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Atlona Composite Video & S-Video To Component Video Scaler
AT-AVS-COMP

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User Manual

Table of Contents

Introduction

Thank you for purchasing the AT-AVS-COMP Composite Video & S-Video to Component video scaler. This product has many innovative features that will prove absolutely useful to you. Please read these instructions carefully as it will guide you through the most of the setup process. In case of assistance with troubleshooting, please contact us.

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WARRANTY

LIMITED ONE-YEAR WARRANTY

ATLONA by Lenexpo Electronics warrants only to the initial purchaser of this product for a period of one year from the date of purchase from an Authorized ATLONA Reseller, the product will be free of electrical and mechanical defects that materially affect the products operation as described in this users manual. Within this period, ATLONA will, at it's sole option, repair or replace any components, which fail of normal use or refund the net original price.

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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 accesible 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-AVSC41. Opening the product will void the warranty.

● Do not attempt to service the unit. Instead disconnect it and contact your Authorised ATLONA reseller or contact ATLONA directly.
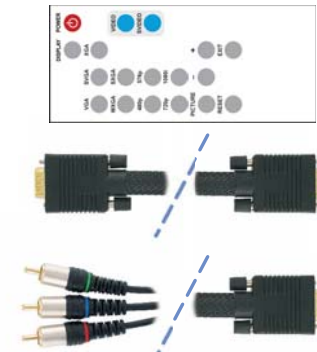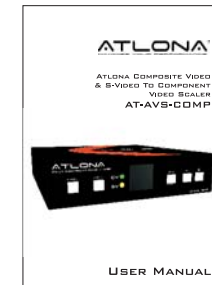
Audio/Video/S-Video to HDMI Scaler

Accessories

Universal Power Supply

User Manual

ATLONA COMPOSITE VIDEO & S-VIDEO TO COMPONENT VIDEO SCALER
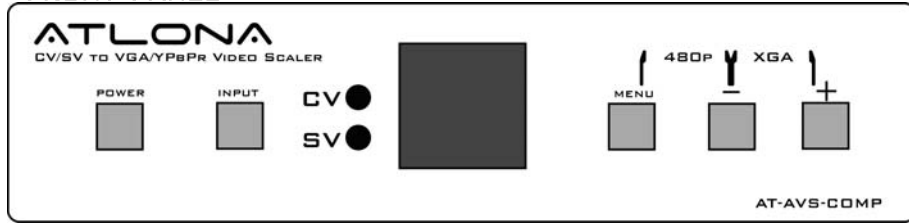AT-AVS-COMP

User Manual

Before You Begin

Component Output: this unit is capable of scaling the video signal to a range of resolutions - from 480p all the way to 1080i including some PC resolutions. Please make sure that your display, which is to be connected to this video scaler, complies with scalers output capabilities. Some displays are not capable of accepting certain resolutions on Component or VGA input.

