Instruction Manual

1T-V1280HD-ST
Video to PC/HD Analog Converter

1T-V1280DVI
Video to PC/HD DVI Converter

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1   INTRODUCTION

Thanks for purchasing this TV One-task product from TV One. The 1T-V1280HD-ST and 1T-V1280DVI are designed to convert Composite or Component Video to a wide variety of PC and HDTV resolutions. The two units are similar in operation and specifications, except that the 1T-V1280HD-ST has an analog output, while the 1T-V1280DVI has a DVI Output. Our professional video conversion products have been serving the industry for over twenty years. TV One offers a full line of high quality Seamless Switchers, Video Scalers, Up/Down/Cross Converters, Analog-Digital Converters (SD/HD-SDI, HDMI, DVI), Format Converters, Standards Converters, TBC/Frame Synchronizers, Matrix Routing Switchers, Signal Distribution Amplifiers and Cat.5 Transmission Systems.

1.1   Liability Statement

1.2   FEATURES

- Ultra Compact, High Performance Units
- Convert Composite, S-Video or YUV Inputs to PC/HD
- Analog or DVI Output versions
- PC and HD Resolutions
- 32Mb Frame Memory
- Integral Picture Adjustments
- On Screen Display for Setup and Adjustment
- Rugged Metal Case
- Locking DC Power Connector for Security

1.3   Getting the Best Results

There are many factors affecting the quality of results when scaling video signals. Some basic precautions will ensure the best possible performance from your Video Scaler.

- **Output display device** – The quality of the output signal will depend largely upon the type and quality of display device used.   For instance, some video projectors just look better than others.
- **Using Native Resolution –** It is always best to set the output resolution of the scaler to the native resolution and refresh rate of the display device. This allows our scaler to do most of the work, which usually results in a superior picture.
- **Distance between the Video Scaler and the display device –** This plays a major role in the final result. Long distances are possible, but special measures should be taken in order to avoid cable losses. These include using high quality (coax-type) VGA cables and Premium DVI Cables. Line amplifiers may also be necessary.
- **Output connection cables** – Low quality cables are susceptible to interference. They degrade signal quality due to poor matching and cause elevated noise levels. Therefore, cables should be of the best quality. Coax-type computer cables are recommended because of their superior internal shielding characteristics.
- **Interference from nearby electrical devices** – These can have an adverse effect on signal quality. For example, an older computer monitor often emits very high electromagnetic fields that can interfere with the performance of video equipment in its proximity.

2   SPECIFICATIONS

2.1   General Specifications

Input Format	Composite Video, S-Video, RGBS, YPbPr
Input Signal Levels	Composite Video @ 1V p-p, 75Ω S-Video @Y 1V p-p, C 0.7 V p-p, 75Ω Pb, B-Y, Pr, R-Y @ 0.7V p-p, 75Ω
Output Format	RGBHV, YPbPr (1T-V1280HD-ST) Digital RGBHV (1T-V1290DVI)
Output Signal Levels	RGB @ 0.7V p-p, 75Ω. H&V Sync @ 3-5V p-p, TTL Y @ 1V p-p, 75Ω. Pb, Pr @ 0.7V p-p, 75Ω
Input Connectors	Composite Video via RCA, S-Video via 4 Pin DIN, YUV & SCART via 8-pin Mini-DIN and breakout cables
Output Connectors	1T-V1280HD-ST = HD15, 1T-V1280DVI=DVI
Control	Front Panel Buttons
Information Display	On Screen Display
Video Adjustments	Brightness, Contrast, Color, Tint, Sharpness, H&V Peaking
Weight	680 grams (1.5 lbs)
Dimensions–HxWxD	25x175x100mm (1"x7"x4")
Power Source	100~240VAC to 5VDC@2.0A In-Plug Switching Adapter

