



SIMPLE, EASY

ATLONA



ATLONA

HDMI EXTENDER OVER 1 CAT5E CABLE

AT-HDMI40SR

USER MANUAL



The **AT-HDMI40SR HDMI Extender over 1 CAT5e Cable** has been tested for conformity to safety regulations and requirements in the US, and has been certified for international use. However, like all electronic equipment, the AT-HDMI40SR should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on the unit.
- Do not attempt to service the unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation. Do not use near water.
- Keep unit away from objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the manufacturer's power adapter and connection cables. They are designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

The AT-HDMI40SR boosts up your video/audio transmission distance up to 60m/200ft in HDTV 1080i format. With only one cost effective CAT-5/5e cable, users can readily extend HDTV sources from DVD players, PS3, PC, or any other kind of HDCP compliant source, to any remote display including HDMI/DVI enabled TV set LCD, or monitor. This cost effective solution allows HDCP compliant sources and players to transmit high quality video and audio at greater distances.

The AT-HDMI40SR includes two units: transmitting and receiving units. The transmitting unit is used to capture the input HDMI/DVI signals and carry the signals through one RJ-45 connector into one CAT-5/5e/6 cable. The receiving unit is responsible for equalizing the sent TMDS multimedia data. The transmission distance between the sending and receiving units can be up to 60m/200ft at 1080i and 40m/130ft at 1080p. With the equalization control switch on the receiving unit, users can adjust the equalization strength to the received TMDS signals, and therefore optimize the transmission distance between source and destination.

FEATURES

- HDMI 1.2a compliant
- Extend the signal distance of an HDMI source up to 60m/200ft at 1080i or 720p
- Extend the signal distance of an HDMI source up to 40m/130ft at 1080p
- HDCP compliant
- Minimize the cable skew by adjustable 8-level equalization knob

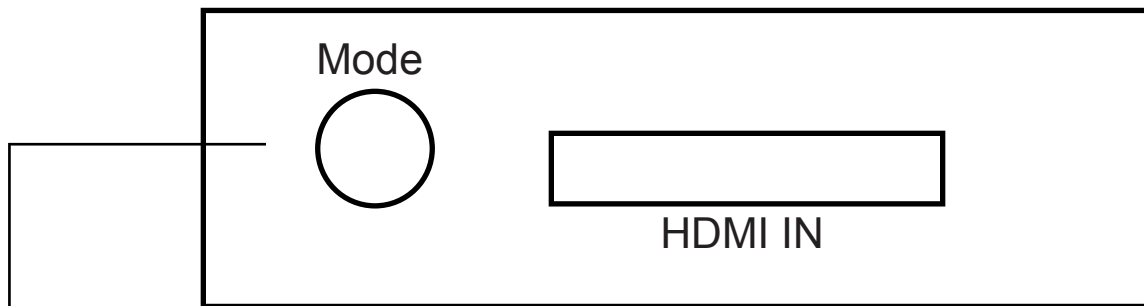
PACKAGE CONTENTS

- 1x HDMI transmitting unit (AT-HDMI40S)
- 1x HDMI receiving unit (AT-HDMI40R)
- 2x 5V 2A power adapter
- 1x User Manual

TECHNICAL SPECIFICATIONS

- Video Bandwidth: 1.65Gbps (HDMI 1.2a)
- Input TMDS signal: 1.2 volts (peak-to-peak)
- Input DDC signal: 5 volts (peak-to-peak)
- HDMI Connector: 19 pin type female connector
- Power Supply: 5V 2A
- Power Consumption: 10 Watts (max)
- RJ-45 Connector: 2 indication LEDs
- Dimensions: 70mm x 60mm x 25mm / 2.8"x2.4"x1" (L x W x H)
- Weight: 180g / 6.3oz

