



ATLONA
8-INPUT 2-OUTPUT PROFESSIONAL VIDEO
SCALER
AT-PRO82

USER MANUAL



TABLE OF CONTENTS

1. Introduction	1
2. Specifications	1
3. Package Contents	2
4. Panel Descriptions	2
4.1 Front Panel	2
4.2 Rear Panel	3
5. Connection	4
6. Remote Control	4
7. IR Extender	5
7.1 Rear Panel IR Extender Ports	5
7.2 The IR Extender Components Setup	5
8. RS-232 Serial Interface	6
8.1 RS-232 Serial Interface Connect a PC or Control System	6
8.2 RS-232	6
8.3 Protocol Commands	6
9. RS-232 Protocol Commands	7
9.1 Standby Mode	7
9.2 Power Off Mode	7
9.3 Front Panel Lock	7
9.4 Unit Reset	7
10. Installation	8
11. Safety Information	9
12. Warranty	10
13. Atlona Product Registration	11

INTRODUCTION

Atlona Technologies' AT-PRO82 is a unique 8-input 2-output Professional Video Scaler designed to work as a switcher and scaler for multiple Audio/Video sources and displays. This Atlona unit is capable of switching 2 x Composite Video, 2 x S-Video, 2 x Component and 2 x VGA, all with Stereo Audio signals going out to 2 x VGA with Stereo Audio Outputs. This gives the AT-PRO82 the ability to switch between eight sources and two displays. Both outputs are mirrored and therefore the image would be identical out of both outputs. This device will support sharp and highly defined video in multiple resolutions of up to 1080p or 1920x1200. Along with supporting Pal and NTSC formatting, this unit has quick and easy installation. With manual, RS232, as well as IR Remote control options, Atlona's AT-PRO82 Scaler/Switcher is perfect for all Video equipment and applications that using Multiple Video formats and signals such as Cable and Satellite receivers, VCRs, DVD Players, Set Top Boxes...etc.

SPECIFICATIONS

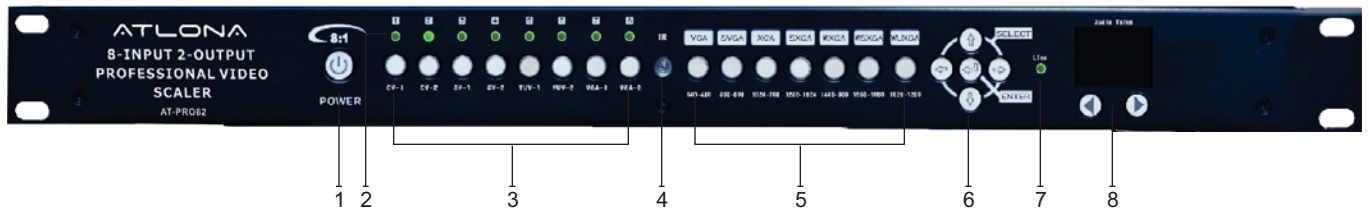
Inputs	2x Composite Video and Stereo Audio Inputs; 2x S-Video with Stereo Audio Inputs; 2x Component Video with Stereo Audio Inputs; 2x VGA with Stereo Audio Inputs
Outputs	2x VGA with Stereo Audio Outputs
Auto detection TV video system	NTSC-M 3.58, NTSC-J, 4.43, PAL-B-D-I-G-H-K, PAL-M, PAL-N, PAL-N COMB-N, SECAM (Impedance: 75 ohms)
OSD menu selections	Adjust Color: Contrast, Brightness, Sharpness, Level and Gain
Video bandwidth	250MHz, (-3 d B)
Audio bandwidth	>60MHz, (-3 d B)
Audio frequency response	20Hz ~ 20KHz
Input source resolutions	CVBS/S-Video for STANDARD TV VIDEO SYSTEM; Component Video (YPBPR) for 480p, 720p & 1080p; VGA for VGA (640x480), SVGA(800x600), XGA(1024x768), SXGA(1280x1024) or (1920x1200HD)Maximum
Unit output resolutions	VGA for SVGA, XGA, SXGA, WXGA, WSXGA or WUXGA (1920x1200 HD)
Control	Direct Front Panel menu, RS-232, and IR Remote control
RS-232 control	9600 bps, No Parity, 8 bits, 1 Stop bit
Safety approvals	CE, FCC, RoHs(2002/95/EC)
Dimensions (LWH)	19"x 7.87"x 1.75"(482mm x 200mm x 44mm)
Power supply	12VDC, 2A (2.45A Max.) Universal Switch type 50/60Hz 100~230 VAC
Shipping weight	3.2kg