2.2   Output Signal Specifications

PC Resolutions		Vert Rate	Format	Scan Type
VGA	640x480	50, 60,72,75,85, 100,120Hz	RGBHV	Progressive
SVGA	800x600	50, 56, 60,72,75,85Hz	RGBHV	Progressive
XGA	1024x768	50, 60,70,75,85Hz	RGBHV	Progressive
WXGA	1280x768	50, 60Hz	RGBHV	Progressive
SXGA	1280x1024	50, 60Hz	RGBHV	Progressive
UXGA (Note 1)	1600x1200	60Hz	RGBHV	Progressive
HDTV Resolutions		**Vert Rate**	**Format**	**Scan Type**
480p	720x480	50,60Hz	YPbPr, RGBHV	Progressive
576p	720x576	50,60Hz	YPbPr, RGBHV	Progressive
720p	1280x720	50,60Hz	YPbPr, RGBHV	Progressive
1080i (Note 2)	1920x1080	50,60Hz	YPbPr, RGBHV (Note 3)	Pseudo Interlaced Interlaced
1080p (Note 1)	1920x1080	50, 60Hz	YpbPr, RGBHV	Progressive

Note 1 – UXGA and 1080p available only on 1T-V1280HD-ST .
Note 2 - The 1080i Output is actually a doubled 540p signal. It will appear as 1080i
     on most displays, however, it is not a true 1080i signal format.
Note 3 - 1T-V1280DVI is digital RGBHV output only without YPbPr output.
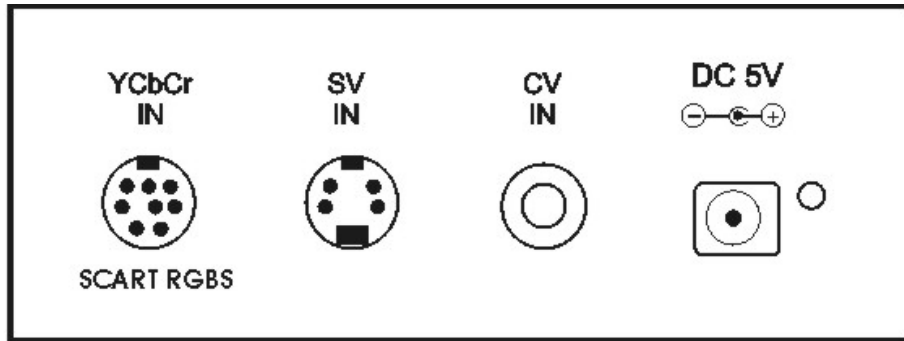
3 CHECKING PACKAGE CONTENTS

Before attempting to use this unit, please check the packaging and make certain the following items are contained in the shipping carton:

- Scaler Unit
- 100~240VAC to 5VDC Power Adapter
- 8 Pin Mini-DIN to 3 RCA Cable (YUV)
- 8 Pin Mini-DIN to SCART Cable *(1T-V1280HD-ST only)*
- 8 Pin Mini-DIN to 4 RCA Cable (RGBs) *(1T-V1280HD-ST only)*
- User Manual

Note: *Please retain the original packing material should the need ever arise to return the unit. If you find any items are missing, contact your reseller or TV One immediately. Have the Model Number, Serial Number and Invoice available for reference when you call.*

4 CONNECTING THE HARDWARE

The first step is to connect a video source to the input of the Scaler and to connect it's output to a display device. The drawing below is common to both units and shows the locations of the input and power connectors.

1 Input and Power Connections

4.1 Connecting the Input

Both the 1T-V1280HD-ST and 1T-V1280DVI Video Scalers can accept Composite Video, S-Video, YUV Component or SCART RGBs Video inputs. Composite Video is connected to the Scaler via the RCA connector, S-Video connects via the 4-Pin Mini-DIN Connector, YUV Component connects via the 8-Pin Mini-DIN Connector using the 3RCA to 8-Pin Mini-DIN Cable provided, SCART connects via the 8-Pin Mini DIN connector using the 8 Pin Mini-DIN to SCART Cable, and RGBS connects via the 8-Pin Mini-DIN Connector using the 8 Pin Mini-DIN to 4 RCA Cable provided. Proper signal levels are very important to the operation of this product so make sure your inputs are of the levels specified

on page 6. If improper operation of the unit occurs and the unit has power, the most likely cause of the problem is high or low signal levels or the use of a wrong input cable.

