Video to PC/HD Scaler Box
ID #390

Operation Manual

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Introduction

ID# 390 Video to PC/HD Scaler Box is designed to convert Composite and S-Video to a variety of computer and HDTV resolutions.
It handles video input from TV systems of NTSC, Pal standards.
ID# 390 Video to PC/HD Scaler Box has many great features to enhance video performance and is ideal for use in professional large screen presentation.

Features

- Motion adaptive 3D Y/C separation comb filter (for composite video input)
- 3D (frame based) Motion adaptive YNR/CNR noise reduction (for Y/C video input)
- Advanced 3D Motion adaptive deinterlace
- Automatic 2 : 2/3 : 2 film mode detection
- Supports 50Hz to 60Hz frame rate conversion
- Video Quality Improvement:
  - DCT1 (Digital chroma transient improve)
  - DLT1 (Digital luminance transient Improve)
  - Black level extension

- Average picture level (APL), Automatic contrast limiter (ACL) function support
- OSD menu for picture quality adjustment
- Built in 8-bit DAC for RGB or YPbPr output
- Front Panel and IR remote control
- Automatic NTSC/Pal/SECAM video format detection and switching

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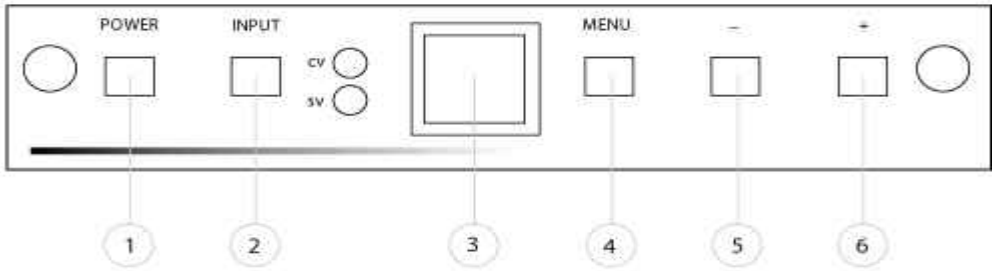
Operation Controls and Functions

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 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 CV 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. IR Sensor:

Infrad remote control sensor

4. Menu/Enter:

This button serves two purposes.
a. press the button to bring up the OSD main control menu as show in the "OSD Operation" section.
b. To act as a "enter" key to enter sub menu of your selected item or adjust the value of the selected item.

5/6. +/- Button:

Press the button to move up or down the tick "V" to your desired parameter. Or after a parameter is selected, the button can be used to alter the value of your selected parameter.

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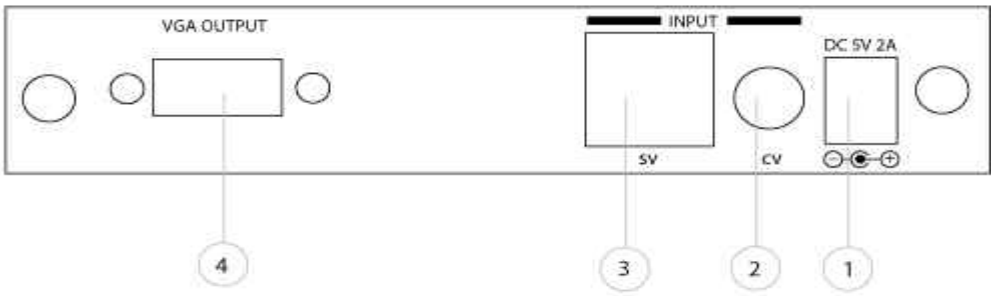
Rear Panel



1. **DC Power Jack:**
   5V 2A DC power input
2. **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.
3. **S-Video:**
   Use a S-Video cable to connect the S-Video output of the source 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
4. **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 your HDTV display.

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

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OSD Control

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

Main Menu
V **Picture adj.**
Output Setup
Exit

Use +,- to move the tick“V” to your desired parameter, then press MENU/Enter to enter into sub-menu of your selected parameter.

Picture Adjustment
When the Picture Adjust is selected a sub menu as below appears.

	Default	Range
Bright	16	1-31
V **Contrast**	16	1-31
Colour	16	1-31
Tint	16	1-31
Sharp	05	1-19
Default	OK	
Exit		

Use +,- to move the tick“V” to your 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 tick “V” to “EXIT”, then press Menu/Enter to Exit.