PACKAGE CONTENTS:

- Atlona 8-input 2-output Professional Video Scaler (AT-PRO82)
- Instruction Manual
- IR Remote Control
- Universal AC/DC power adapter: 12VDC

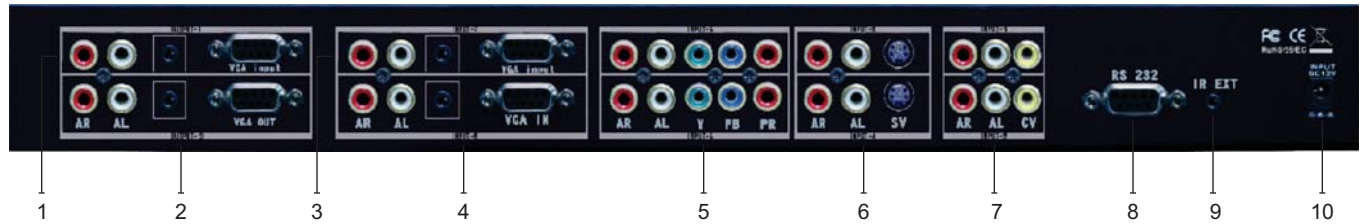
PANEL DESCRIPTIONS

1. Front Panel



- 1) POWER SWITCH. The power switch turns the unit ON/OFF. The LED will illuminate red to indicate the switcher is ON and receiving power
- 2) INPUT SOURCES DISPLAY. Inputs 1-8 LEDs illuminate green to indicate that a video source signal is present.
- 3) SOURCE SELECT BUTTONS. Outputs 1 and 2 source select buttons are provided for each destination.
Input 1 - Composite Video / Stereo Audio
Input 2 - Composite Video / Stereo Audio
Input 3 - S-Video / Stereo Audio
Input 4 - S-Video / Stereo Audio
Input 5 - Component Video (YPBPR) / Stereo Audio
Input 6 - Component Video (YPBPR) / Stereo Audio
Input 7 - VGA (RGBHV) / Stereo Audio
Input 8 - VGA (RGBHV) / Stereo Audio
- 4) IR SENSOR. The IR sensor receives IR commands.
- 5) SELECT VGA RESOLUTION BUTTONS. VGA output resolutions via selection buttons.
1- VGA Resolution: 640 x 480
2- SVGA Resolution: 800 x 600
3- XGA Resolution: 1024 x 768
4- SXGA Resolution: 1280 x 1024
5- WXGA Resolution: 1440 x 900
6- WSXGA Resolution: 1680 x 1050
7- WUXGA Resolution: 1920 x 1200
- 6) OSD CONTROL. Adjust OSD on display via display screen.
- 7) LINE DISPLAY. Optional function for cascading one unit to another.
- 8) AUDIO OUTPUT VOLUME. Adjust outputs Audio/Volume via LED display

2. Rear Panel



- 1) 2x VGA/STEREO AUDIO OUTPUTS.
Output 1 - VGA-RGBHV / Stereo Audio
Output 2 - VGA-RGBHV / Stereo Audio
- 2) 2x OD3.5mm AUDIO OUTPUTS.
2x Stereo Audio outputs.
- 3) INPUT 7 & 8 VGA-AUDIO INPUTS.
Input 7 - VGA-RGBHV via 1x DB-15p connector
- Stereo Audio via 2x RCA connectors
Input 8 - VGA-RGBHV via 1x DB-15p connector
- Stereo Audio via 2x RCA connectors
- 4) INPUTS 7 & 8: AUDIO with OD3.5mm Jack.
Input 7 - stereo audio(AR/AL) via OD3.5mm phone jack
Input 8 - a stereo audio(AR/AL) via OD3.5mm phone jack
- 5) INPUTS 5 & 6:
Input 5 - Component(YPBPR) via 1x RCA connectors
- Stereo Audio via 2x RCA connectors
Input 6 - Component(YPBPR) via 1x RCA connectors
- Stereo Audio via 2x RCA connectors
- 6) INPUTS 3 & 4:
Input 3 - S-Video (Y/C) via 1x Mini din-4 Female connector
- Stereo Audio via 2x RCA connectors
Input 4 - S-Video (Y/C) via 1x Mini din-4 Female connector
- Stereo Audio via 2x RCA connectors
- 7) INPUTS 1 & 2:
Input 1 - Composite Video via 1x RCA connectors
- Stereo Audio via 2x RCA connectors
Input 2 - Composite Video via 1x RCA connectors
- Stereo Audio via 2x RCA connectors
- 8) RS232 CONTROL. RS 232 control allows for interfacing to a PC.
- 9) IR EXTENDER CONTROL. IR Extender to extend distance of 300M
- 10) POWER INPUT. Use to plug in 12V DC power adaptor.

