LINK

LINK EXT40-4KECO.2

40m 4K30 HDMI Extender

User Manual

Version: V1.0.0

Thank you for purchasing this product

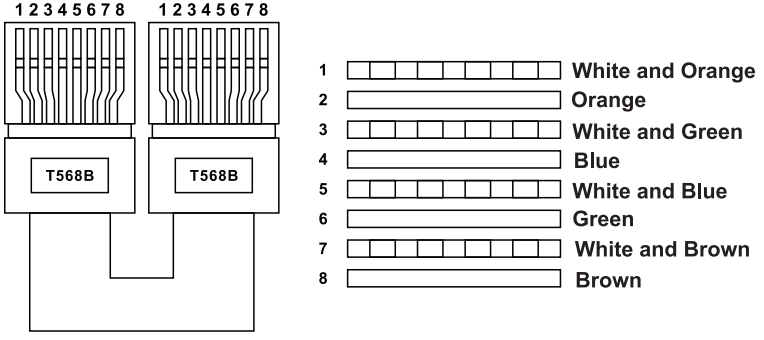
For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

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.

Caution

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



Direct Interconnection Method

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Introduction

Overview

This 4K30 HDMI Extender can extend HDMI high-definition signal up to 70m/230ft for 1080p, or 40m/131ft for 4K@30Hz over CAT6 cable, achieving zero-delay, long-distance transmission between the signal sources and display devices. This extender with HDMI loop output can be cascaded to the next extender, supporting resolution up to 4K@30Hz 4:4:4. It supports EDID copy function (you can choose local or remote EDID). 3D TV and PoC (Power over Cable) function are also supported. Audio formats are up to LPCM 7.1, Dolby True HD, DTS HD.

This multi-functional product can be widely applied in multimedia conference hall, TV teaching and large-screen display.

Features

- Compliant with HDCP 1.4
- Video bandwidth is 10.2Gbps
- Video resolution is up to 4K2K@30Hz YUV 4:4:4
- Transmission distance over CAT6 cable:
  70m/230ft for 1080p, 40m/131ft for 4K@30Hz
- Support bi-directional PoC function and IR pass-through
- Audio formats is up to LPCM 7.1, Dolby True HD, DTS HD
- Advanced EDID management: built-in EDID and EDID copy pass-through between the signal sources and display devices
- Compact design for easy and flexible installation

Package Contents

- 1× 4K30 HDMI Extender (TX)
- 1× 4K30 HDMI Extender (RX)
- 1× IR Blaster Cable (1.5m)
- 1× IR Wideband Receiver Cable (1.5m)
- 1× 12V/1A Locking Power Supply
- 1× User Manual

Specifications

Technical	
HDMI Compliance	HDMI 1.4b
HDCP Compliance	HDCP 1.4
Video Bandwidth	10.2Gbps
Video Resolution	Up to 4K@30Hz YUV 4:4:4 *All available resolutions are shown on page 4.
Color Space	RGB_4:4:4, YCbCr_4:4:4, YCbCr_4:2:2
Color Depth	8-bit
Audio Formats	LPCM 2.0\5.1\7.1CH, DD, DD+, DTS, Dolby True HD, DTS-HD Master
Audio Sample Rate	48KHz
HDR	HDR, HDR10, Dolby Vision, HLG
IR Level	5Vp-p
IR Frequency	Wideband 20K-60KHz
Transmission Distance	70m/230ft for 1080p via CAT6 cable 40m/131ft for 4K@30Hz via CAT6 cable 35M @4K w/ CAT5e, 50M @1080P 40M @4K w/ CAT6/6a, 70M @1080P
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
Connection	
Transmitter	Input: 1× HDMI IN [Type A, 19-pin female] 1× IR IN [3.5mm audio jack] Output: 1× HDMI OUT [Type A, 19-pin female] 1× IR OUT [3.5mm audio jack] 1× CAT OUT [RJ45]
Receiver	Input: 1× CAT IN [RJ45] 1× IR IN [3.5mm audio jack] Output: 1× HDMI OUT [Type A, 19-pin female] 1× IR OUT [3.5mm audio jack]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter / Receiver: 74mm [W] × 68mm [D] × 20mm [H]
Weight	Transmitter: 141g; Receiver: 141g