Please make sure that the length of your cables, does not exceed 20m/66ft. In case it does, your system MIGHT require a booster, repeater or an extender.
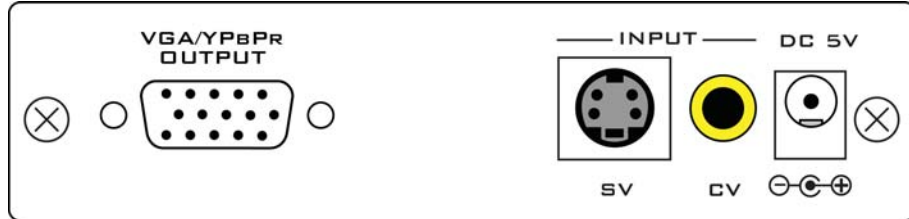
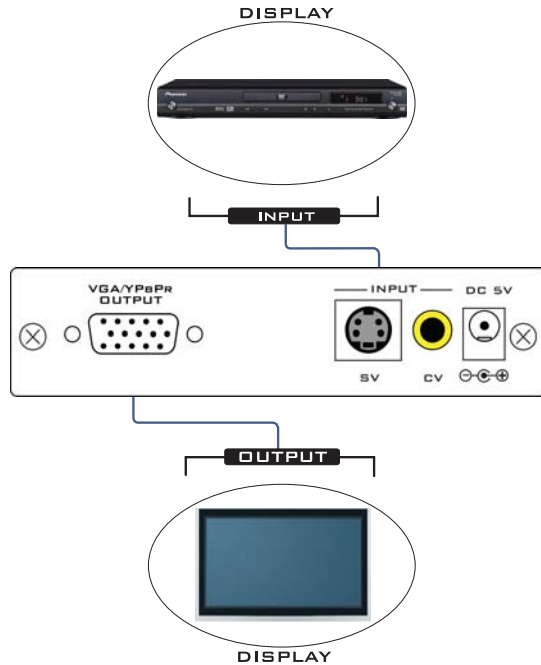9   2
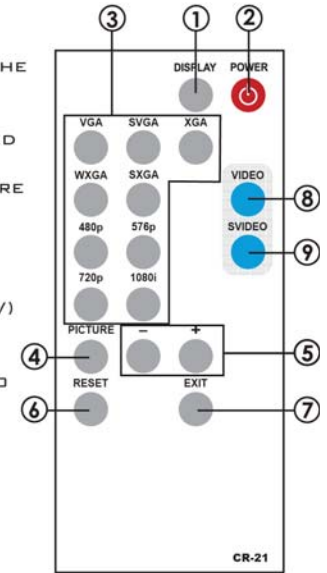
ILLUSTRATION

Front Panel

ATLONA
CV/SV to VGA/YPbPr Video Scaler

POWER INPUT   CV ●   SV ●   480p XGA
MENU   −   +

AT-AVS-COMP

Rear Panel

VGA/YPbPr OUTPUT   INPUT   DC 5V

SV   CV

INSTALLATION

DISPLAY

INPUT

VGA/YPbPr OUTPUT   INPUT   DC 5V

SV   CV

OUTPUT

DISPLAY

SET-UP

REMOTE CONTROL

1. Display: Press the button to display input source and output resolution on the screen.
2. Power: Power ON/OFF button.
3. VGA~1080i: Press to select your desired output resolution.
4. Picture: Press the button to enter picture adjust submenu. Use +,- button to move cursor (V) up/down to your desired parameter, press "Picture" again to confirm.
5. +/-: Press to move up/down the cursor (V) to your desired parameter,or press to increase/decrease the setting value.
6. Reset: Press to reset all setting back to factory default value.
7. Exit: To exit OSD.
8. Video: Press the button to select composite video input.
9. SVideo: Press the button to select SVideo input.

③ ① ②
DISPLAY POWER
VGA SVGA XGA
WXGA SXGA   VIDEO ⑧
480p 576p   SVIDEO ⑨
720p 1080i
④ PICTURE − + ⑤
⑥ RESET EXIT ⑦
CR-21

SPECIFICATIONS

Input signal levels	Video@1Vp-p, 75 ohm, Y@1 Vp-p, 75 ohm Color@ 0.7 Vp-p, 75 ohm
Output Fomat	Analog YPbPr/HDTV or RGB/PC
Output Connector	HD-15 female
Output Singnal	RGB @ 0.7 Vp-p, H&V Sync @ 3 Vp-p, Y @ 1 Vp-p, Pb, Pr. 0.7 Vp-p 75ohm
Weight	400 grams
Dimensions	125(W) x 123(D) x 30(H) mm

