Data Link Layer
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	Input: 8/10/12-bit; Output: 8-bit
Transmission Distance	150m/492ft
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
Silkscreen 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: 1.5W, Decoder: 1.1W (Max)
Operation Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

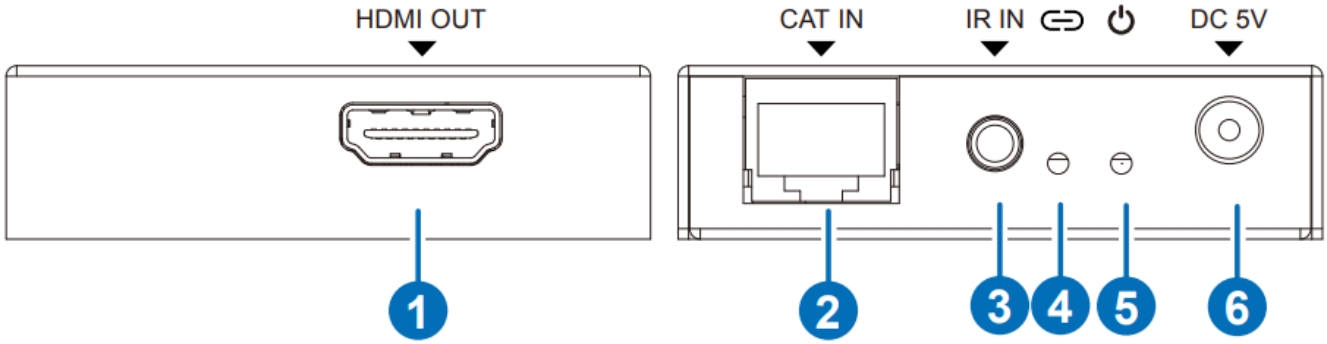
Operation Controls and Functions

Encoder Panel



No.	Name	Function Description
1	HDMI IN	HDMI input port, connected to HDMI source device such as DVD or Set-top box wit h an HDMI cable.
2	HDMI OUT	HDMI loop output port, connected to the HDMI display device such as TV or Monit or with an HDMI cable.
3	CAT OUT	The CAT OUT port is connected to the CAT IN port of the decoder or connected to the Switch/router/hub with a CAT6 cable for sending a signal to the decoder.
4	IR OUT	Connect the IR blaster cable. The IR blaster signal is from the IR IN port of the dec oder.
5	LINK LED	The blue LED will flash when the encoder is connected to a decoder or connected to Switch/router / hub.
6	Power LED	The blue LED will be on when the encoder is powered on.
7	DC 5V	Plug the DC 5V/1A power supply into the unit and connect the adapter to an AC outlet.