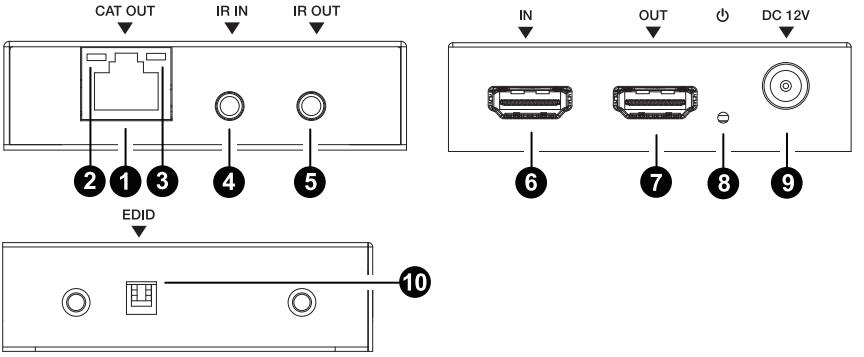
Power Supply	DC 12V/1A
Power Consumption	3W (Max)
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Operating Humidity	20%~80% relative humidity, non-condensing
Storage Humidity	10%~90% relative humidity, non-condensing

* All available input/output resolutions:

640x480p60Hz, 800x600p60Hz, 1024x768p60Hz, 1280x1024p60Hz, 1360x768p60Hz, 1440x900p60Hz, 1440x1050p60Hz, 1600x1200p60Hz, 1680x1050@60, 1920x1200@60RB; 720x480i59.94Hz(480i59), 720x480p59.94Hz(480p59), 720x576i50Hz(576i50), 720x576p50Hz(576p50), 1280x720p50Hz(720p50), 1280x720p59.94Hz(720p59), 1280x720p60Hz(720p60), 1920x1080i50Hz(1080i50), 1920x1080i59.94Hz(1080i59), 1920x1080i60Hz(1080i60), 1920x1080p23.98Hz(1080p23), 1920x1080p24Hz(1080p24), 1920x1080p25Hz(1080p25), 1920x1080p29.97Hz(1080p29), 1920x1080p30Hz(1080p30), 1920x1080p50Hz(1080p50), 1920x1080p59.94Hz(1080p59), 1920x1080p60Hz(1080p60), 3840x2160p23.98Hz(2160p23), 3840x2160p24Hz(2160p24), 3840x2160p25Hz(2160p25), 3840x2160p29.97Hz(2160p29), 3840x2160p30Hz(2160p30), 4096x2160p23.98Hz, 4096x2160p24Hz, 4096x2160p25Hz, 4096x2160p29.97Hz, 4096x2160p30Hz,

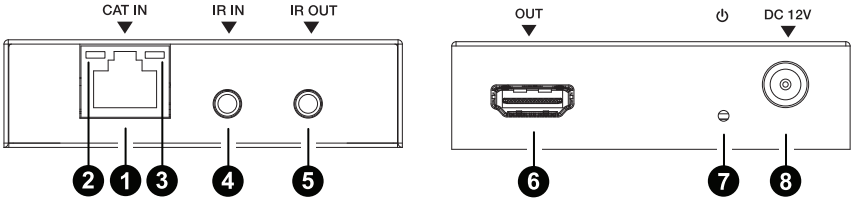
Operation Controls and Functions

Transmitter Panel



No.	Name	Function Description
1	CAT OUT	Connects to the CAT IN port on Receiver with CAT cable.
2	Link Status Indicator (Green)	▪ Light on: Transmitter and Receiver are connected normally. ▪ Light off: Transmitter and Receiver are not connected.
3	HDCP Signal Indicator (Yellow)	▪ Light on: HDMI signal with HDCP. ▪ Light flashing: HDMI signal without HDCP. ▪ Light off: No HDMI signal.
4	IR IN	IR signal input port, connected to IR wideband receiver.
5	IR OUT	IR signal output port, connected to IR blaster.
6	HDMI IN	HDMI signal input port, connected to an HDMI source device such as DVD or computer host with HDMI cable.
7	HDMI OUT	HDMI signal loop output port, connected to an HDMI display device such as TV or monitor with HDMI cable.
8	Power LED	The green LED will be on when Transmitter is powered on.
9	DC 12V	DC 12V/1A power input port.
10	EDID DIP switch	Used for EDID setting. Up is 1 and down is 0. [DIP]=11: Copy Receiver HDMI output Sink EDID (as factory default) [DIP]=10: 4K30(4:4:4)_SDR,2.0CH [DIP]=01: 1080P(4:4:4)_SDR,2.0CH [DIP]=00: Copy Transmitter HDMI loop out Sink EDID