Output Signal Specifications

PC Resolutions	Vert Rate	Scan Type	Format Digital out Pin 1~19	Digital out Pin C1~C5
VGA 640 X 480	60 Hz	Progressive	RGB	RGB
SVGA 800 X600	60 Hz	progressive	RGB	RGB
XGA 1024X768	60 Hz	Progressive	RGB	RGB
WXGA 1280X768	60 Hz	Progressive	RGB	RGB
SXGA 1280X1024	60 Hz	Progressive	RGB	RGB
HDTV Resolutions	Vert Rate	Scan Type		
480p 720 x 480	60 Hz	Progressive	RGB	Y/Pb/Pr
576p 720 x 576	50 Hz	Progressive	RGB	Y/Pb/Pr
720p 1280 x 720	60 Hz	Progressive	RGB	Y/Pb/Pr
1080i 1920x1080	60 Hz	Interlaced	RGB	Y/Pb/Pr

SET-UP

OUTPUT SETUP

When Output Set up is selected a submenu as below appears:
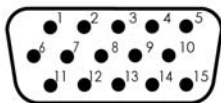
    Output Setup
    √ Timing XGA
    Exit

Press the " MENU/ENTER" button to enter into output timing select mode. Press +,- to toggle through a variety of output resolutions as below. Once your desired resolution is selected. press the "menu/enter" to enter the resolution.

	Resolution	Vertical rate
VGA	640x480	60Hz
SVGA	800x600	60Hz
XGA	1024x768	60Hz
WXGA	1280x768	60Hz
SXGA	1280x1024	60Hz
480p	720x480	60Hz
576p	720x576	50Hz
720p	1280x720	60Hz
1080i	1920x1080	60Hz

Note: All output resolutions except 576p have 60Hz vertical rate, The 576p resolution has 50Hz vertical rate. The output signal format for the 5 PC resolutions (VGA~SVGA) is RGBHV. The output signal format for the 4 HD resolutions (480p~1080i) is YPbPr.

HD-15 pin assignments

```
  1  2  3  4  5
 6  7  8  9  10
11 12 13 14 15
```

PC RGB OUTPUT (VGA-SXGA)

PART NO	PIN NO	DESCRIPTION (PC OUT)
DB15HD	1	RED
	2	GREEN
	3	BLUE
	4	GND
	5	GND (DDC-RETURN)
	6	GND-RED
	7	GND-GREEN
	8	GND-BLUE
	9	N/A
	10	GND-SYNC
	11	GND
	12	DDC-DATA
	13	HSYNC
	14	V-SYNCED
	15	DDC-CLOCK

HD YPbPr OUTPUT (480i-1080i)

PART NO	PIN NO	DESCRIPTION (HD OUT)
DB15HD	1	PR
	2	Y
	3	PB
	4	GND
	5	GND (DDC-RETURN)
	6	GND-PR
	7	GND-Y
	8	GND-PB
	9	N/A
	10	GND-SYNC
	11	GND
	12	DDC-DATA
	13	HSYNC
	14	V-SYNCED
	15	DDC-CLOCK

SET-UP

FEATURES

Motion adaptive 3D Y/C separation comb filter (for composite video input)
Motion adaptive 3D(Frame Based) YNR/CNR noise reduction (for S-Video input)
Advanced 3D motion adaptive deinterlacing
Automatic 2:2/3:2 pulldown (film mode detection)
Supports 50Hz to 60Hz frame rate conversion (PAL/NTSC support)
Video quality improvement
DCT1(Digital chroma transient improvement),
DLT1(Digital luminance transient improvement),
Black level expansion
Average picture leveler (APL),
Automatic contrast limiter (ACL)
OSD menu for picture quality adjustments.
Front Panel and IR remote control.
Automatic NTSC/PAL video format detection and switching.

CONNECTIONS:

Step 1. Connect Composite Video(Yellow) or S-Video(4-pin) cable to your source and to AT-AVS-DVI
Step 3. Connect HDMI cable to your display and to AT-AVS-DVI
Step 4. Connect power cable to AT-AVS-DVI

OPERATION:

When the scaler is plugged in, the "CV" or "SV"led will light up, notifying you that It Is active and the video Input is currently set to Composite Video(CV) or S-Video(SV).

