

Altronic Distributors warrants this product for 2 years 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) Ringing us on 1300 797 007 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-authorised 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.

Distributed by:

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HDMI Extender Over Ethernet Balun System

A 3144 Transmitter

A 3145 Receiver



Operation Manual

Optional accessories sold separately
Single channel transmitter A 3140
Single channel receiver A 3141

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.

1.0 INTRODUCTION

This balun converts HDMI input into video and audio signal that can be transmitted over a single Cat5e or Cat6 cable, and then outputted again as HDMI. It allows users to enjoy high definition images and sound when watching movies or playing games on the traditional RGB monitors or projectors fitted with HDMI input sockets.

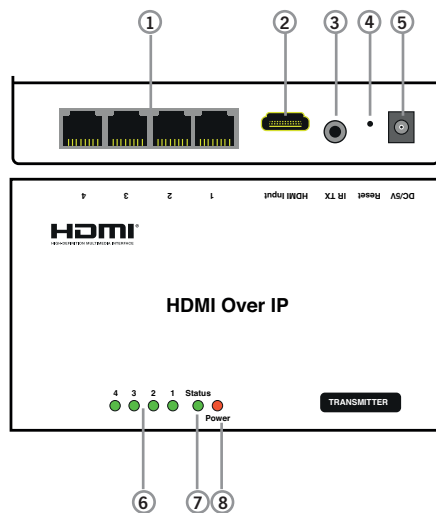
It offers solutions for the home digital entertainment centre, HDTV displays at retail sites, conference room presentations, school and corporate training environments, and video monitoring for security purposes.

1.1 FEATURES

- Flexible and scalable HDMI 1080p High Quality Video Broadcasting with Gigabit Ethernet LAN.
- Extends 1080p HDMI signals up to 120m over a single UTP Cat5e/6 cable.
- Multicasting and broadcasting architecture, adding more displays without overloading LAN bandwidth.
- Plug and Play operation – no programming or setup required.
- Receiver with 4x RJ45 ports can be used as a 4-port switcher (i.e. UTP Link sockets are bi-directional).
- The receiver can be cascaded for many layers.
- Support Point-to-Point, Point-to-Many network configuration.
- Extend, split, and daisy-chain HDMI devices with IR using CAT-5e / Cat6 cables.

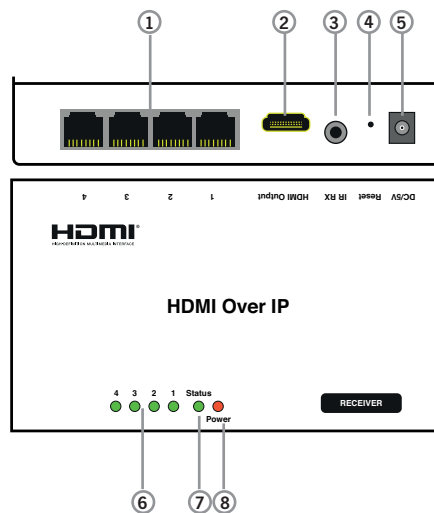
1.2 PACKAGE CONTENTS

- Main Unit: Transmitter and Receiver HDMI Extender
- Power adapter: DC 5V 2A x2 PCS
- IR-TX cable and IR-RX cable
- Operating Instructions booklet



Transmitter Panel A 3144

- | | |
|---------------------|--------------------------------------|
| 1. Link ports | 6. Link connection status indicator |
| 2. HDMI input | 7. Device status operation indicator |
| 3. IR-TX port | 8. Power indicator |
| 4. Reset button | |
| 5. Power input port | |



Receiver Panel A 3145

- | | |
|---------------------|--------------------------------------|
| 1. Link ports | 6. Link connection status indicator |
| 2. HDMI output | 7. Device status operation indicator |
| 3. IR-RX port | 8. Power indicator |
| 4. Reset button | |
| 5. Power input port | |

4.0 MAINTENANCE AND SERVICING

- Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.
- Damage requiring service: The unit should be serviced by qualified service personnel if:
 - The DC power supply cord or AC adaptor has been damaged;
 - Objects or liquids have gotten into the unit;
 - The unit has been exposed to rain;
 - The unit does not operate normally or exhibits a marked change in performance;
 - The unit has been dropped or the cabinet damaged.
- Servicing Personnel: Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- Replacement parts: When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- Safety check: After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition again.

