



User Manual

ATLONA

**DUAL LINK DVI OVER 3 X CAT5/6/7
TRANSMITTER AND RECEIVER
AT-DVI30SR**

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INTRODUCTION

The Atlona Dual Link DVI transmitter and receiver over three CAT5/6/7 cables is an extension tool for your long distance DVI display needs. Dual link DVI cables have a maximum distance of 15 feet before you lose resolution. Instead of using a long DVI cable, your existing CAT5/6/7 cables can replace DVI cables while performing the same functions like transferring 12 bit Deep color with a bandwidth of up to 2.25 Gbps and without signal loss. Moreover, the device has a built-in equalizer and Hot Plug Detect (HPD) function that allows users to enjoy a smooth and quick image display. With CAT5 cables you can run 100ft of cable and maintain high resolution video up to 2560x1600. However, CAT6 cables will get you 125ft and CAT7 will get you to 150ft between the computer or source and the display. This extender is ideal for those that want to achieve the highest resolution possible while running a display in a remote location. It's a perfect match for the Apple 30" cinema display, BARCO 2K projectors, or others like it, and customers that demand a high level of detail and distortion free images. For the best possible performance we recommend using CAT6 or CAT7 cables.

APPLICATIONS:

- Graphics card content display
- DVI content information sharing
- Educational displays
- High resolution graphic design

PACKAGE CONTENTS:

- Dual link DVI over 3 x CAT5/6/7 transmitter
- Dual link DVI over 3 x CAT5/6/7 receiver
- 5V DC power supply (only for the transmitter), receiver is passive
- Operation Manual

SYSTEM REQUIREMENTS:

Dual link DVI source equipment with Dual link DVI input display and 3 x CAT5/6/7 cables.

FEATURES:

- DVI 1.0, HDCP1.1 & HDMI 1.3 compliant
- Frequency bandwidth up to 2.25 Gbps
- Supports resolutions up to 2560 x 1600
- Supports Extended Display Identification Data (EDID) & Consumer Electronics Control (CEC)
- Receiver unit is passive, power is only for the transmitter.

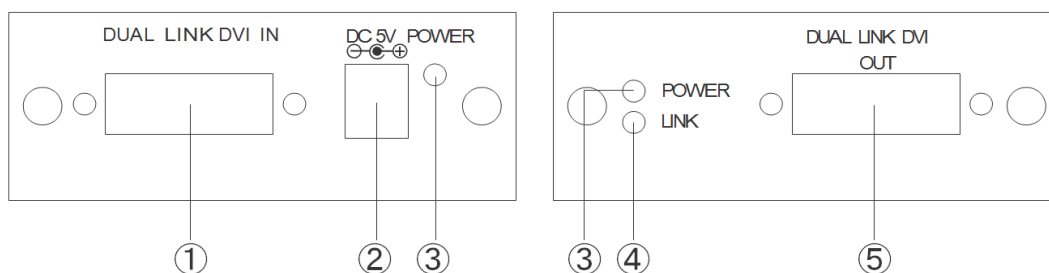
SPECIFICATIONS:

Frequency Bandwidth	2.25 Gbps	
Transmitter	Input Port	1 x Dual link DVI-D
	Output Port	3 x CAT5/6/7 (2 x Video, 1 x DDC)
Receiver	Input Port	3 x CAT5/6/7 (2 x Video, 1 x DDC)
	Output Port	1 x Dual link DVI-D
CAT6 Cable	1080p 8-bit 30(M), 12-bit 25(M)	
ESD Protection	Human body model: $\pm 8\text{kV}$ (air-gap discharge) $\pm 4\text{kV}$ (contact discharge)	
Dimensions (in.)	3.09"(W) x 4.13"(D) x 1.18"(H)	
Power Supply	1 x 5V DC / 2.6A	
Weight (lb)	0.8 each box	
Chassis Material	Aluminum	
Silkscreen Color	Black	
Power Consumption	10W	
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F	
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F	
Relative Humidity	20~90% RH (non-condensing)	