CONNECTION

Before making any connections to AT-PRO82:

Be sure the mains voltage supply matches the label on the supplied plug-Pack (+/- 10%)

Make sure all devices are powered down

Ensure that all system grounds (earth) are connected to a common point.

Connect all sources to the Desired Video/Audio Inputs

Connect all displays to desired Audio/Video Outputs

Power on all sources and displays

Set AT-PRO82 Power switch to (ON)

When powering up, Atlona's Matrix switcher will return to its last used setting.

For each destination output select the appropriate input source by using:

- The front panel input 1-8 select buttons
- RS 232
- IR remote control.

REMOTE CONTROL

1. POWER ON/OFF

Press Power Button to switch ON and OFF

2. INPUT Selections

- | | |
|-------------|--|
| input- # 1 | Composite Video / Stereo Audio |
| input - # 2 | Composite Video / Stereo Audio |
| input- # 3 | S-Video / Stereo Audio |
| input- # 4 | S-Video / Stereo Audio |
| input- # 5 | Component Video (YPBPR) / Stereo Audio |
| input- # 6 | Component Video (YPBPR) / Stereo Audio |
| input- # 7 | VGA-RGBHV / Stereo Audio |
| input- # 8 | VGA-RGBHV / Stereo Audio |

3. SELECT VGA OUTPUT RESOLUTIONS

Select through VGA output resolutions:

- SXGA 1280 x1024
- WXGA 1440 x900
- WSXGA+1680 x1050
- WUXGA 1920 x1200

4. MENU - OSD

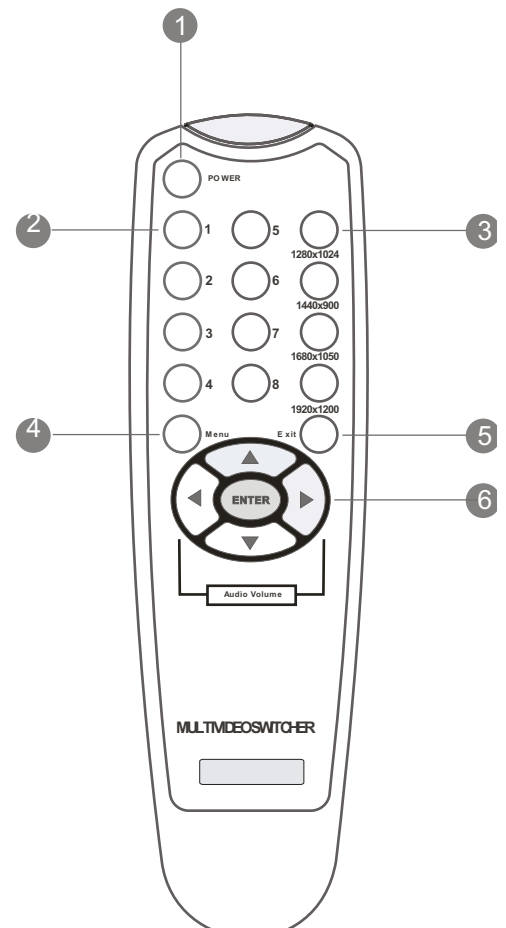
Use OSD to setup or Adjust output resolutions and color.

