PC/HDTV to PC/HDTV Converter ID# 81
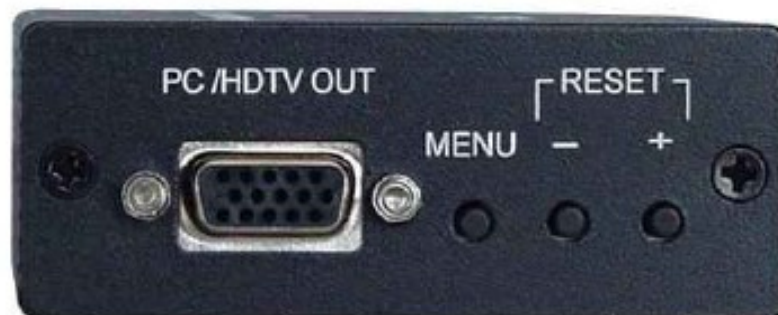

Operation Manual

Introduction

This unit combines the functions of a video-scaler, scan-converter, and format transformer into a compact and durable metal housing with easy-to-use touch buttons.

Features

- The unit is not only is a video scaler it is also a scan converter and a format transformer.
- The resolution of any PC or HDTV inputs can be scaled up or scaled down to any other PC or HDTV resolution, along with its frame rate converted to a selectable frequency.
- 48 MB frame memory for frame rate conversion.
- Signal format conversion between RGBHV and YPbPr.
- Input: PC (VGA/SVGA/XGA/SXGA), HDTV (480i/576i/480p/567p/720p/1080i), FH: 60 to 85 Hz
- Output: PC (VGA/SVGA/XGA/SXGA), HDTV (480p/576p/720p/1080i)
- Input mode auto detection.
- Input Setup allows for fine-tuning the output picture to a best condition through the adjustment of ADC sampling clock, and phase.
- Easy to use push buttons and OSD menu control.

Operating Functions and Controls
Front Panel

1. **Reset/ – and + -** The – and + keys are used to adjust the selected parameter values. Pressing + and – simultaneously resets the settings to the factory default values.
2. **PC/HDTV Out-** This is the PC/HDTV Output port
3. **Menu (Enter)-** The menu button brings up the OSD menu controls:
   - **Input setup**
   - **Output setup**
   - **Picture adjust**
   - **HV adjust**
   - **OSD Adjust**
   - **System Information**
   - **Auto Adjust**
   - **Exit**

Use + or – to move the arrow cursor to your desired selection, then press Menu
(Enter) to confirm your selection and enter into sub menu.

- **Input setup-** When it is selected, a sub-menu of clock and phase adjust will appear.

Use + or – to choose the parameter you want to adjust and then press the menu (enter) button to highlight your selection. Once a parameter is highlighted, use + and – to increase or decrease the value of the setting. Press Menu again to leave the setting. Move the arrow to exit then press Menu/Enter to exit.

- **Output Setup-** When it is selected use the + and – buttons to choose your desired PC or HDTV output (choose desired output resolution).
- **Picture Adjustment-** When it is selected the following appear:

- Contrast- use the + and – buttons to adjust the picture contrast level.
- Bright- Use the + and – buttons to adjust the picture brightness level.
- Colour- Use the + and – buttons to adjust the level of colour saturation.

   - Red- Use the + and – buttons to enhance or decrease the level of red colour.
   - Green- Use the + and – buttons to enhance or decrease the level of green colour.
   - Blue- Use the + and – buttons to enhance or decrease the level of blue colour.

- Reset- Press this button to reset all adjustments back to factory-preset values.
- Exit- Press this button to exit this sub-menu.

- **HV Adjust-** When this sub-menu is selected, H-position and V-position appear on the screen. Use the + and – buttons to adjust the best horizontal and vertical position of the OSD menu.

- **System Information-** When it is selected, it shows the input/output resolution and their vertical refresh rate on the screen.
- **Auto Adjust-** When it is selected the unit will automatically adjust all the parameters to the factory-preset values.
- **Exit-** Select to exit from the current menu page.

NOTE- The default output resolution is XGA @ 60 Hz. The unit has last memory capability, thus can memorize all customers' settings before power off and recall those settings on the next power on.

At any time of using the unit press + and – simultaneously and it will reset the output resolution to XGA @ 60 Hz, and other settings to their factory default value.

Rear Panel

1. **DC 12V 0.8A-** This is the power supply input port.
2. **PC/HDTV In-** This is the PC/HDTV input port.