OPERATION CONTROLS AND FUCTIONS

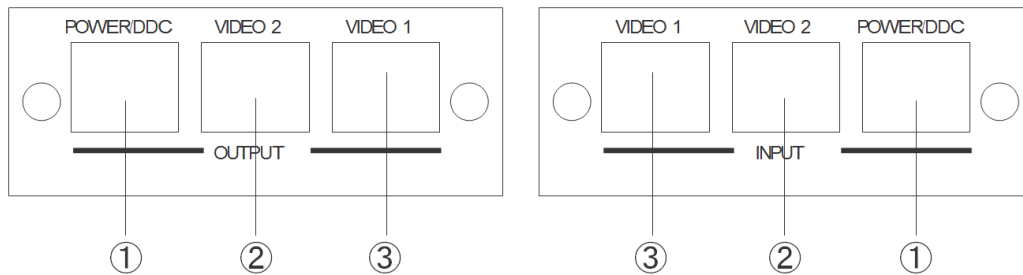
The following sections describe the hardware components of the unit.

7.1 Front Panel



1. DUAL LINK DVI IN: This slot is where you connect to the DVI or HDMI output port of your source equipment such as a PC with DVI or HDMI to a DVI cable.
2. DC 5V Power: This slot is where you plug the 5V DC power supply into the unit and connect the adaptor to an AC wall outlet.
3. POWER LED: This LED will illuminate when the device is connected with power.
4. LINK LED: When the device detects both the source and display signal the SYNC LED will illuminate.
5. DUAL LINK DVI OUT: This slot is where you connect to the DVI or HDMI monitor with a DVI or DVI to HDMI cable.

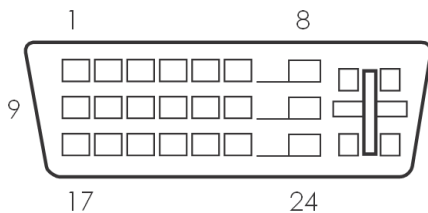
7.2 Rear Panel



1. POWER/DDC: Connect the DDC output of the transmitter to the DDC input of the receiver unit using CAT5/6/7 cables.
2. VIDEO 2: Connect the VIDEO 2 output of the transmitter to the VIDEO 2 input of the receiver unit using CAT5/6/7 cables.
3. VIDEO 1: Connect the VIDEO 1 output of the transmitter to the VIDEO 1 input of the receiver unit using CAT5/6/7 cables.