FRONT PANEL CONTROLS:

Main panel of the scaler consists of 5 buttons, lets take a look at their functions beggining with the one to the left.
1)Power Button - controls ON/OFF function
2)Input Button - cycles through CV & SV inputs
3)Menu Button - acts as menu activation and "enter" in the OSD menu
4) " - " button - advanced menu control
5) "+" button - advanced menu control
        Pressing "Menu" and " - " at the same time will reset the unit to the factory HDTV resolution (480P)
        Pressing " - " and "+" at the same time will reset the unit to the factory PC resolution (XGA)

SET-UP

Front Panel

1. Power button and LED indicator:
Press the button once to power on the unit, press again to power off. When the unit is powered on, one of the input LEDs will illuminate depending on your last selection of input source before power off. The factory default setting for the input is CV (composite video). The green LED illuminates when composite video is selected. The Yellow LED illuminates when S-Video is selected.

2. Input select button:
Press the button to select your desired input source between Composite Video and S-Video.

3. Menu Button:
This button serves two purposes.
   A. Press the button to bring up OSD main control menu as shown in the "OSD Operation".
   B. To act as a "enter" key to enter sub menu of you selected item or adjust value of the selected item.

4. +/- button:
Press the button to move up or down the tick "V" to your desired parameter. After a parameter is selected by pressing MENU/ENTER button, press the button to alter the value of your selected parameter.
Note: Once out of range, you can press "MENU" and "-" buttons together to go back to HDTV factory default setting 480P. Or press"+" and "-" button together to go back to PC factory default setting XGA.

Rear Panel

   DC power jack: 5V 2A DC power input.
   Composite Video: Use a Composite video cable to connect the composite video output of the source equipment to this composite video(CV) input of the scaler.
   S-Video: Use a S-Video cable to connect the S-Video output of thesource video equipment to this " S-Video" input on the back of the video Scaler. S-Video provides improved performance over composite video and is recommended over composite.
   PC/HD output: This HD-15 D-Sub connector is shared by PC/RGBHV output and HDTV/YPbPr output. When PC/RGBHV output resolution (VGA to SXGA) is selected, use the HD-15 to HD-15 VGA cable to connect this output to the PC input of your display monitor. When HDTV/YPbPr output (480p, 576p, 720p, 1080i) is selected, use the HD-15 to YPbPr 3 x RCA cable to connect this output to the YPbPr input of you HDTV display.

Note: Use of wrong cable for your selected output will result in an abnormal picture on the screen.

SET-UP

Output Format

The output format of VGA connector is RGB for PC resolutions and YPbPr for HDTV resolutions

PC (RGB)			HDTV (YPbPr)		
VGA -RGB	640X480	60 Hz	1080i -YPbPr	1920x1080	60 Hz
SVGA -RGB	800X600	60 Hz	720p -YPbPr	1280X720	60 Hz
XGA -RGB	1024X768	60 Hz	576p -YPbPr	720X576	50 Hz
WXGA -RGB	1280X768	60 Hz	480p -YPbPr	720X480	60 Hz
SXGA -RGB	1280X1024	60 Hz			

OSD Operation

After power on the unit , press the menu button to bring up the main menu page as below:

   √ Main Menu
      Picture adj.
      Output Setup
      Exit

Use +,- button to move "V" to your desired parameter, then press MENU/ENTER to enter into sub-menu of your selected parameter.

Picture Adjust

When Picture Adjust is selected a sub menu as below comes up.

	Default	Range
Bright	16	1-31
Contrast	16	1-31
Color	16	1-31
Tint	16	1-31
Sharp	05	1-19
Default	OK	
Exit		

USE +,- to move the cursor (V) to the desired adjust item, Press the Menu/Enter to confirm your selection. At this point, the selected parameter will turn red, and you can use +,- to increase or decrease the value of the parameter. When adjustment is complete, Press "Menu" to leave the parameter. Move the cursor "V" to "Exit", then press menu/enter to exit.