AITech

Vision for Net Media

HDView

PC/HDTV

2-Way

Converter

Operation Manual

1. Introduction

The HDView is a high-performance universal PC/HDTV to PC/HDTV converter.
It combines the functions of a video scaler, scan-converter, and format transformer and is packed into a compact and durable metal housing with easy-to-use touch buttons.

The HDView is controlled via push button and OSD menu.
The controls include input/output setup, picture adjustment, H/V phase adjustment, system information and many other advanced features.

2. Features

1. The HDView is not only a video scaler it is also a scan converter and a format transformer.
2. 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.
3. 48 MB frame memory for frame rate conversion.
4. Signal format conversion between RGBHV and YPbPr.
5. 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)
6. Input mode auto detection.
7. Input Setup allows for fine-tuning the output picture to a best condition through the adjustment of ADC sampling clock, and phase.
8. Easy- to- use push buttons and OSD menu control.

3. What's included

The following items are included in the standard shipping package.

1. The HDView converter.
2. 15-Pin D-Sub PC to PC cable x 1.
3. 15-pin D-Sub to YPbPr 3-RCA adaptor cable x 1.
4. AC power adapter 12V 800mA, center positive.

4. Operation

Input connection:

The unit can accept both PC and HDTV inputs.

When accepting a PC input use the 15-pin D-sub cable to connect the output of a PC device to the input connector labeled PC/HDTV on the back of the unit.

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 of the unit.

The unit can automatically detect the mode and resolution of the PC/HDTV input.

Output connection:

The unit can output a variety of PC resolutions and HDTV progressive resolutions.

When one of the PC resolutions is selected as output, use the 15-pin D-Sub VGA cable to connect the PC/HDTV output of the unit to the VGA input of a display monitor.

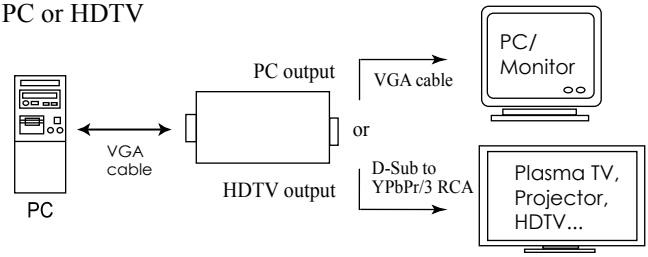
When one of the HDTV resolutions is selected as output, use the 15-pin D-Sub to YPbPr/3 RCA cable to connect the PC/HDTV output of the unit to the YPbPr input of a HDTV device.

Note:

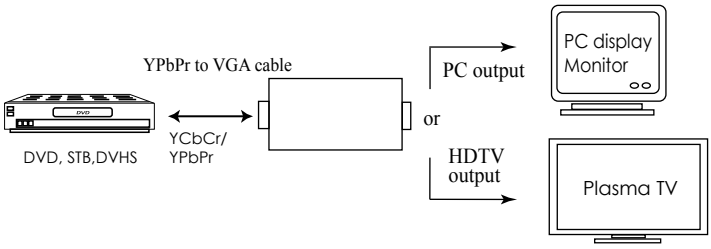
Use of the wrong cable for your selected output will result in an abnormal picture on the screen.

Connection Block Diagram:

(a) PC to PC or HDTV

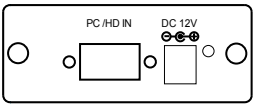


(b) HDTV to PC or HDTV

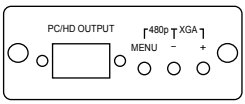


5. Operation Controls and Functions

Front Panel



Rear Panel

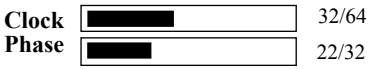


Menu(Enter): Pressing the Menu button will bring up the OSD menu controls on the screen as follows:

→ **Input set up**
Output set up
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 set up- When it is selected, a sub menu of clock and phase adjust as below will appear.