Receiver Panel



No.	Name	Function Description
1	CAT IN	Connects to the CAT OUT port on Transmitter with CAT cable.
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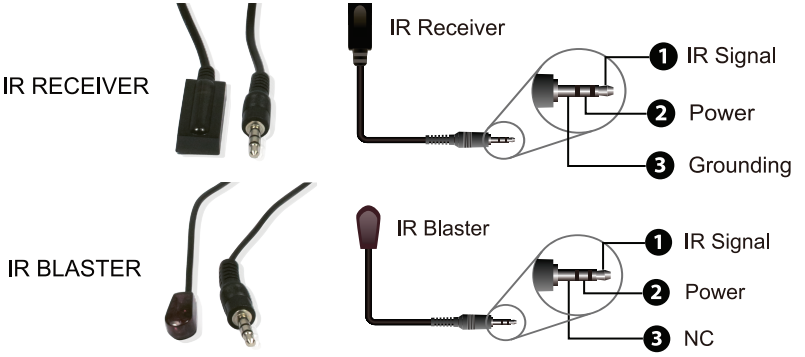
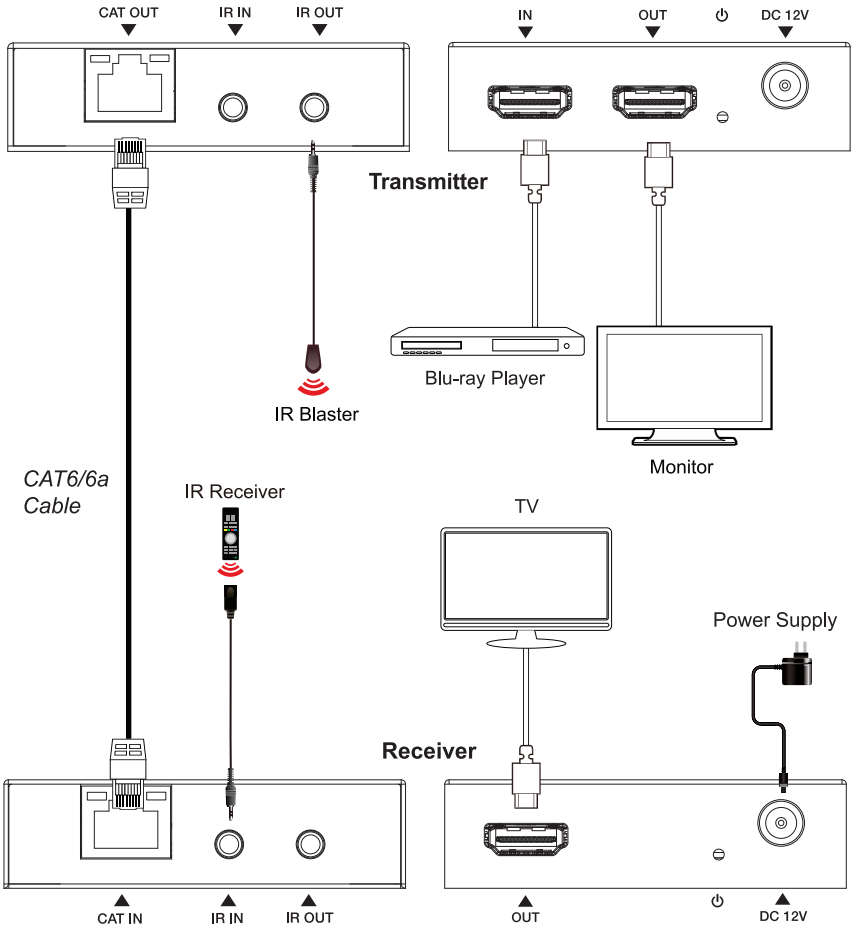
6	HDMI OUT	HDMI signal output port, connected to an HDMI display device such as TV or monitor with HDMI cable.
7	Power LED	The green LED will be on when Receiver is powered on.
8	DC 12V	DC 12V/1A power input port.

IR Pin Definition



Application Example



Warrenty

All LINK products come with a 2-year limited liability warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products which have been abused, modified, or disassembled. Warranty items only by authorized resellers. Warranty not eligible for products purchased through non-authorized online sellers.

A product that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the date of reshipment to the buyer. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number. The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed. Proof of sale may be required in order to claim warranty.