



ATLONA
HDMI OVER CAT5/6/7 TRANSMITTER &
RECEIVER WITH RS-232 AND STEREO AUDIO
AT-HDS100SR
&
AT-HDS250SR

USER MANUAL



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INTRODUCTION

Atlona Technologies' AT-HDS100SR and AT-HDS250SR HDMI Extenders, designed for long distance HDMI runs, are twisted pair transmitter and receiver modules which feature stereo audio as well as RS-232 data signals. The AT-HDS100SR is capable of extending signal up to 330ft while the AT-HDS250SR extends signal up to 825ft. In these lengths, each HDMI extender is still capable of maintaining very high video resolutions up to 1920x1200 or 1080p with no signal degradation. Atlona's new HDMI Extender units are stocked full of features including embedded equalizer, gain, and CTI adjustments as well as built in EDID for storing necessary data. Along with being HDCP compliant, these units come included with wall mountable brackets for any custom or commercial installer.

FEATURES:

- Transmits HDMI, Stereo Audio and RS232 long distances:
 - up to 330ft (AT-HDS100SR)
 - up to 825ft (AT-HDS250SR)
- HDMI Connection does carry Audio and Video signals, the extender has an additional Stereo Audio Connection (3.5mm jack)
- Designed to work on low cost Cat5/6/7 Cables
- High Resolution support up to 1920x1200 or 1080p
- HDCP Compliant
- HDTV Compatible
- Equalizer, Gain, CTI (Color Transient Improvement) adjustments
- Bi-Directional RS-232
- Built-In EDID module which stores the EDID data of the display on the receiver unit
- Both Transmitter and Receiver units are shielded for environments with a lot of interference
- Wall Mountable, brackets are included

PACKAGE CONTENTS:

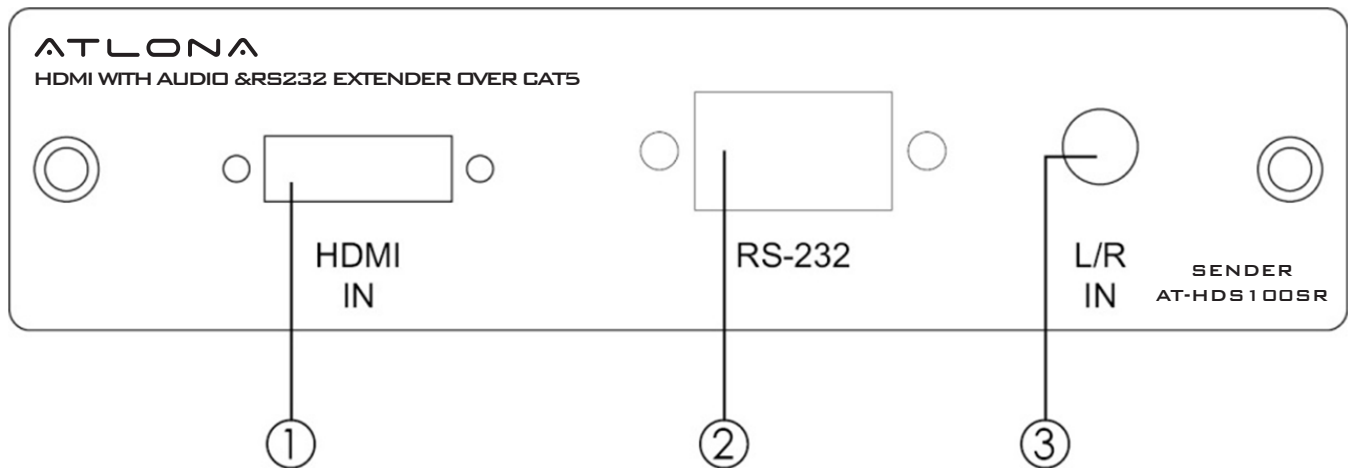
1. 1 x Transmitter module AT-HDS100S or AT-HDS250S
2. 1 x Receiver module AT-HDS100R or AT-HDS250R
3. 2 x 5V Power Supplies
4. 1 x Instruction Manual
5. 2 x Wall Brackets