5.0 SPECIFICATIONS

Operating Temperature Range:	.....-5° to +35°C (+23° to +95°F)
Operating Humidity Range:	.....5 to 90%RH (No Condensation)
Support Video Format:	.....DTV/HDTV:480i/576i/480P/576P/720P/1080i/1080P
Output Video:	.....HDMI, HDCP
Audio Sampling rate:	.....32kHz, 44.1kHz and 48kHz
Transmission Distance:	.....1080P @ 60Hz = 120m (Maximum) over single CAT5E/6 /24AWG/Solid wire
Power Supply:	.....5V/2A DC (Plugpack included)
Power Consumption:	
– Transmitter:	.....5W (Max)
– Receiver:	.....5W (Max)
Dimensions (L x W x H):	.....145 x 85 x 28mm
IR frequency range:	.....38kHz - 56kHz
Net Weight:	.....Receiver:340g,Transmitter:340g
TX&RX:	
- Default IP address:	.....192.168.168.55;
- MAC address:	.....00:0b:78:00:60:01
- Default IP address:	.....192.168.168.56;
- MAC address:	.....00:0b:78:00:60:02

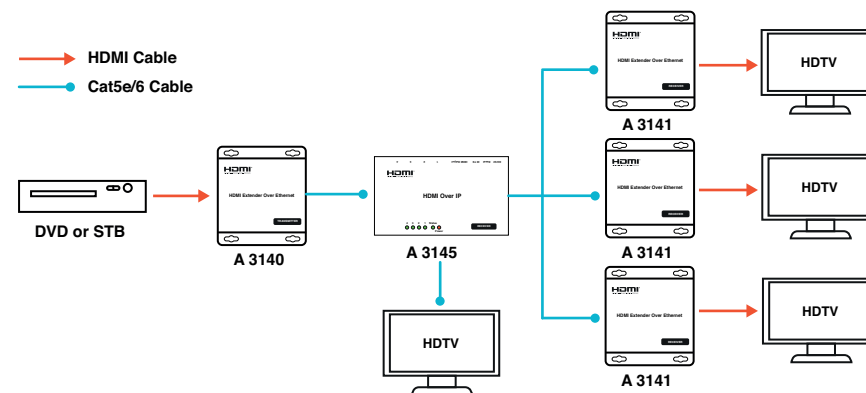
Note 1: Specifications are subject to change without notice. Mass and dimensions are approximate.

Note 2: One TX to many RX, The IP And MAC Address different is better.

2.0 OPERATING INSTRUCTIONS

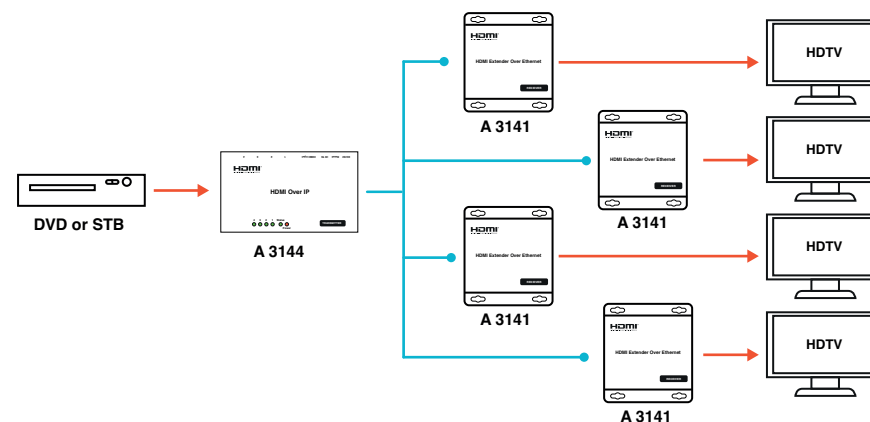
2.1 One to many (A)

A 3140 transmitter working with receivers A 3145 and A 3141.



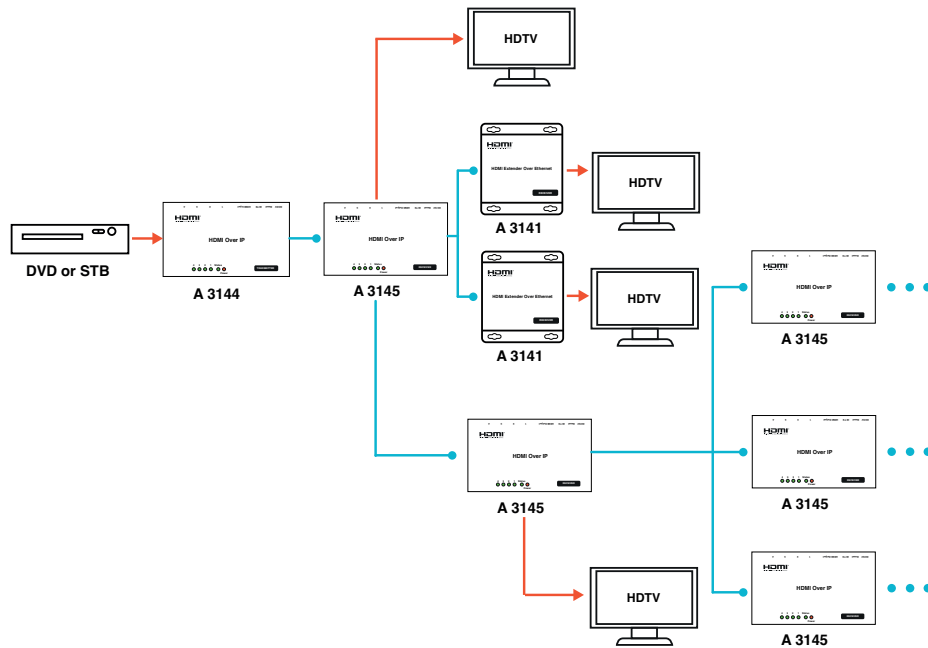
2.2 One to many (B)

A 3144 work with A 3141.