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

Output set up- When it is selected, the following sub-menu will appear, use +, - buttons to choose your desired PC or HDTV output from the following output resolutions.

Output Mode	**Setup XGA-60**

Output resolution:

PC		**HDTV**	
SXGA	1280 X 1024@60/75Hz	720p-RGB	1280X 720@60Hz
1280A	1280 X 960@60Hz	576p-RGB	720X 576@60Hz
XGA	1024 X 768@60/70/75/85Hz	480p-RGB	720 X 480@60Hz
WXGA	1280 X 768@60Hz	1080i-RGB	1920x1080@60Hz
SVGA	800 X 600@60/72/75/85Hz	720p-YPbPr	1280 X 720@50/60Hz
VGA	640 X 480@60/72/75/85Hz	576p-YPbPr	720 X 576@60Hz
VGA 70	720 X 400@70Hz	480p-YPbPr	720 X 480@60Hz
VESA 85	640 X 400@85Hz	1080i-YPbPr	1920x1080@50/60Hz
	1152 X 864@ 70/75Hz		

5. Operation Controls and Functions

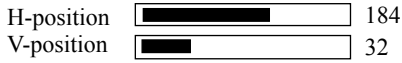
Picture Adjust: When it is selected the following adjustment parameters will appear:

The adjustment range and factory preset vaule are as follows:

	Range	Default
Contrast	0-255	047
Bright	0-255	102
Color	0-255	064
Red	0-255	128
Green	0-255	128
Blue	0-255	128

Use + , - and MENU/Enter to adjust the value of your selected parameter.
Select Reset to reset all adjustments back to the factory preset value.

HV Adjust: When it is selected the following sub-menu appears.



Use + - to adjust the best horizontal and vertical position of the picture.

OSD Adjust: When it is selected, you can adjust the 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.

System Info
INPUT: XGA 60
OUTPUT: XGA 75

Auto Adjust: When it is selected, the unit will automatically adjust all the parameter to the factory preset value.

Exit: Select to exit from the current menu page.

Note:

* The default output resolution of the unit is XGA@60Hz.
  The unit has last memory capability, thus can memorize all user's settings before powering off and recall those settings on next power on.
* At any time using the unit, pressing + and - buttons simutaneously will reset the output resolution to XGA@60Hz, and other settings back to factory default value.

6. 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 Screen 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	RGBHV	Progressive
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	RGBHV	Progressive
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

Warranties

This appendix documents the product warranty applicable to the United States only, as well as information about FCC radio frequency interference. For warranty information outside of the United States, please contact your local distributor.

Limited Warranty

This AITech product is warranted to be free from failures due to defects in material and workmanship for one year from the date of original purchase as evidenced by a copy of the purchase receipt. During the warranty period, AITech, at AITech's sole discretion, will repair or replace at no charge, the product which, in its opinion, is defective.

A Return Merchandise Authorization (RMA) number must be obtained from AITech prior to returning any merchandise for repair or replacement. Merchandise sent to AITech without an RMA will be returned unopened.

The original purchaser is responsible for packing the product for shipment and for the charges to ship the failed product to AITech. AITech is responsible for charges to ship the repaired or replaced product. If any charge to you is involved, the replacement product will be shipped C.O.D.

If the failed product has been modified in any way without the consent of AITech or if the failure is the result of misuse, abuse, or misapplication, AITech has no obligation to repair or replace the failed product.

EXCEPT AS EXPRESSLY PROVIDED ABOVE, THE PRODUCT AND ACCOMPANYING WRITTEN MATERIALS (INCLUDING THE USER'S GUIDE) ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. AITECH SPECIFICALLY DOES NOT WARRANT THE OPERATION OF THE PRODUCT AND WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT EVEN IF AITECH HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGE, SO THE ABOVE LIMITATION MAY NOT APPLY.

FCC Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and then on again, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from the circuit to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Shielded cables and I/O cords must be used for this equipment to comply with the relevant FCC regulations. Changes or modifications not expressly approved in writing by AITECH may void the user's authority to operate this equipment.

AITech

Vision for Net Media

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