Front View - Transmitting Unit AT-HDMI40S

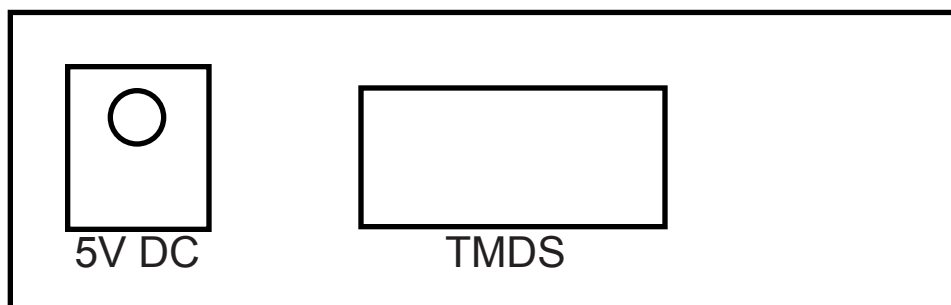


HDMI IN: Connect a HDMI source with a HDMI M-M cable here

→ **Rotary switch:**

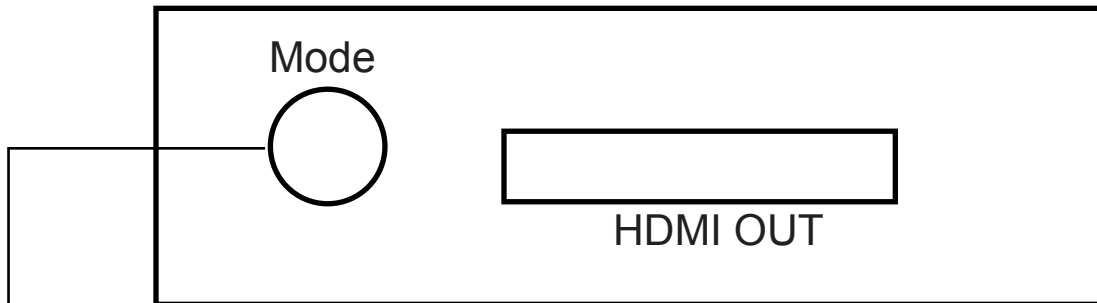
- 0: HDMI mode with 8 audio channels
- 1: HDMI mode with S/PDIF 2 audio channels
- 2: DVI mode
- 3-5: Reserved
- 6: Use default EDID
- 7: Learn EDID from the receiver

Rear View - Transmitting Unit AT-HDMI40S



TMDS: Plug in a CAT5/5e/6 cable that needs to be linked to the TMDS connector of the receiving unit: AT-HDMI40R.

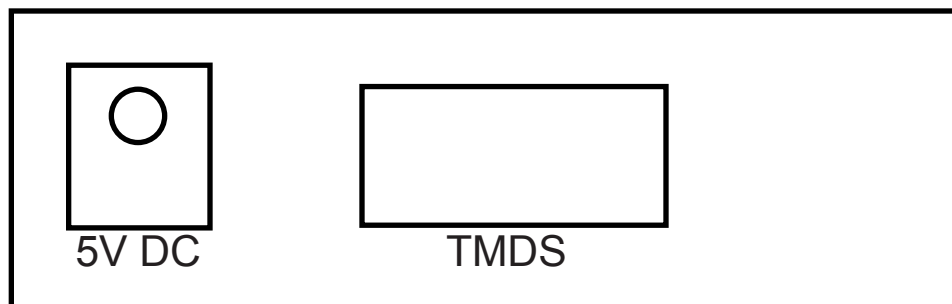
Front View - Receiving Unit AT-HDMI40R



HDMI IN: Connect a HDMI display with a HDMI M-M cable here.

→ **Rotary switch:** Adjust the equalization strength to the received TMDS signals. 0-7= strongest – weakest.

Rear View –Receiving Unit AT-HDMI40R



TMDS: Plug in a CAT5/5e/6 cable that needs to be linked to the TMDS connector of the transmitting Unit : AT-HDMI40S.

5V DC: Connect to 5V DC power supply.

1. Connect your HDMI/DVI source (such as a DVD player) to the transmitting unit AT-HDMI40S.
2. Connect your HDMI/DVI display (such as a plasma TV) to the receiving unit AT-HDMI40R.
3. Connect your CAT-5/5e/6 cable between the transmitting and receiving units.
4. Make sure your CAT-5/5e/6 cable is tightly connected and not loose.
5. Plug in 5V DC power cord to the power jack of the receiving unit.
6. Plug in 5V DC power cord to the power jack of the transmitting unit.
7. If a flickering or a blinking image is seen, try to adjust the rotational switch to improve the cable skew. 0 stands for the strongest EQ while 7 stands for the weakest. Try adjusting the EQ from 7 to 0.