4.2   Connecting the Output

The 1T-V1280HD-ST Video Scaler can output analog RGBHV or YPbPr formats up to UXGA and 1080p. RGBHV and YPbPr are both available on the HD-15 output connector. Should a HDTV (YPbPr) output be desired, use an HD-15 to RCA cable to connect the device's output to the destination device. The 1T-V1280DVI outputs only digital RGBHV format up to SXGA and 1080i via the DVI connector.
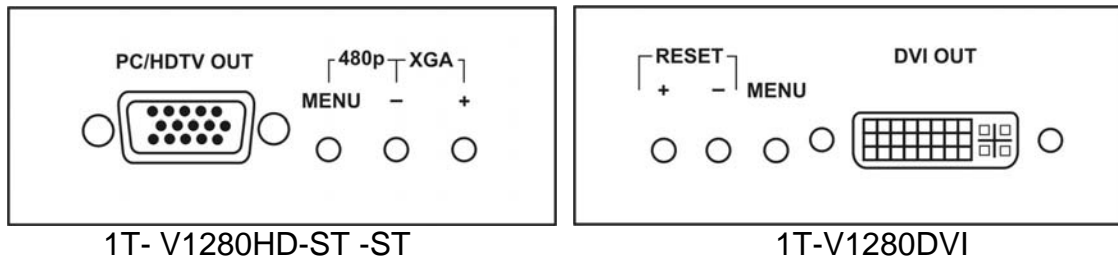
4.3   Connecting Power to the Unit

The Video Scaler is shipped with an In-Plug Power Adapter to convert 100~240VAC@50-60Hz to 5VDC. Connect the DC Output Cord from the Power Adapter to the back of the unit and then plug the Power Adapter into an AC Receptacle. When the unit's front panel Power Switch is turned On, the Power LED indicator will illuminate.

5   OPERATING THE UNIT

5.1   Controlling the Scaler

The Scaler is controlled via three buttons with status indicated by OSD. The position of the buttons is slightly different on the two models but the functionality is the same.

1T- V1280HD-ST -ST   1T-V1280DVI

- **Menu Button:** This Button displays the Menu Options via the On Screen Display on the display device connected to the output.
- **+ and - Buttons**: These Buttons allow navigation within the Menu and adjustments of the parameters available.
- **XGA Reset**: Simultaneously depressing the – and + buttons returns settings to factory defaults and sets the output to XGA.
- **480p Reset**: Simultaneously depressing the MENU and - buttons returns settings to factory defaults and sets the output to 480p.

Pressing the Menu Button results brings up the Initial or **Main Menu,** as shown in the following illustration. Move the cursor to the desired setup option by using the + and – buttons. When you reach the option you desire, press the Menu Button again to call up that option.

```
Picture Adjust
Display Setup
Advanced Setup
System Information
Exit
```

Once the desired option is reached and selected, a new Menu will appear and you once again use the + & - Keys to select the parameter you wish to change or adjust.

5.2   Setup Example

If you select the first item on the main menu, **Picture Adjust**, a secondary menu will show the following items:

```
Brightness
Contrast
Color
Tint
H Peaking Filter
Sharpness
V Peaking Filter
Reset
Exit
```

If you want to change the Color level for example, you would use the + & - Keys, to navigate to that Item on the Menu and Press the Menu Key again to select that option. When Color is selected, a sub-menu for the adjustment will appear:

Color   [▮▮▮▮▮   ]   48

Use the + and - Buttons to increase or decrease the value of the setting. Press Menu again to leave the setting. Move the arrow to Exit and press Menu/Enter again to Exit.

