DVI to Mini DisplayPort Converter
AT-DP400

User Manual

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USA
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SINCE
2003

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INTRODUCTION

The Atlona AT-DP400 is DVI (Dual Link) to Mini DisplayPort Converter. This is one of a kind device is specifically designed for any digital DVI source signal (such as a Mac/PC Computer with DVI output) to be displayed on the Apple iMac 27″ or Apple 24″ LED Cinema Display®. The DP400 allows users to take advantage of the extremely high resolution (2560x1440) that iMac 27″ is capable of supporting. Along with its small, compact design, the converter is USB powered, which means that when your computer is ON the converter is ON as well. With the additional ability of passing along all EDID and HDCP information, the Apple tested and Apple approved DP400 is exactly what Mac users have been waiting for.

FEATURES

• Allows dual link DVI (digital only) signal to display on the iMac 27″ or Apple 24″ LED
• Supports Dual Link resolutions up to 2560x1600 or more common 2560x1440 used by iMac 27″
• True pixel to pixel signal
• Fully tested with all Apple computers ever made featured with DVI output
• HDCP Compatible, which means that you can play copy protected material though our converter
• Full EDID Return, the computer will not even know that it is connected though a converter, it will only see the display and the converter will pass all the display's capabilities to the computer
• Re-Clocking technology will insure that signal stays the same quality as it was before entering the converter
• Video Pass-Though, no scaling (EDID and HDCP compliant)
• Easy to install and simple to operate
• Powered though attached USB cable (no external power needed)
• 7-inch DVI and 7-inch USB cables are attached to the converter
• Converter is only hardware based, therefore will never have any issues with new operating systems or if Apple updates the current operating system

PACKAGE CONTENT

• DVI to Mini DisplayPort Converter with attached 7-inch DVI and USB Cables
• Operational Manual

APPLICATIONS

• Any Mac or PC computer with DVI output to be connected to iMac 27″ or   24″ Cinema Display
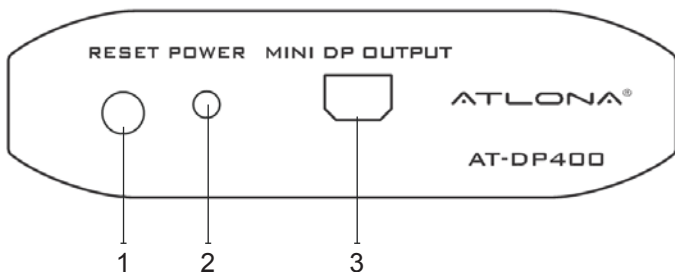• Convert any digital DVI signal into Mini DisplayPort

SYSTEM REQUIREMENTS

Input DVI-D (digital only) source equipment and output iMac 27″ or Apple LED Cinema Display®

SPECIFICATIONS

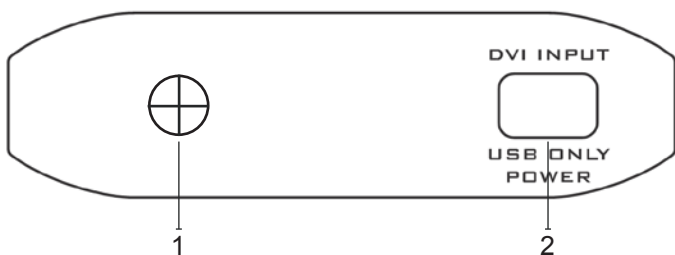|	
Input Port	DVI-D (Digital Only)
Output Port	Mini DisplayPort
Color Space	RGS_24
ESD Protection	Human body model: +/- 8kV (air-gap discharge) +/- 4kV (contact discharge)
Input TMDS signal	1.2 Volts (peak-to-peak)
Dimensions (mm)	110 x 90 x 30 / (Inch)4.3'x3.5x1.8
Weight (lb)	0.5
Chassis Material	Plastic
Silkscreen Color	White
Power Consumption	2.5W
Operating Temperature	0ºC ~ 40ºC / 32ºF ~ 104ºF
Storage Temperature	-20ºC ~ 60ºC / -4ºF ~ 140ºF
Relative Humidity	20~90% RH (non-condensing)

PANEL DESCRIPTIONS

1. Front Panel

1. Reset Switch: Push this button to reset the device's EDID. The LED will blink red while resetting the EDID. Only need to be performed if computer is changed.
2. Green LED – Power in ON, Red LED – Power is OFF.
3. MINI DP OUTPUT: Connect it with mini DP cable to Apple Cinema Display or to iMac 27".
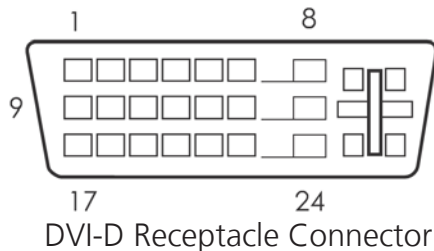
2. Rear Panel

1. 3.5mm mini stereo audio connection to transfer audio signal to display.
2. DVI & USB INPUT: DVI/USB 7-inch Pig-Tail. Connect DVI to the computers DVI output for video signal and USB to the Computers USB output for power. If there is no empty USB outputs, Power to USB adapter could be used.