Installation

- When accepting a PC input use the 15-pin D-Sub cable to connect the output of a PC device to the input connector (Number 2 on rear panel).
- When accepting a HDTV input use the 15-pin D-Sub to YPbPr/3 RCA cable to connect the YPbPr/Output (or YCbCr) of a HDTV device to the PC/HDTV input connector (Number 2 on the rear panel).
- The unit can automatically detect the mode and resolution of the PC/HDTV input.
- When one of the PC resolutions is selected as output, use the 15-pin D-Sub VGA cable to connect the PC/HDTV output (Number 2 on the front panel) to the VGA input of a display monitor.
- When one of the HDTV resolutions is selected as output, the 15-pin D-Sub to YPbPr/3 RCA adapter cable to connect the PC/HDTV output (Number 2 on the front panel) to the YPbPr input of a HDTV device.

Once all connections are complete please connect the power supply provided to the power socket.

Specifications

Input Format	RGBHV, YPbPr, YCbCr
Input Signal Levels	RGB @ 0.7V p-p, 75 ohm. H&V Sync @ 3-5Vp-p, TTL Y @ 1V p-p, 75 ohm. Pb,Cb,Pr, Cr @ 0.7V p-p, 75 ohm
Output Format	RGBHV, YPbPr
Output Signal Levels	RGB @ 0.7V p-p, 75 ohm. H&V Sync @ 3-5V p-p, TTL Y @ 1 V p-p, 75 ohm. Pb,Pr @ 0.7V p-p 75 ohm
Input/Output Connector Type	HD 15 Female
Control	Front Panel Buttons
Information Display	On Scerrn Display
Video Adjustments	Brightness, Contrast, Color, R-G-B Levels
Weight	10 oz. (280 grams)
Dimensions-HxWxD	1.2" x 3" x 5.5" (30 x 75 x 140mm)
Power Source	12VDC @ 800mA

Input Signal Specifications

PC Resolution		Vert Rate	Format	Scan Type
VGA	640 X 480	60,72,75,85 Hz	RGBHV	Progressive
VESA85	640 X 400	85 Hz	RGBHV	progressive
VGA70	720 X 400	70 Hz	RGBHV	Progressive
SVGA	800 X600	60,72, 75, 85 Hz	RGBHV	Progressive
XGA	1024X768	60, 70, 75, 85 Hz	RGBHV	Progressive
Mac	1152X864	70, 75 Hz	RGBHV	Progressive
WXGA	1280X768	60 Hz	RGBHV	Progressive
1280A	1280X960	60 Hz	RGBHV	Progressive
SXGA	1280X1024	60 ,75 Hz		
HDTV Resolutions		Vert Rate	Format	Scan Type
480p	720 x 480	60 Hz	YPbPr, RGBHV	Progressive
480i	720 x 480	60 Hz	YCbCr,RGBHV	Interlace
576p	720 x 576	50 Hz	YPbPr, RGBHV	Progressive
576i	720 x 576	50 Hz	YCbCr, RGBHV	Interlace
720p	1280 x 720	50,60 Hz	YPbPr, RGBHV	Progressive
1080i	1920 x 1080	50,60 Hz	YPbPr, RGBHV	Interlace

Output Signal Specifications

PC Resolution		Vert Rate	Format	Scan Type
VGA	640 X 480	60,72,75,85 Hz	RGBHV	Progressive
VESA85	640 X 400	85 Hz	RGBHV	progressive
VGA70	720 X 400	70 Hz	RGBHV	Progressive
SVGA	800 X600	60,72, 75, 85 Hz	RGBHV	Progressive
XGA	1024X768	60, 70, 75, 85 Hz	RGBHV	Progressive
Mac	1152X864	70, 75 Hz	RGBHV	Progressive
WXGA	1280X768	60 Hz	RGBHV	Progressive
1280A	1280X960	60 Hz	RGBHV	Progressive
SXGA	1280X1024	60, 75 Hz		
HDTV Resolutions		Vert Rate	Format	Scan Type
480p	720 x 480	60 Hz	YPbPr, RGBHV	Progressive
576p	720 x 576	60 Hz	YPbPr, RGBHV	Progressive
720p	1280 x 720	50,60 Hz	YPbPr, RGBHV	Progressive
1080i/540p	1920x1080	50,60 Hz	YPbPr, RGBHV	Pseudo Interlance