2.3 One to many(C)

Connect A 3144 transmitter to A 3145 receiver, then another A 3145 receiver, as well as A 3141 to achieve a large multi-layered AV network cascade.



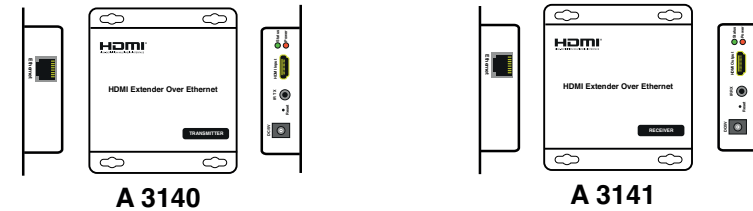
2.4 HDMI Over IP - One source to more displays function

1. Connect one HDMI Cable between the HDMI output port of source device and the HDMI input port of transmitter unit.
2. Connect one HDMI Cable between the HDMI input port of display and the HDMI output port of receiver unit.
3. Connect one UTP Cat5e or better cables between the RJ45 port of transmitter unit and RJ45 port of receiver unit.
4. Connect the included 5V DC power supplies to both transmitter unit and receiver unit.
5. Power on the output device first and the source second. Check display for image and audio.

2.5 Connecting Diagram

1. A 3144 is the transmitter with 1x HDMI input port (Connect to HDMI High Definition source) and 4x RJ45 Link ports, through which it can connect to the receivers A 3141 and A 3145 (up to four receivers of one or the other type).
2. A 3145 is the receiver with 1x HDMI output port and 4x RJ45 Link ports. It can connect to the A 3141 (which can the output via HDMI to a monitor) or to other A 3145 units to form a multilayered AV distribution network.
3. A 3140 is the transmitter with 1x HDMI input port (Connect to HDMI High Definition source) and 1x RJ45 output port, through which it can connect to either 1x A 3141 or 1x A 3145 (which can then connect to other A 3145 units).
4. A 3141 is the receiver with 1x RJ45 input port and 1x HDMI output port. A 3141 can receive a signal from either 1x A 3140 or an A 3145 unit (A 3140/41 are a single channel one-to-one balun pair, simpler than A 3144/45 balun pair).

NOTE: The LINK RJ45 connection ports of the A 3145 receiver units are bi-directional in that they can both receive a signal from a transmitter balun, and send signals to other receivers via cable. Therefore, receiver A 3145 is a distributor as well in that it can receive a signal on one LINK channel, and send that signal out to one or more of the remaining LINK connections. In a sense, the receiver A 3145 is really a transceiver or a repeater, which is what enables a user to create a layered network configuration to distribute an AV signal from a common source to many monitors over long distances.



3.0 SETUP HDMI TX AND HDMI RX

An HTTP server is embedded in each TX and RX. You can setup IP address for HDMI extender via a web browser.

- The default IP address of the TX is 192.168.168.55, MAC address is: 00:0b:78:00:60:01.
- The default IP address of the RX is 192.168.168.56, MAC address is: 00:0b:78:00:60:02.

Steps:

1. Assign the PC (or laptop) IP address on the computer following these directions through the relevant menus: "Control Panel" > "Network Connections" > "Local Area Connections Status"? > "Properties" > "Internet Protocol (TCP/IP)".
2. Type the IP address field with 192.168.168.11 (0-255) and Subnet mask with 255.255.255.0. After that press OK to save the configuration.
- Note: The IP address of PC should be different from the IP address of TX and RX.
3. Use an Ethernet cable to connect the PC (or laptop) and the extender. The power LED for the extender is red and the status LED becomes green.
4. Please ping the connected device from computer using the following sequence: "Start" > "Run" > input "CMD" > input "ping 192.168.168.55" for TX or input "ping 192.168.168.56" for RX. You will receive a reply if the connection is established.
5. Login in IE: 192.168.168.255 (default IP for TX) or 192.168.168.256 (default IP for RX). You can setup IP address, subnet mask, gateway, and MAC address for the TX and RX.
6. Please set IP address for each TX and each RX, IP: 192.168.168.XX (XX:1-255). All IP addresses for TX and RX must be different.
7. Please set MAC address for TX and RX. MAC:00:0b:78:XX:XX (XX:01-FF). The MAC address for each TX and each RX must be different.
8. After clicking the "Apply" button, the green LED light on the device will go out. You have successfully set IP address for TX and RX.

Note: If you need to restore the device to its factory default settings, please power on the device. The red light illuminates. Wait about 10 seconds until the green LED light illuminates. Then press the reset button for up to 10 seconds. The green light will go out. You have successfully restored the IP address to factory default.