NOTICE

1. If your HDMI/DVI device requires an EDID present, you can use an EDID Reader/Writer to provide DVI / HDMI EDID information.
2. All the transmission distances are measured using Belden CAT-5e 125MHz.
3. To reduce the interference among the unshielded twisted pairs of wires in CAT-5/5e/6 cable, you can use shielded CAT-5/5e/6 cables to improve EMI problems, which worsens in long transmissions.
4. Because the quality of the CAT-5/5e/6 cables has major effects in how long transmission distance will be, and the quality that is received by the display, the actual transmission length is subject to your CAT-5/5e/6 cables. For resolution greater than 1080i or 1280x1024, a CAT-6 is recommended.

Note for EDID (Extended Display Identification Data) learning

1. Please connect the display which you want to read EDID with a HDMI cable to the transmitter's **HDMI-IN** and turn **Mode** to **7** so the Transmitter can learn the EDID information from the connected HDTV. The LED on the RJ45-OUT of Transmitter will dim and light again in a few seconds, which indicates the EDID learning process is completed.
2. Turn **Mode** clockwise from **Mode 7** to **Mode 0** or **Mode 1** for desirable audio setting and enjoy the experience. DO NOT let the rotary arrow pass by **Mode 6** which will erase the EDID just learned and restore the default EDID.

After the EDID is learned, please turn MODE to 1, then begin to adjust EQ on Receiver from 7 to 0.

Recommendation Guide for HDMI over LAN Cable Transmission

Performance rating		Type of LAN cable		
Wiring	Shielding	CAT5	CAT5e	CAT6
Solid	Unshielded (UTP)	★ ★ ★	★ ★ ★ ★	★ ★ ★ ★ ★
	Shielded (STP)	★ ★ ★	★ ★ ★	★ ★ ★ ★
Stranded	Unshielded (UTP)	★	★ ★	★ ★
	Shielded (STP)	★	★	★ ★
Termination		Please only use EIA/TIA-568-B termination (T568B)		

Safeguards

To reduce the risk of electric shock, do not expose this product to rain or moisture.

If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.

Do not modify the wall plug. Doing so will void the warranty and safety features.

This equipment should be installed near the socket outlet and the device should be easily accessible in case it requires disconnection.

Precautions

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product or cause fires.

In the event of an electrostatic discharge, this device may automatically turn off. If this occurs, unplug the device, and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins, or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements and swimming pools.

Use only accessories recommended by ATLONA to avoid fire, shock or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning. Do not use cleaning fluid or aerosols, which could enter the unit and cause damage, fire or electrical shock. Some substances may also mar the finish of the product.

Never open or remove unit panels or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your AT-HDMI-40SRS. Opening the product will void the warranty.

Do not attempt to service the unit. Instead disconnect it and contact your Authorized ATLONA reseller or contact ATLONA directly.

1. LIMITED WARRANTY

Atlona Technologies warrants that (a) its products (the "Product") will perform substantially in accordance with the accompanying written materials for a period of 3 YEARS from the date of receipt and (b) that the Product will be free from defects in materials and workmanship under normal use and service for a period of 3 years. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 3 years from the date of receipt. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to Customer.

2. CUSTOMER REMEDIES

Atlona Technologies and its suppliers' entire liability and Customer's exclusive remedy shall be, at Atlona Technologies' option, either return of the price paid for the Product, or repair or replacement of the Product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of Customer's receipt. This Limited Warranty is void if failure of the Product has resulted from accident, abuse, or misapplication. Any replacement Product will be warranted for the remainder of the original warranty period or 3 year, whichever is longer.

3. NO OTHER WARRANTIES

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, ATLONA TECHNOLOGIES AND ITS SUPPLIERS DISCLAIM ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE PRODUCT AND ANY RELATED WRITTEN MATERIALS. THIS LIMITED WARRANTY GIVES CUSTOMER SPECIFIC LEGAL RIGHTS. CUSTOMER MAY HAVE OTHER RIGHTS DEPENDING ON THE JURISDICTION.

4. NO LIABILITY FOR DAMAGES

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