5. EXIT - OSD

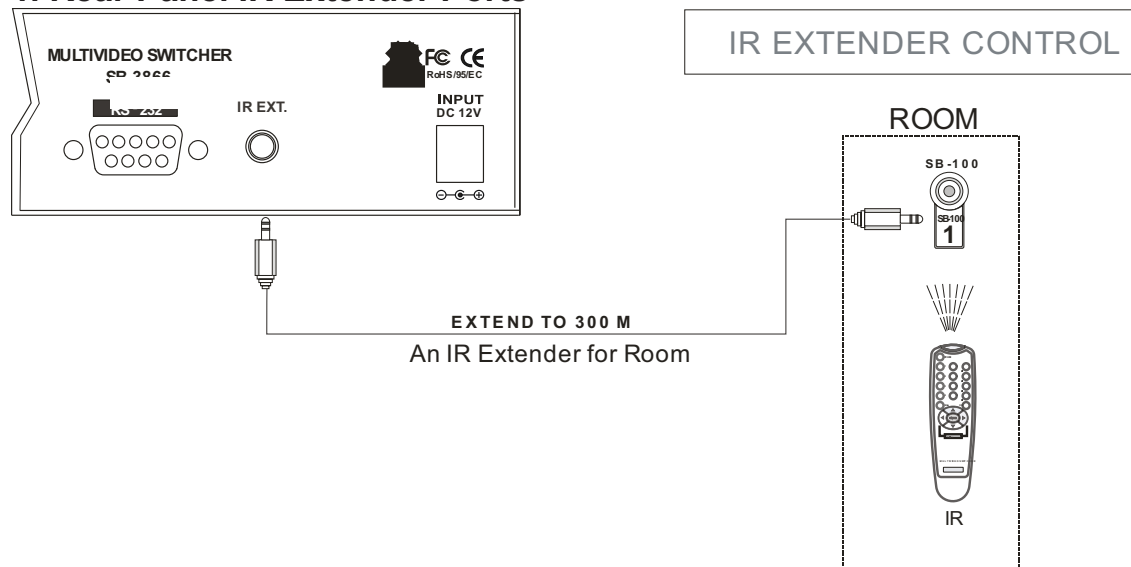
OSD to EXIT

6. AUDIO VALUE ADJUSTMENT

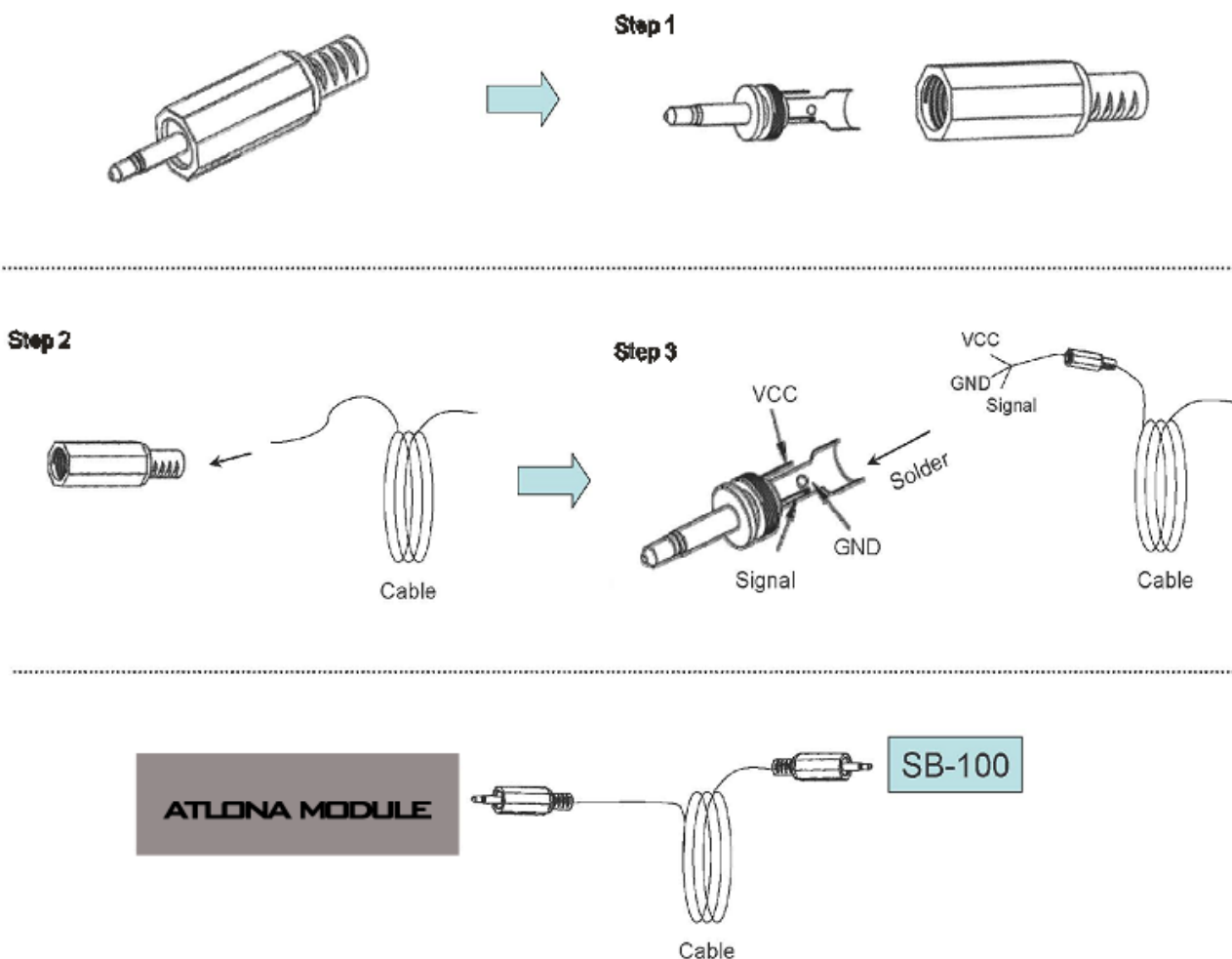
OSD to setup or Adjust Audio Output Volume