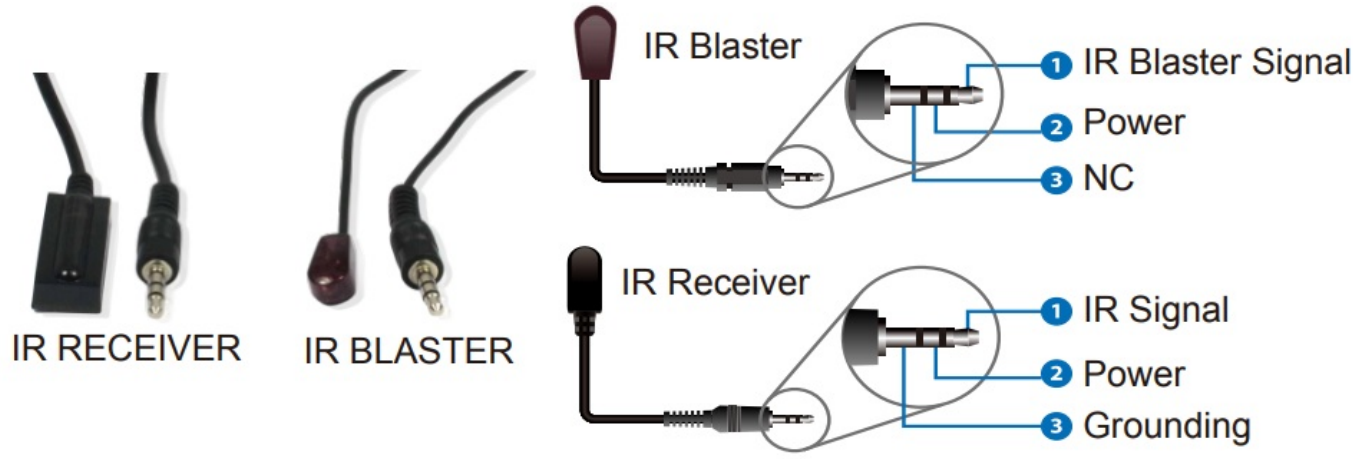
Decoder Panel



No.	Name	Function Description
1	HDMI OUT	HDMI output port, connected to the HDMI display device such as TV or Monitor wit h HDMI cable.
2	CAT IN	The CAT IN port is connected to the CAT OUT port of the encoder or connected to t he Switch/router/hub with a CAT6 cable for receiving a signal from the encoder.
3	IR IN	Connect the IR receiver cable. The IR signal is sent to IR OUT port of the encoder.
4	LINK LED	The blue LED will flash when the decoder is connected to an encoder or connected to the Switch/router/hub.
5	Power LED	The blue LED will be on when the decoder is powered on.
6	DC 5V	Plug the DC 5V/1A power supply into the unit and connect the adapter to an AC ou tlet.

IR Pin Definition

IR Receiver and Blaster pin’s definition is as below:



Application

Application Example

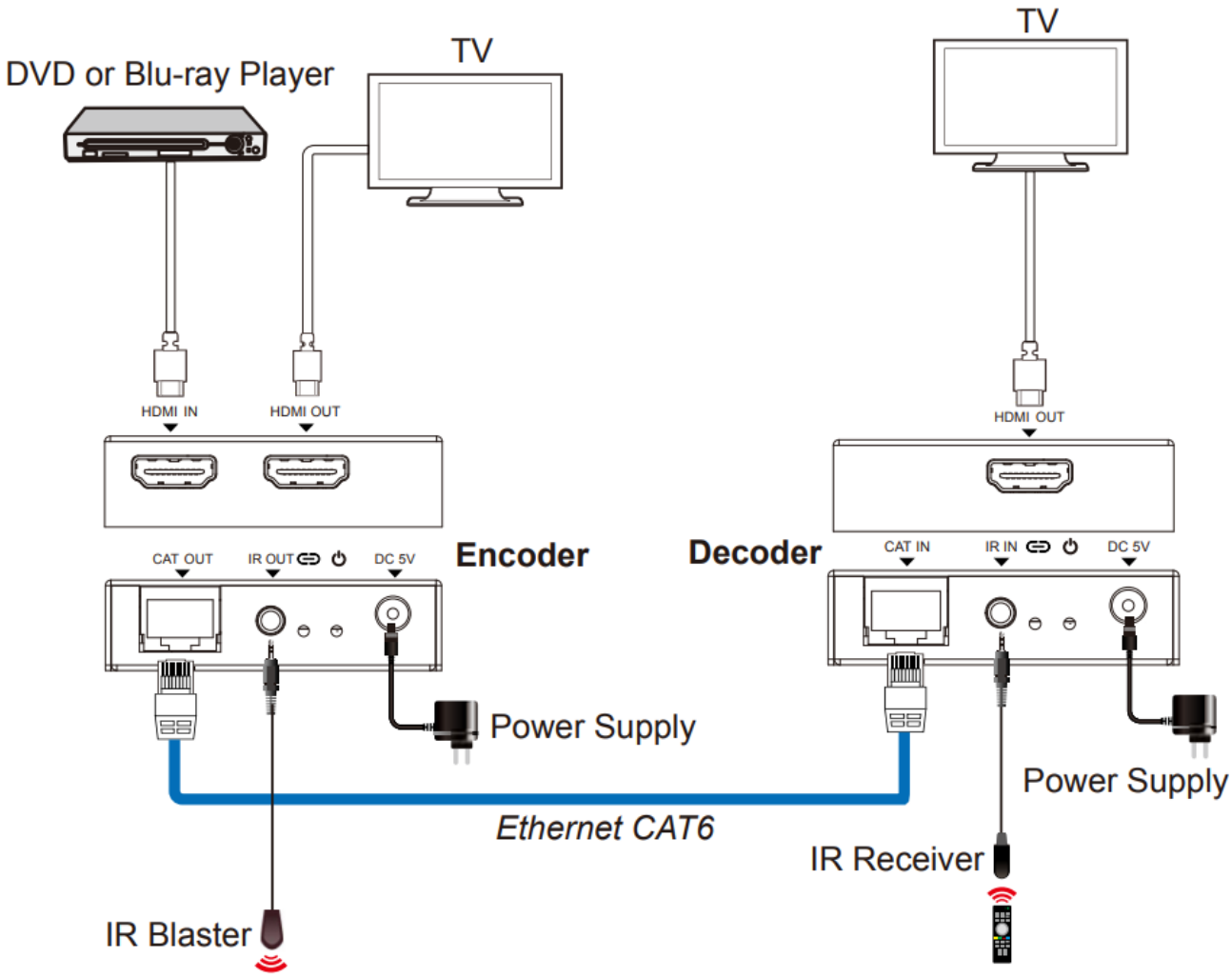


Figure 1: Encoder connects Decoder directly

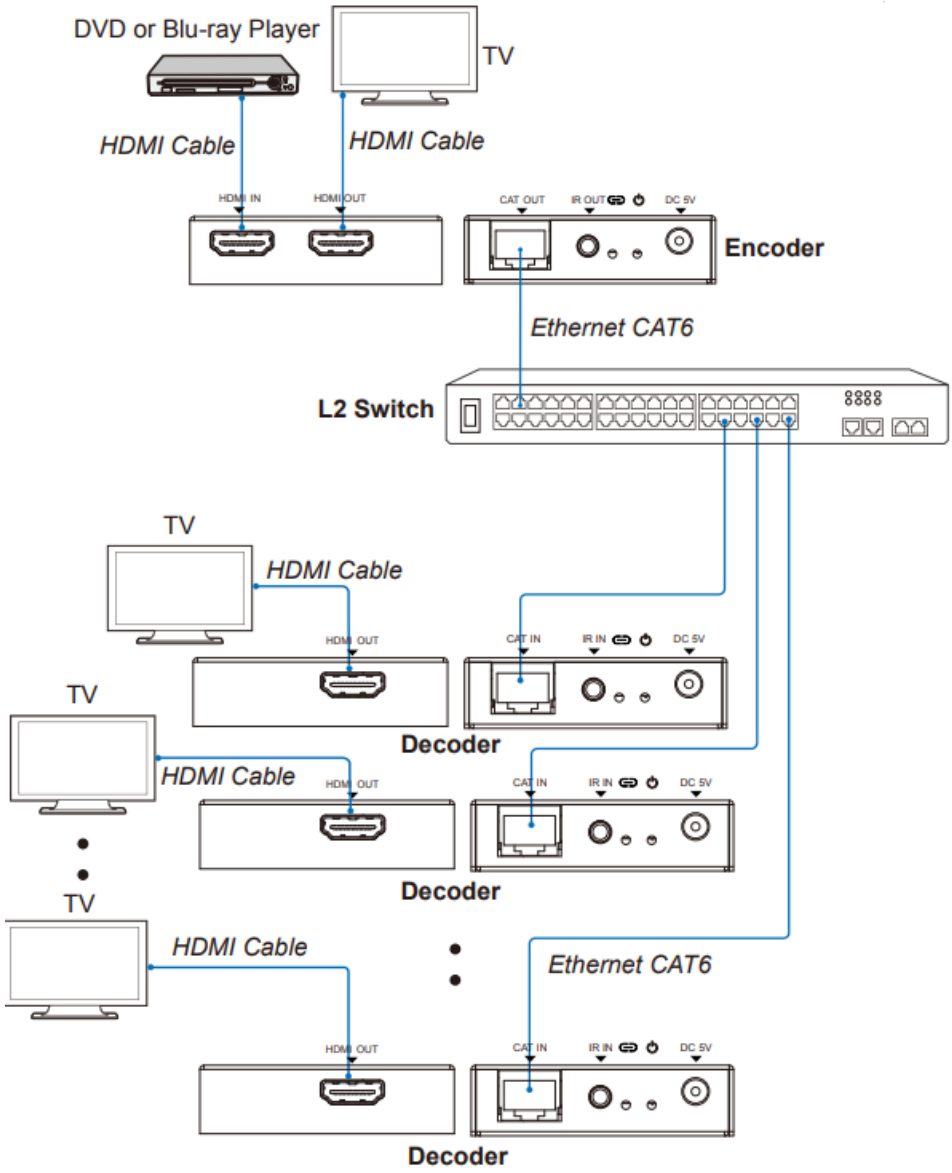


Figure 2: Encoder connects Decoders via Switch
(one Encoder to multiple Decoders)

Documents / Resources

	DR UTP STR150C HDMI Over IP Extender [pdf] User Manual STR150C HDMI Over IP Extender, STR150C, HDMI Over IP Extender, Over IP Extender, IP Extender, Extender

References

- User Manual