

# DYNALINK

# A 3242B

## Operating Instructions

### HDMI & Bi-Directional Infra-Red Cat6 Extender UTP Balun

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## Overview

This 18Gbps HDMI Extender can extend HDMI HD signal and IR control signal to a distance up to 230ft / 70m via a single CAT6/6a cable, which can achieve zero-delay, uncompressed long-distance transmission between the transmitter and receiver. Video resolution is up to 4K2K@60Hz. It supports EDID copy pass-through function between the source device and display device. It supports POC (Power over Cable) and audio-return-channel (ARC) functions.

This Extender can be widely used in multi-media conference halls, TV teaching and large-screen displays.

## Package Contents

1 x HDMI Transmitter  
1 x HDMI Receiver  
1 x 12V DC Adapter  
1 x IR Blaster Cable  
1 x IR Receiver Cable  
4 x Mounting Ears  
8 x Machine Screws (KM3\*4)  
1 x User Manual

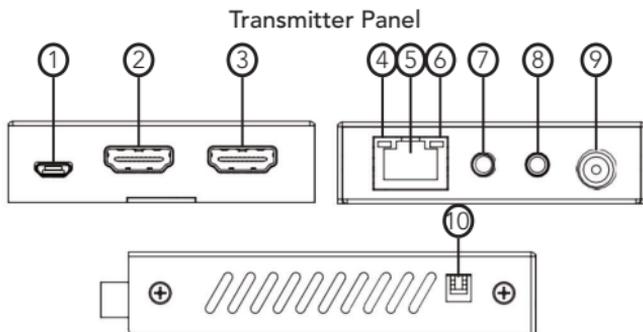
## Features

- HDMI2.0b and HDCP 2.2 compliant
- Supports 18Gbps video bandwidth
- Supports video resolution up to 4K2K@60Hz RGB/YCBCR 4:4:4
- The transmission distance can be extended up to 230ft / 70m via a single CAT6/6a cable
- Support HDR, HDR10, HDR10+, Dolby Vision, HLG
- Support bi-directional IR control signal pass-through
- Audio formats: LPCM 7.1, Dolby True HD, DTS HD Master
- EDID copy pass-through function between the source device and display device
- Support ARC and audio de-embedding, audio is output through the optical fiber port of the receiver
- Support bi-directional POC (Power over Cable) function
- Compact design for easy and flexible installation

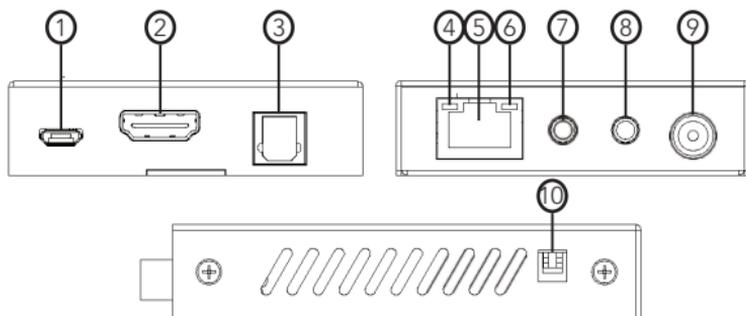
## Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution	Up to 4K2K@60Hz RGB/YCBCR 4:4:4
IR Level	5Vp-p
IR Frequency	Wideband 20K-60KHz
Transmission Distance	4K2K@60Hz 4:4:4--70m, 1080P--70m (CAT6/6a cable)
Colour Space	RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Colour Depth	8/10/12bit
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
Audio Formats	HDMI: LPCM 7.1CH, Dolby True HD, DTS-HD Master Optical: Dolby 5.1, DTS 5.1, PCM 2.0
Connection	
Transmitter	Input: 1×HDMI IN [TypeA, 19-pin female]
	Output: 1×HDMI OUT [RJ45] 1×CAT OUT [RJ45]
	Control: 1×SERVICE [Micro-USB jack] 1×IR IN [3.5mm Stereo Mini-jack] 1×IR OUT [3.5mm Stereo Mini-jack]
Receiver	Input: 1×CAT IN [RJ45]
	Output: 1×HDMI OUT [TypeA, 19-pin female] 1×TOSLINK
	Control: 1×SERVICE [Micro-USB jack] 1×IR IN [3.5mm Stereo Mini-jack] 1×IR OUT [3.5mm Stereo Mini-jack]
Mechanical	
Housing	Metal Enclosure
Colour	Black
Dimensions	Transmitter / Receiver: 90mm (W)×68mm (D)×18mm (H)
Weight	Transmitter: 160g, Receiver: 155g
Power Supply	DC 12V/1A; Support bi-directional POC function
Power Consumption	3.36 W (max)
Operating Temperature	0°C ~ 40°C
Storage Temperature	-20°C ~ 60°C
Relative Humidity	20~90% RH (non-condensing)