SPECIFICATIONS

- Transmitter Input ports: 1 x HDMI female; 1 x RS-232 (9-pin); 1 x Analog Stereo Audio(3.5mm jack)
- Transmitter Output ports: 2 x CAT5/6/7 (RJ45)
- Receiver Input ports: 2 x CAT5/6/7 (RJ45)
- Receiver Output ports: 1 x HDMI female; 1 x RS-232 (9-pin); 1 x Analog Stereo Audio (3.5mm jack)
- HDTV Resolutions: 480i/p 60, 576p 50, 720P 50/60, 1080i 50/60Hz, 1080p 50/60Hz
- Computer Resolutions: 640 x 480, 800 x 600, 1024 x 768, 1280 x 1024, 1600 x 1200, 1920 x 1200
- EQ and CTI adjustments
- Power Supply: 5V / 2.6A (Universal)
- Dimensions (inch): 4.92W x 5.11L x 1.18H (receiver/transmitter are the same size)
- Net Weight each unit: 1.2LB
- Gross Weight: 4.5LB

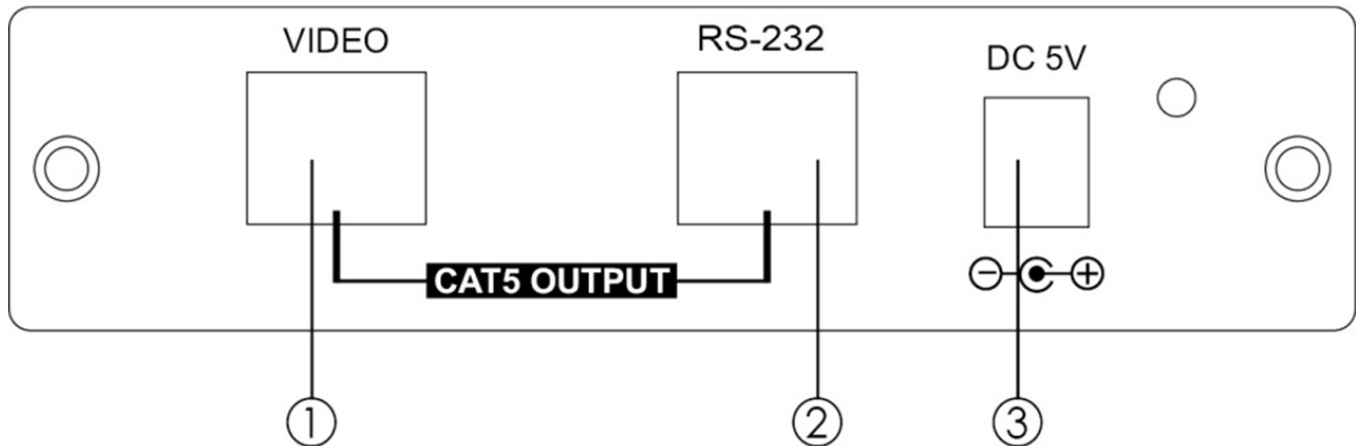
PANEL DESCRIPTIONS

Transmitter's Front Panel



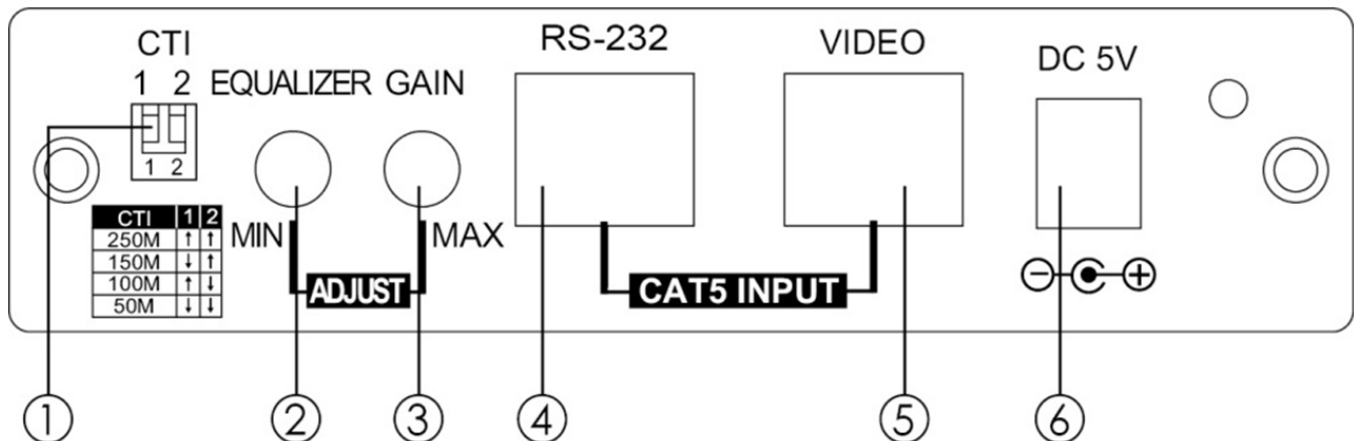
1. HDMI IN – Plug from HDMI source's output to HDMI
2. RS-232 – Connect to source with D-Sub 9 pin cable to control output display device. (Please refer to section below for RS-232 pin definition).
3. L/R IN – Plug from source's audio output with L/R phone jack cable.