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Output Setup

When Output setup is selected a sub menu as below appears.

Output Setup
V 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 button 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: **1.** All output resolutions except 576p have 60Hz vertical rate, the 576p resolution has 50Hz vertical rate.

2. - The output signal format for the 5 PC resolutions (VGA~SVGA) is RGBHV.

3. - The output signal format for the 4 HD resolutions (480p~1080i) is YpbPr.

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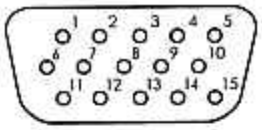
HD-15 Pin Configuration



1. PC RGB output (VGA~SXGA)

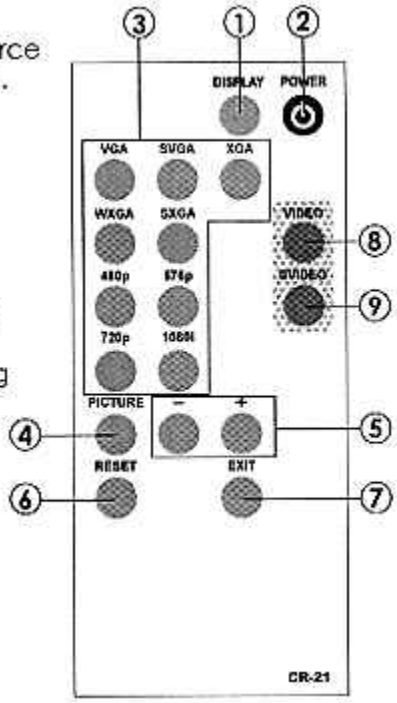
Part No.	Pin No.	Description (PC out)
DB15HD	1	RED
	2	GREN
	3	BLUE
	4	GND
	5	GND (DDC-RETURN)
	6	GND-RED
	7	GND-GREEN
	8	GND-BLUE
	9	N.C
	10	GND-SYNC
	11	GND
	12	DDC-DATA
	13	H-SYNC
	14	V-SYNC
	15	DDC-CLOCK

2. HD YPbPr output (480p~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.C
	10	GND-SYNC
	11	GND
	12	DDC-DATA
	13	H-SYNC
	14	V-SYNC
	15	DDC-CLOCK

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 the buttons 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 the buttons to move up/down the cursor (V) to your desired parameter, or press to increase/decrease the setting value.
6. **Reset:** Press the button 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.



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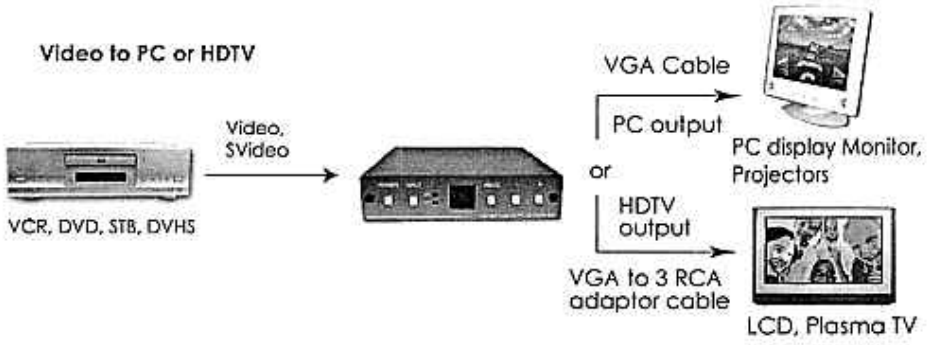
Specifications

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 75 ohm
Weight	400 grams
Dimensions	125(W) x 123(D) x 30(H) mm

Output Signal Specifications

PC Resolutions		Vert Rate	Format	Scan Type
VGA	640 X 480	60 Hz	RGBHV	Progressive
SVGA	800 X600	60 Hz	RGBHV	progressive
XGA	1024X768	60 Hz	RGBHV	Progressive
WXGA	1280X768	60 Hz	RGBHV	Progressive
SXGA	1280X1024	60 Hz		
HDTV Resolutions		**Vert Rate**	**Format**	**Scan Type**
480p	720 x 480	60 Hz	YPbPr	Progressive
576p	720 x 576	50 Hz	YPbPr	Progressive
720p	1280 x 720	60 Hz	YPbPr	Progressive
1080i	1920x1080	60 Hz	YPbPr	Interlaced

Installation



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