



ATLONA
MINIATURE MULTIMODE FIBER OPTIC HDMI
EXTENSION KIT
AT-HDF30SR

USER MANUAL



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INTRODUCTION

Atlona Technologies' new AT-HDF30S (Transmitter) and AT-HDF30R (Receiver) units are low cost, Fiber Optic HDMI baluns. This extremely small and high performance solution will carry HDMI audio/video signal, bi-directional stereo audio and 2 channels of RS-232 through one multimode fiber. This Mini-HDMI fiber optic transmitter allows any HD video source to extend signal up to 400m at WUXGA (1920x1200 @ 60Hz) and supports HDTV resolution up to 1080p. Multiple signals can run through a single conduit without crosstalk or interference . Along with being HDCP compliant, this unit is capable of transmitting DVI video signal with an Atlona DVI-to-HDMI adapter.

Atlona's AT-HDF30SR is equipped with advanced digital fiber optic technology allowing for self adjustment with no compression, bit reduction, or signal degradation. These units support 12-bit color depth and have an 8dB input equalizer, which compensates losses over 5m (16ft). With this self-adjustment and no power cord needed, quick and easy set up is as simple as plug and play.

The AT-HDF30S is compatible with other Atlona products including the AT-DVIF30R and AT-RGBF30R (for non HDCP signal only). Using one of these units on the receiver end will not only transmit signal, but also convert from HDMI-to-RGB/YPbPr/DVI in a single setup. This extension kit is the perfect solution for Video Wall Presentations and all Digital Signage applications due to its long range, conversion ability, and lossless signal transmission.

FEATURES:

- HDMI v1.3 Compliant
- Supported signals:
 - Digital Audio Video
 - Bi-Directional Stereo Audio
 - Channel RS232
- Supported resolutions at 400M (1320FT)
 - PC : 1920x1200 (60Hz)
 - HDTV: 1080p/1080i/720p
- Supports HDCP/DDC Content
- No losses, no degradations, no crosstalk
- One Multimode (SC type) Fiber
- 12-bit color depth and 8dB equalizer
- MAC/PC compatible
- High secure signal transfer
- Compatible with AT-DVIF30R and AT-RGBF30R

SPECIFICATIONS:

Video	
Resolution	Up to 1080p@60Hz or 1920x1200@60Hz
Connector	HDMI Female Plug
Protocol	HDCP/DDC Capable
Audio	
Channel Capacity	2
Operating Mode	Unbalanced (Stereo Audio), Bi-directional
Input/Output Impedance	10k/50 Ohms (Stereo Audio)
Max. Input/Output Level	5 dBu/4Vpp (Stereo Audio)
Magnitude Freq. Response	20Hz to 20kHz @ -3dB
THD+N	>70 @ 1k Hz (Stereo Audio)
Connector	Terminal Block
Optical	
Fiber Type	Multimode
Number of Fibers	1
Connector	SC
Serial Data	
Channel Capacity	2
Signal Format	RS-232
Data Rate	Up to 57.6kbaud
Connector	Terminal Block
Physical	
Dimension (H x W x D)	0.75" x 2.75" x 3.0"
Power Level (max.)	+5VDC @ 1.0A
Operating Temperature	0 to +50°C
Humidity	0 to 95% RH, non-condensing

PACKAGE CONTENTS:

- AT-HDF30S x 1
(Units Sold Separately)
- AT-HDF30R x 1
- Operation Manual x 1

OPERATION:

1. Make sure, if plugged into a source, the power is off before proceeding with the fiber optic installation.
2. Connect (SC type) Multimode fiber from Sender unit to Receiver by connecting one unit's fiber optical port to the others.
3. Connect the AT-HDF30SR (Transmitter) HDMI video input to the HDMI video source.
4. Next, connect the AT-HDF30SR (Receiver) HDMI video output directly to the HDMI video receiver using proper HDMI cable.

AUDIO:

Atlona's AT-HDF30SR audio interface supports two channel high fidelity transmissions. Two separate mono channels or one stereo channel can be transmitted in each direction while the Line-level audio signals remain connected to the units.

When SENDING the audio signal, connect two cables to the "AUDIO OUTPUT" connectors of the line-level source. On the HDF30SR, connect the other end of the cables to the front panel terminal block connectors labeled "AUDIO IN". For stereo channels, be sure to match the cables at both ends (L to L, R to R).

When RECEIVING the audio signal, label and connect two twisted-pair cables to the "AUDIO INPUT" connectors of the line level audio receiver. On the AT-HDF30SR, connect the other end of the cables to the front panel terminal connectors labeled "AUDIO OUT". If using stereo channels, be sure to match the cables at both ends (L to L, R to R).