Transmitter's Rear Panel



1. VIDEO CAT5/6/7 OUTPUT - Connect the VIDEO output to the VIDEO input of receiver with CAT-5/6/7 cable.
2. RS232 - Insert CAT 5 cable to the receiver's rear panel RS232 jack.
3. Power - Connect with 5V / 2.6A power adaptor.

Receiver's Front Panel



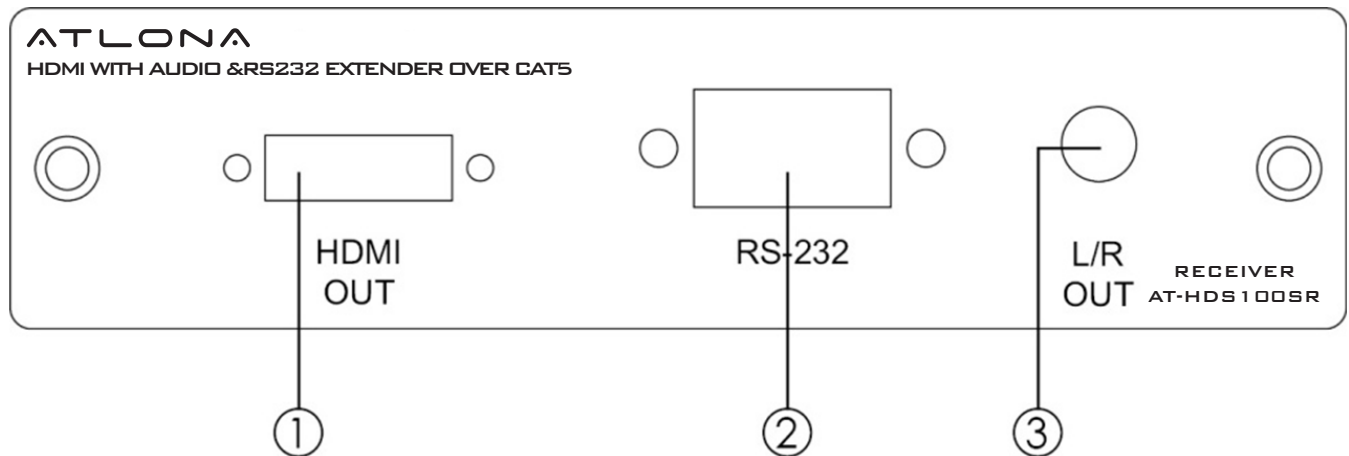
1. CTI dip switch – Setting CTI by using the twin jumpers to adjust the optimized setting for different distance of connection.

CTI	1	2
150 - 250m	↑	↑
100 - 150m	↓	↑
50 - 100m	↑	↓
50 m↓	↓	↓

Note: This function is only available on AT-HDS250SR.

2. EQUALIZER – Use this switch to adjust Sharpness/Peak over long distances by turning right or left.
3. GAIN – Use this switch to adjust Brightness/Contrast by turning right or left.
4. RS232 – Connect CAT 5/6/7 cable to the transmitter’s rear panel RS232 jack.
5. VIDEO CAT 5/6/7 INPUT – Connect the VIDEO input to the Video output of the transmitter with CAT-5/6/7 cable. (Suggest using solid UTP CAT5 cable for better performance)
6. Power – Connect with 5V / 2.6A power adaptor supply.

Receiver’s Rear Panel



1. HDMI OUT – Connect to Video/Audio display with HDMI cable.
2. RS-232 – Connect to device with D-Sub 9 Pin cable for controlling device. (Please refer to section below for RS-232 pin definition).
3. L/R OUT – Connect to audio’s input with 3.5mm phone jack.

RS-232 PROTOCOL

RJ-45 Pin Definition:

Pin	Definition
1	R x D -
2	R x D +
3	T x D -
4	GND
5	GND
6	T x D +
7	N/A
8	N/A

Baud Rate: 110bps~921600bps

CONNECTION DIAGRAM



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-HDS100SR & AT-HDS250SR. 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.

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