5.3 Display Setup

When this is selected, an Output Resolution sub-menu will appear.
Use the + and – Buttons to choose the desired PC or HDTV output resolution

PC		HDTV	
UXGA (Note 1)	1600x1200@60Hz	720p	1280x720@50/60Hz
SXGA	1280x1024@50/60Hz	576p	720x576@50Hz
WXGA	1280x768@50/60Hz	480p-	720x480@60Hz
XGA	1024x768@50/60/70/75/85Hz	1080i	1920x1080@50/60Hz
SVGA	800x600@50/56/60/72/75/85Hz	1080p (Note 1)	1920x1080@50/60Hz
VGA	640x480@50/60/72/75/85/100/120Hz	**Note1**–1T-V1280HD-ST Only	

5.4 Advanced Setup

Advance Setup allows you to turn off the Film Mode (3:2 Pull Down), turn off the OSD (On Screen Display) and set the "No Signal" Display to either Blue or Black.

5.5 System Information

When this is selected, the OSD shows the Scaler's current Output Resolution and Vertical Refresh Rate.

6 TROUBLESHOOTING

Other than checking for faulty cables, the only common problem would be choosing a wrong Output Setting. Make sure the display is capable of handling the resolution and refresh rate selected and make sure the output format selected (RGB or YPbPr) for the type of cable being used at the output.

After trying the above suggestions should the problem still persist, contact your dealer for additional suggestions before contacting TV One. Should the dealer's technical personnel be unable to assist you, contact TV One via our support website: ***http://tvone.crmdesk.com.*** Create a technical support request on the site and our support team will respond within a short period of time.

7 LIMITED WARRANTY

LIMITED WARRANTY – With the exceptions noted in the next paragraph, TV One warrants the original purchaser that the equipment it manufactures or sells will be free from defects in materials and workmanship for a period of two years from the date of purchase. Should this product, in TV One's opinion, prove defective within this warranty period, TV One, at its option, will repair or replace this product without charge. Any defective parts replaced become the property of

TV One. This warranty does not apply to those products which have been damaged due to accident, unauthorized alterations, improper repair, modifications, inadequate maintenance and care, or use in any manner for which the product was not originally intended.

Items integrated into TV One products that are made by other manufacturers, notably computer hard drives and liquid crystal display panels, are limited to the term of the warranty offered by the respective manufacturers. Such specific warranties are available upon request to TV One.

If repairs are necessary under this warranty policy, the original purchaser must obtain a Return Authorization Number from TV One and return the product to a location designated by TV One, freight prepaid. After repairs are complete, the product will be returned, freight prepaid.

LIMITATIONS - All products sold are "as is" and the above Limited Warranty is in lieu of all other warranties for this product, expressed or implied, and is strictly limited to two years from the date of purchase. TV One assumes no liability to distributors, resellers or end-users or any third parties for any loss of use, revenue or profit.

TV One makes no other representation of warranty as to fitness for the purpose or merchantability or otherwise in respect of any of the products sold. The liability of TV One with respect to any defective products will be limited to the repair or replacement of such products. In no event shall TV One be responsible or liable for any damage arising from the use of such defective products whether such damages be direct, indirect, consequential or otherwise, and whether such damages are incurred by the reseller, end-user or any third party.

8   REGULATORY COMPLIANCE

The 1T-V1280HD-ST -ST and 1T-V1280DVI have been tested for compliance with appropriate FCC and CE rules and regulations.

The Power Adaptor/Supply has been tested for compliance with appropriate UL, CUL, CE, PSE, GS Rules, Regulations and/or Guidelines.

This Product and Power Adapter is RoHS Compliant.

9   CONTACT INFORMATION

Should you have questions or require assistance with this product in areas not covered by this manual, please contact TV One at the appropriate location.

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