## Operation Controls and Functions



No.	Name	Function
1	SERVICE	Firmware update port
2	HDMI OUT	HDMI signal loop output port. Connect to HDMI display devices with HDMI cable
3	HDMI IN	HDMI signal input port. Connect to HDMI source device with HDMI cable
4	Data Signal Indicator (Orange)	<ul style="list-style-type: none"> <li>• Illuminating: HDMI signal with HDCP.</li> <li>• Flashing: HDMI signal without HDCP.</li> <li>• Dark: No HDMI signal.</li> </ul>
5	CAT OUT	RJ45 connector for connecting the CAT IN port of the Receiver with CAT6/6a cable.
6	Link Signal Indicator (Green)	<ul style="list-style-type: none"> <li>• Illuminating: Transmitter and Receiver are in good connection status.</li> <li>• Flashing: Transmitter and Receiver are in poor connection status.</li> <li>• Dark: Transmitter and Receiver are not connected.</li> </ul>
7	IR IN	Connect to IR receiver cable, the IR receive signal will emit to the IR OUT port of the Receiver.
8	IR Out	Connect to IR blaster cable, the IR emit signal is from the IR IN port of the Receiver.
9	12V DC	DC 12V/1A power input port. <i>Note that the extender supports POC function, it means that either Transmitter or Receiver is connected to 12V/1A power supply, the other doesn't need power supply.</i>
10	EDID DIP Switch	Use the DIP switch to set EDID. (Switching to the upper end indicates 1; switching to the lower end indicates 0.) 11 - EDID information is copied from the display at the RX. 10 - EDID is preset to 4K@60Hz Stereo 01 - EDID is preset to 1080p Stereo 00 - EDID information is copied from the HDMI OUT at the TX.

**Receiver Panel**


No.	Name	Function
1	SERVICE	Firmware update port
2	HDMI OUT	HDMI signal loop output port. Connect to HDMI display devices with HDMI cable
3	TOSLINK	Optical fiber audio output port. Connect to amplifier with optical cable.
4	Data Signal Indicator (Orange)	<ul style="list-style-type: none"> <li>• Illuminating: HDMI signal with HDCP.</li> <li>• Flashing: HDMI signal without HDCP.</li> <li>• Dark: No HDMI signal.</li> </ul>
5	CAT IN	RJ45 connector for connecting the CAT OUT port of the Transmitter with CAT6/6a cable.
6	Link Signal Indicator (Green)	<ul style="list-style-type: none"> <li>• Illuminating: Transmitter and Receiver are in good connection status.</li> <li>• Flashing: Transmitter and Receiver are in poor connection status.</li> <li>• Dark: Transmitter and Receiver are not connected.</li> </ul>
7	IR IN	Connect to the IR receiver cable. The IR signal will send to the IR OUT port of the Transmitter.
8	IR Out	Connect to the IR blaster cable, the IR signal is from IR IN port of the Transmitter.
9	12V DC	DC 12V/1A power input port. <i>Note that the extender supports POC function, it means that either Transmitter or Receiver is connected to 12V/1A power supply, the other doesn't need power supply.</i>
10	ARC DIP switch	Use the DIP switch to control ARC function. (Switching to the upper end indicates 1; switching to the lower end indicates 0. Note that only the left switch is valid, the right switch is invalid.) 1X - Enable the ARC function 0X - Disable the ARC function

## IR Pin Definition

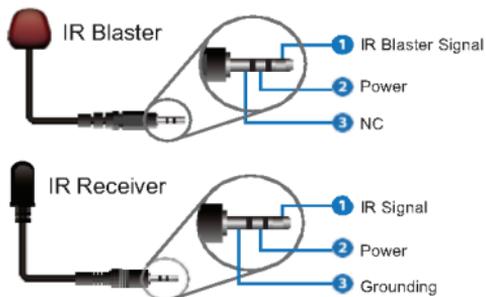
IR Receiver and Blaster pin's definition is as below:



IR RECEIVER



IR BLASTER

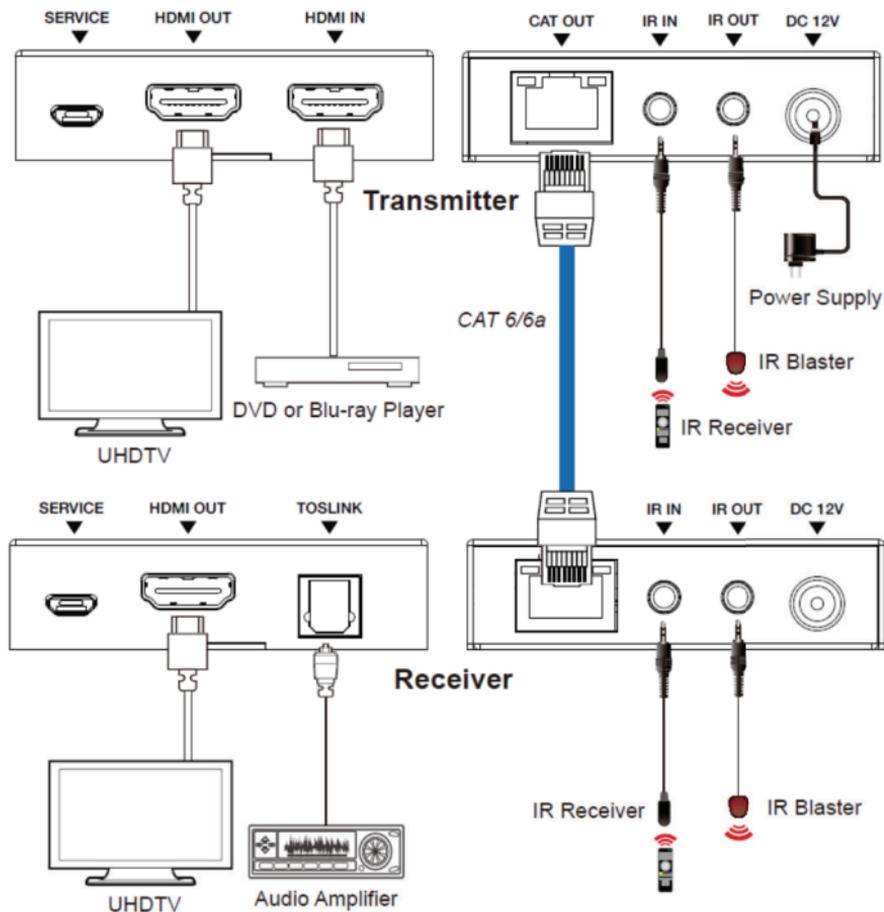


Note:

When the angle between the IR receiver and the remote control is  $\pm 45^\circ$ , the transmission distance is 0-5 meters;

When the angle between the IR receiver and the remote control is  $\pm 90^\circ$ , the transmission distance is 0-8 meters.

## Application Example



Altronic Distributors warrants this product for one year from date of purchase from Altronics or its resellers to the consumer. If this item is part of an installation or another product, please contact the installer or supplier for your warranty.

During the warranty period, we undertake to repair or replace your product at no charge if found to be defective due to a manufacturing fault. The warranty excludes damage by misuse or incorrect installation (i.e. failure to install and operate device according to specifications in the supplied instruction manual), neglect, shipping accident, or no fault found, nor by use in a way or manner not intended by the supplier.

For repair or service please contact your **PLACE OF PURCHASE**.

If this item was purchased directly from Altronics please make a warranty claim by:

**1. FOR MAIL ORDER CUSTOMERS (includes school and trade orders),**

- a) Calling your nearest store location and quoting your tax invoice number.
- b) Upon contacting Altronics, we will issue an R.A. (Return Authorisation). As Altronics have a number of service agents throughout Australia, a copy of the R.A. will be emailed, faxed or mailed to you with full instructions of how and where to send the goods. The freight for shipping goods back to Altronics for all repairs is at the customers expense.
- c) A copy of the R.A. form, (or at the very minimum, the R.A. number) must accompany the goods to effect the repair.
- d) Altronics will pay the return freight to the customer where the warranty claim has been accepted.
- e) Please quote the R.A. number in any correspondence to us.

**2. FOR OVER THE COUNTER PURCHASES to make a warranty claim, please return the goods to us in any of our stores, with a copy of your proof of purchase (tax invoice).**

- a) Upon leaving the goods at one of our stores, an R.A. number will be issued to you.
  - b) Once repaired, you will be contacted, advising that the goods are ready to be collected from the store.
- It is at Altronics discretion as to whether the goods will be repaired or replaced (whilst under warranty); and as to whether identical goods will be used to replace the item due to changes of models / products.

Note: Under no circumstances should you attempt to repair the device yourself or via a non-authorized Altronics service centre, as this will invalidate the warranty!

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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