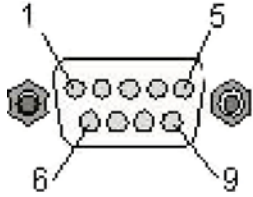
1. Rear Panel IR Extender Ports



2. The IR Extender Components Setup



1. RS-232 Serial Interface Connect a PC or Control System



Pin	RS-232	Definition
1	-	Not used
2	TX	Transmitter
3	RX	Receiver
4	-	Not used
5	GND	Ground
6	-	Not used
7	-	Not used
8	-	Not used
9	-	Not used

2. RS-232

Atlona's AT-PRO82 can be controlled via the RS-232 serial control to allow interfacing with a PC, The serial communication parameters are 9600 baud, 8 bit, No Parity and 1 stop bit - this is often referred to as 9600 8N1.

When the unit recognizes a complete command it will perform the requested action. There is no delimiter character required. This unit does not send out a message when a value is changed from the front panel or IR control. If the unit needs to be controlled via the front panel in addition to the RS232 control, regularly poll the unit status to ensure the control system accurately reflects the current settings, or similar third party control system.

3. Protocol Commands

To Switch Inputs to Outputs

SBI0X00Y- Where X is Output Number (1-8) and Y is Number (1-8)

Unit will respond with

SBUD0X0Y- Where X is Output Number (1-8) and Y is Input Number (1-8)

Example : Send Input 8 to Output 3

SBUD0803-Send

SBI08003-Rcvd

1. Standby Mode

Note: Note: Turning the unit System Power Off over RS232 will blank-out the displays, leaving only the Power Switch LED on. Hard resetting the unit when in (System Power Off) mode will return the unit to its normal operation and unlock the front panel. Even while the unit is turned off by RS232, it will continue to accept and act upon switching commands. This allows you to set up a scene before soft powering the unit on and enabling the video outputs. The unit will still return to its status and change messages in response to commands sent while in the System.

2. Power Off Mode

SBSYSMON- Put system into Standby (Soft Power Off)

SBSYSMOF- Bring unit out of Standby (Soft Power On)

Unit will respond with

SBALOFAK- Unit is in Standby

SBALONAK- Unit is no longer in Standby

Example : Put Unit in Standby (Soft Power)

SBSYSMOF- SendS

BALOFAK- Rcvd

3. Front Panel Lock

Note : Hard resetting the unit will unlock the Front Panel controls.