SERIAL DATA:

Atlona's AT-HDF30SR units can be used for RS-232 interface as well as transmits two channels of un-balanced data signals

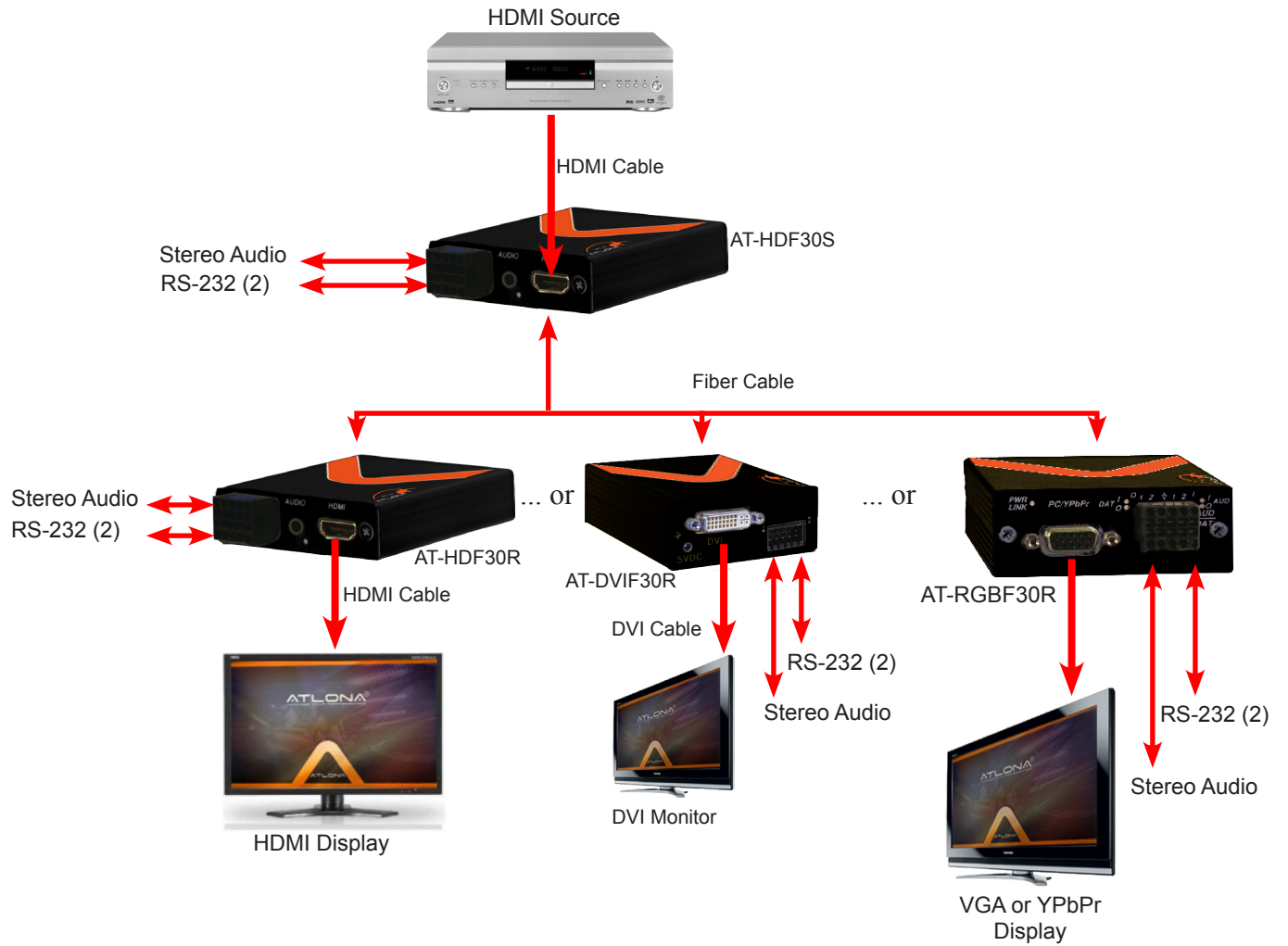
1. Connect one serial computer data cable to the the RS-232 device.
2. Next, Connect the other end of cable to the front panel data terminal connector on the AT-HDF30SR.

RS-422 SERIAL DATA:

Atlona's AT-HDF30SR units transmit a single channel of differential data signals which are compatible with RS-422 electrical signals

1. Connect one data cable to the RS-422 device.
2. Next, connect the other end of this cable to the front panel RS-422 terminal connector on the AT-HDF30SR.

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-HDF30SR. 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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