PIN ASSIGNMENT

8.1 Dual Link DVI-D Pin Definition



DVI-D Receptacle Connector

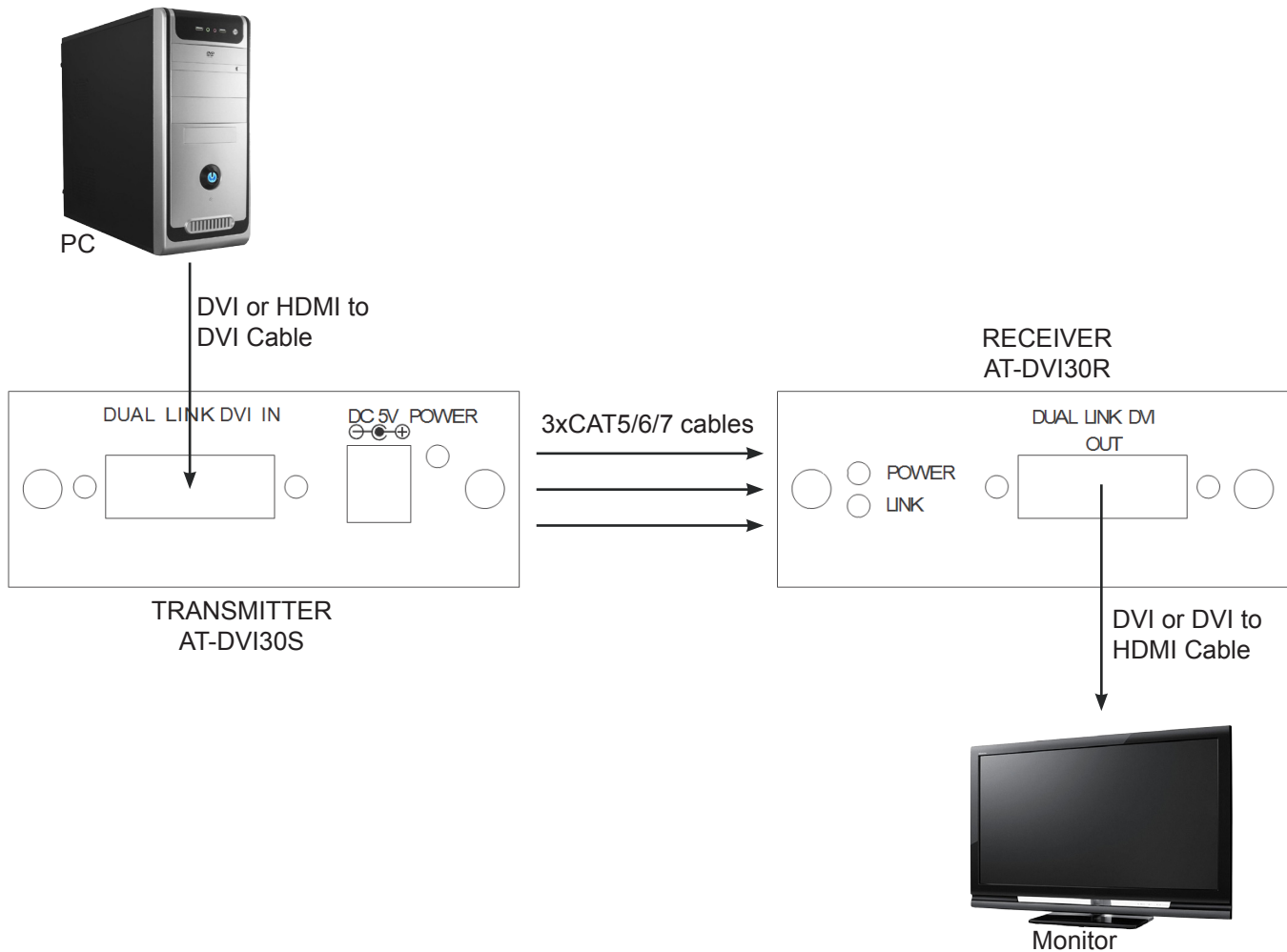
Digital-Only Connector Pin Assignments

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	T.M.D.S Data2-	9	T.M.D.S Data1-	17	T.M.D.S Data0-
2	T.M.D.S Data2+	10	T.M.D.S Data1+	18	T.M.D.S Data0+
3	T.M.D.S. Data2/4 Shield	11	T.M.D.S. Data1/3 Shield	19	T.M.D.S. Data0/5 Shield
4	TMDS Data 4-	12	TMDS Data 3-	20	TMDS Data 5-
5	TMDS Data 4+	13	TMDS Data 3+	21	TMDS Data 5+
6	DDC Clock	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data	15	Ground (for +5)	23	T.M.D.S. Clock+
8	No Connect	16	Hot Plug Detect	24	T.M.D.S. Clock-

8.2 RJ-45 Pin Definitions

Pin	Video	DDC
1	TX2+	DDC Bus Clock
2	TX2-	NC
3	TX1+	DDC Bus Data
4	TX0+	Power 5V
5	TX0-	GND
6	TX1-	IR IN
7	TXC+	HPD
8	TXC-	CEC

CONNECTION DIAGRAM



ATLONA PRODUCT REGISTRATION

Thank you for purchasing this Atlona product — we hope you'll enjoy it.

We also hope that you'll take a few moments to register your new purchase. Registration creates an ownership record if your product is lost or stolen and helps ensure you'll receive notification of performance issues and firmware updates.

At Atlona, we respect and protect your privacy and assure you that your registration information is completely secure. Of course, Atlona product registration is totally voluntary and failure to register will not diminish your limited warranty rights.

To register go to www.atlona.com/registration

SAFETY INFORMATION

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-DVI30SR. 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

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL ATLONA TECHNOLOGIES OR ITS SUPPLIERS BE LIABLE FOR ANY DAMAGES WHATSOEVER (INCLUDING WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR INDIRECT DAMAGES FOR PERSONAL INJURY, LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR INABILITY TO USE THIS PRODUCT, EVEN IF ATLONA TECHNOLOGIES HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY CASE, ATLONA TECHNOLOGIES' AND ITS SUPPLIERS' ENTIRE LIABILITY UNDER ANY PROVISION OF THIS AGREEMENT SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU FOR THE PRODUCT. BECAUSE SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.