SBSYSMLK- When front panel is locked, changes can only be made by Rs232

SBSYSMUK- Front Panel Unlock

Unit will respond with

SBSYSLOK- Front Panel has been Locked

SBSYSULK- Front Panel has been Unlocked

Example : Lock Front Panel Buttons

SBSYSMLK- Send

SBSYSLOK- Rcvd

4. Unit Reset

SBSYSMLK- Reset every output to Input 1

Unit will respond with

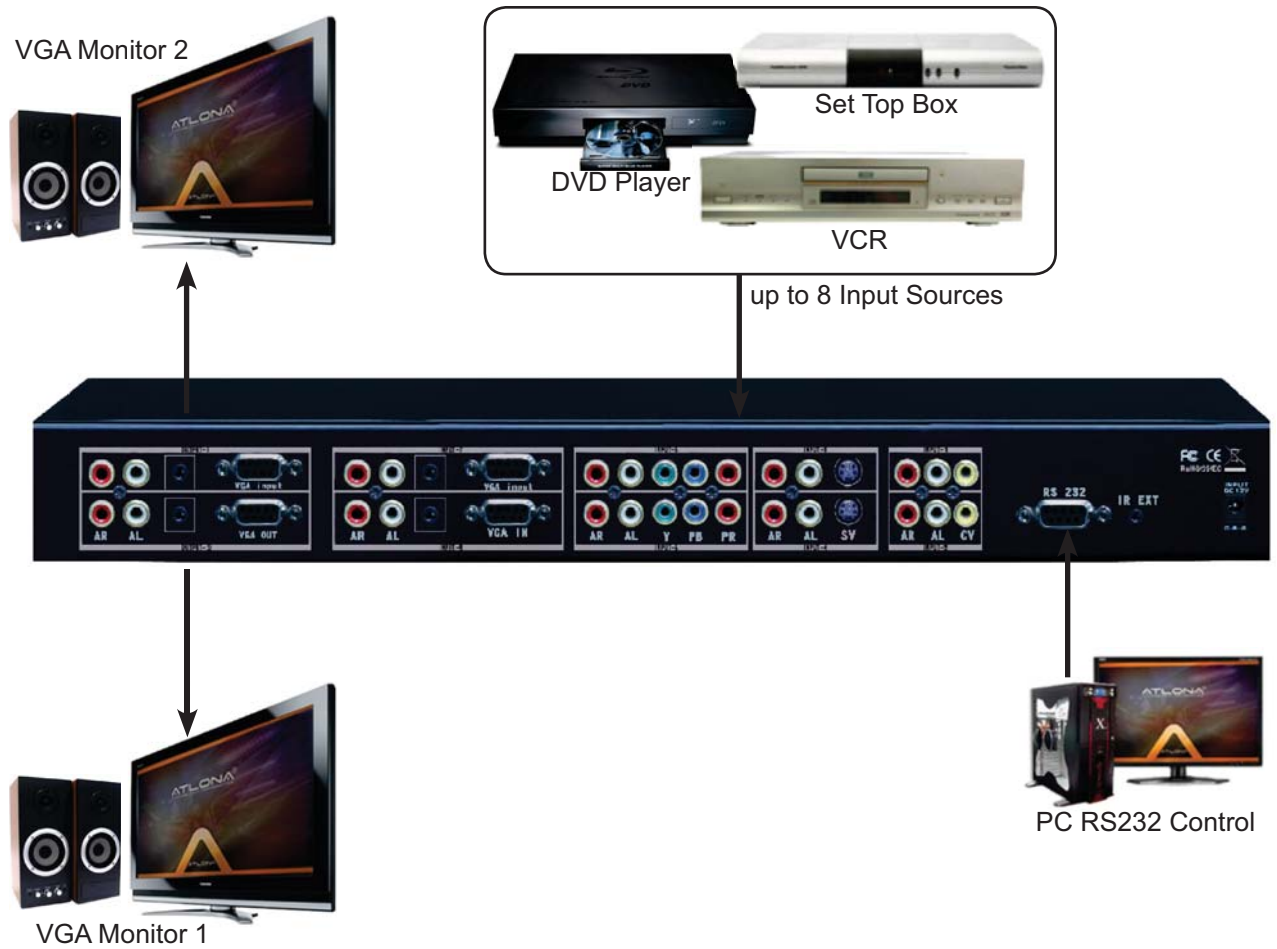
SBRSTACK- Unit has reset each Output to Input 1

Example : Reset all outputs to Input 1

SBALLRST- Send

SBRSTACK- Rcvd

INSTALLATION



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-PRO82. 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.



ATLONA
2151 O'toole Ave, Ste D
San Jose CA 95131
Toll Free: 1-877-536-3976
International: 408-954-8782
FAX: 408-954-8792
Website: www.atlona.com
E-MAIL: info@atlona.com

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