# **DYNA**LINK

## A 3110 - Encoder A 3111 - Decoder

# HDMI over IP Extender (150m)

# **Operating Instructions**



Features

- HDCP 1.4 compliant
- Support 6.75Gbps video bandwidth
- Input video resolution is up to 1920×1200@60Hz YCbCr 4:4:4;
- Output video resolution is up to 1080P@60Hz YCbCr 4:4:4
- Extend transmission distance up to 150m/492ft between encoder and decoder via a single Cat5e/6 cable
- Adopt standard H.265 encoding / decoding
- Support 1Gbps standard IP swticher / router / hub
- Support one-way IR control signal transmission
- With USB KVM function to control remote PC
- Compact design for easy and flexible installation

#### A 3110 + A 3111 HDMI over IP Extender

#### Overview

HDMI over IP Extender adopts standard H.265 encoding / decoding. It can distribute one HD content to one HD display device or to multiple HD display devices over a standard 1Gbps network switcher, and extends distance up to 150m between encoder and decoder via a Cat5e/6 cable. It offers configurable high quality, Iow-bandwidth H.265 compression video. Input video resolution is up to 1920×1200@60Hz; Output video resolution is up to 1080P@60Hz. It also supports USB KVM function and one-way IR control signal transmission.

HDMI over IP Extender includes two units: Encoder and Decoder. Encoder is responsible for obtaining HDMI signals for encoding, and transmitting via CAT5e / 6 cables. Decoder is responsible for signal decoding and outputting HDMI signals to HD displays. The product offers the most convenient solution for HDMI extension over a single Cat5e/6 cable. It can also be used for remote PC control by relaying KVM signals from a remote location.

#### Box Contents

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

#### **Specifications**

Technical	
HDCP Compliance	HDCP 1.4
USB Version	USB 1.1
Video Bandwidth	6.75Gbps
Video Resolution	Input: Up to 1920×1200@60Hz Output: Up to 1080P@60Hz
Audio Formats	Input: LPCM 2.0CH 32KHz/44.1KHz/48KHz Output: LPCM 2.0CH 48KHz
IR Frequency	20Hz ~ 60KHz
Compression Technology	H.265
Request for Switcher/Router	Support 1Gbps, Support DHCP

#### A 3110 + A 3111 HDMI over IP Extender

Colour Depth	8-bit,10-bit,12-bit
Colour Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Encoder	Inputs: 1×HDMI IN (Type A, 19-pin female) Outputs: 1×LAN (RJ45 connector) Control: 1×IR OUT (3.5mm Stereo Mini-jack) 1×USB (USB-B, female)
Decoder	Inputs: 1×LAN (RJ45 connector) Outputs: 1×HDMI OUT (Type A, 19-pin female) Control: 1×IR IN (3.5mm Stereo Mini-jack) 2×USB (USB-A, female)
Mechanical	
Housing	Metal Enclosure
Silkscreen Colour	Black
Dimensions	67W × 91.5D × 17.5Hmm
Weight	Encoder: 155g, Decoder: 150g
Power Supply	Input: AC100 - 240V 50/60Hz Output: DC 5V/1A
Power Consumption	Encoder: 2.9W, Decoder: 3.65W (Max)
Operation Temperature	-10°C to 50°C
Storage Temperature	-20°C ~ 60°C
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 - Encoder



No.	Name	Function Description
1	5V DC	5V 1A input port for power supply
2	LAN	The LAN port is connected to decoder's LAN port or connected to switcher / router / hub with CAT cable
3	IR OUT	Connect to IR blaster cable. The IR blaster signal is from
4	HDMI IN	HDMI source input port for connecting the HDMI source device.
5	PC	Connect to PC. The PC can be controlled for USB port of decoder. (KVM function)
6	Data signal indicator (orange)	The lamp flickers when the LAN port is trans- mitting signal.
7	Power LED indicator (green)	The lamp is on when encoder is powered on.

#### Operation Controls and Functions - Decoder



No.	Name	Function Description
1	5V DC	5V 1A input port for power supply
2	LAN	The LAN port is connected to encoder's LAN port or connected to switcher / router / hub with CAT cable.
3	IR IN	Connect to IR receiver cable. The IR signal is sent to IR OUT port of encoder.
4	HDMI OUT	HDMI output port for connecting the HDMI display device.
5	Two USB Port	USB 1.1 for connecting mouse and USB keyboard.
6	Data signal indicator (orange)	The lamp flickers when the LAN port is trans- mitting signal.
7	Power LED indicator (green)	The lamp is on when decoder is powered on.

#### **IR Pin Definition**

IR Receiver and Blaster pin's definition as below:



Application Diagram - Figure 1 (USB KVM)

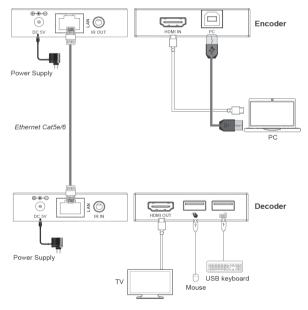


Figure 1: Encoder directly connects to Decoder

#### Application Diagram - Figure 2

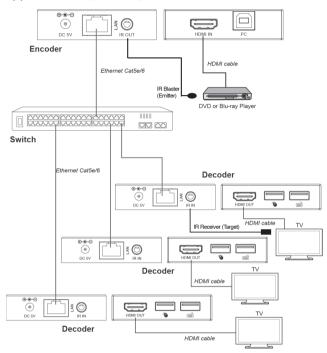


Figure 2: Encoder connects to Decoder via a switcher (one Encoder to multiple Decoders)

NOTE: Sum of Cat5e/6 cable runs must be equal or less than 150m. Endcoder to switch plus switch to decoders must be equal or less than 150m in total.

#### A 3110 + A 3111 HDMI over IP Extender

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 nonauthorised 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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