PIN ASSIGNMENT

1. DVI-D connector

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-

2. Mini DisplayPort Connector

Top Row			Bottom Row		
Pin Number	**Signal Type**	**Pin Name**	**Pin Number**	**Signal Type**	**Pin Name**
1	GND	GND	2	In	Hot Plug Detect
3	Out	ML Lane 0 (p)	4	CONFIG	CONFIG1
5	Out	ML Lane 0 (n)	6	CONFIG	CONFIG2
7	GND	GND	8	GND	GND
9	Out	ML Lane 1 (p)	10	Out	ML Lane 3 (p)
11	Out	ML Lane 1 (n)	12	Out	ML Lane 3 (n)
13	GND	GND	14	GND	GND
15	Out	ML Lane 2 (p)	16	I/O	AUX CH (p)
17	Out	ML Lane 2 (n)	18	I/O	AUX CH (n)
19	GND	GND	20	PWR Out	DP_PWR

CONNECTION DIAGRAM

iMac 27" or Apple 24" Cinema Display

AT-DP400

Mini DisplayPort
cable

DVI
cable

USB
cable

Mac
Notebook

Mac
Mini

PC

TROUBLESHOOTING

Question: My Display/Adapter will fail to "wake up" from sleep mode?
Answer: Press the reset button on the front of the unit. The reset function will reload the EDID and display with the best resolution image. This is not standard issue; however may happen with older computers.

Question: My Mac works fine; however my PC is not connecting to the monitor though your converter?
Answer: a) We suggest to make sure that you have the following output resolutions selected on your computer: iMac 27" (2560x1440) and Apple 24" LED (1920x1200)
b) Please perform a Bios update to make sure you have the latest version.
Please update your video card and USB drivers to the latest drivers.
c) Press "reset" button on the DP400 to trigger a pull of the EDID from the display to the computer

Question: I want to connect my PS3 to my monitor using your box? Please help.
Answer: We do suggest using AT-HD620 as it is a scaler converter box which will be able to display your HDMI sources at the highest resolutions up to 2560x1440. However if you do decide to go with DP400, you can use our converter without additional devices at only 720p. Make sure to set 720p prior connecting it to the DP400. Even Though DP400 is able to pass-though very high resolutions, the Xbox or PS3 users will only be able to view 720p because iMac 27" doesn't accept 1080i or 1080p.

Question: My iSight camera and speakers won't work when I use your unit.
Answer: The iSight operates through the usb of the 24" LED Display, Please plug in the USB from the monitor to your computer.

Question: How can I control the brightness on my monitor when using your device?
Answer: The brightness settings can only be adjusted on Apple made computers.

Question: What does the Green Light mean on the DP400?
Answer: The green light indicates that your laptop or desktop is connected to the DP400 and the Monitor correctly. It also means the unit is powered up successfully through the usb.

Question: What does the Red Light mean on the DP400?
Answer: The Red light can mean that the unit isn't being powered on correctly. Please re-connect the USB and the DVI cables.

SAFETY INFORMATION

Safeguards

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

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

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

This equipment should be installed near the socket outlet and the device should be easily accessible in the 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, fish tanks, 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 and not cleaning fluid or aerosols.

Such products could enter the unit and cause damage, fire, or electric shock. Some substances may also mar the finish of the product.

Never open, 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-DP400. Opening the product will void the warranty.

Do not attempt to service the unit. Disconnect the product and contact your authorized Atlona reseller or contact Atlona directly.

WARRANTY

Limited Warranty

Atlona Technologies warrants that (a) its products (the AT-DP400) 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 customers that fall within those areas.

Customer Remedies

Atlona Technologies' and its suppliers' entire liability and Customer's exclusive remedy shall be, at Atlona Technologies' decision, either return of the price paid for the product, repair, or replacement of the product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of the Customer's receipt. This Limited Warranty is void if failure of the product has resulted from accident, abuse, misapplication, or natural occurrence. In example but not limited to: power surges (electrical storms, local power outage), dropping the product (or items on the product), contact with fluids, and physical misconduct (i.e. kicking or punching). Any replacement product will be warranted for the remainder of the original warranty period.

No other warranties

To the maximum extent permitted by applicable law, Atlona Technologies and its suppliers disclaim all other warranties, either expressed 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. Customers may have other rights depending on the jurisdiction.

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 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. Such damages include but are not limited to: special, incidental, consequential, or indirect damages for personal injury, loss of business profits, business interruption, loss of business information, or any other pecuniary loss.

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. Some Jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damage. The above limitations may not apply to you in such jurisdictional cases.

ATLONA PRODUCT REGISTRATION

Thank you for purchasing this Atlona product. - We hope you enjoy it and will take an extra 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, assuring you that your registration information is completely secure. Atlona product registration is completely voluntary and failure to register will not diminish your limited warranty rights.

To register go to: ***http://www.atlona.com/registration***