Instruction Manual

1T-V1280HD
Video to PC/HD Analog Converter

1T-V1280DVI
Video to PC/HD DVI Converter

Table of Contents

1.0   INTRODUCTION

Thanks for purchasing this TV One-task product from TV One. The 1T-V1280HD 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 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

Every effort has been made to ensure that this product is free of errors. TV One cannot be held liable for the use of this hardware or any direct or indirect consequential damages arising from its use. It is the responsibility of the user of the hardware to check that it is suitable for his/her requirements and that it is installed correctly. All rights reserved. No parts of this manual may be reproduced or transmitted by any form or means electronic or mechanical, including photocopying, recording or by any information storage or retrieval system without the written consent of the publisher.

TV One reserves the right to revise any of its hardware and software following its policy to modify and/or improve its products where necessary or desirable. This statement does not affect the legal rights of the user in any way.

All third party trademarks and copyrights are recognised. The TV One logo, TV One-task and CORIO are the registered Trademarks of TV One. All other trademarks are the property of their respective holders.

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.

2.0   SPECIFICATIONS

Input Format	Composite Video, S-Video or YUV (Y,R-Y,B-Y)
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) 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 via 8-pin Mini-DIN and breakout cable
Output Connectors	1T-V1280HD = HD15, 1T-V1280DVI=DVI
Control	Front Panel Buttons
Information Display	On Screen Display
Video Adjustments	Brightness, Contrast, Color, Tint, Sharpness, H&V Peaking
Weight	280 g (0.62 lbs)
Dimensions–HxWxD	30x133x76mm (1.2"x5.25"x3") 1T-V1280HD 30x146x76mm (1.2"x5.75"x3") 1T-V1280DVI
Environmental	Operating Temperature 0° to +50° C (+32° to +122° F) Operating Humidity 10% to 90%, Non-condensing Storage Temperature -10° to +60° C (+14° to +140° F) Storage Humidity 10% to 90%, Non-condensing
Power Source	100~240VAC to 5VDC@2.0A In-Plug Switching Adapter

Output Resolutions and Formats

PC Resolutions		Vert Rate	Format	Scan Type
VGA	640x480	50, 60,72,75,85Hz	RGBHV	Progressive
SVGA	800x600	50, 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.
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.
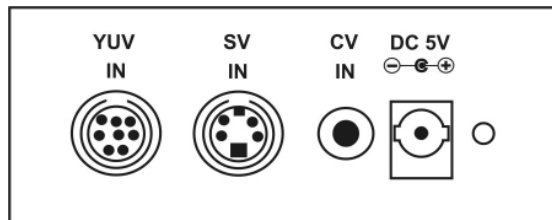
3.0   CHECKING PACKAGE CONTENTS

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

- 1x Scaler Unit
- 1x 100~240VAC to 5VDC Power Adapter
- 1x 8 Pin Mini-DIN to 3 RCA Cable
- 1x 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.

4.0   CONNECTING THE HARDWARE

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

4.1   Connecting the Input

Both the 1T-V1280HD and 1T-V1280DVI Video Scalers can accept Composite Video, S-Video or YUV Component Video inputs. Composite Video is connected to the Scaler via the RCA connector, S-Video connects via the 4-Pin Mini-DIN Connector and YUV Component connects via the 8-Pin Mini-DIN Connector using the 3RCA to 8-Pin Mini-DIN 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 5. 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 Video Scaler can output analog RGBHV or YPbPr formats up to UXGA and 1080p. RGBHA and YPbPr are both available on the HD-15 output connector. The 1T-V1280DVI outputs only digital RGBHV format up to SXGA and 1080i via the DVI connector.
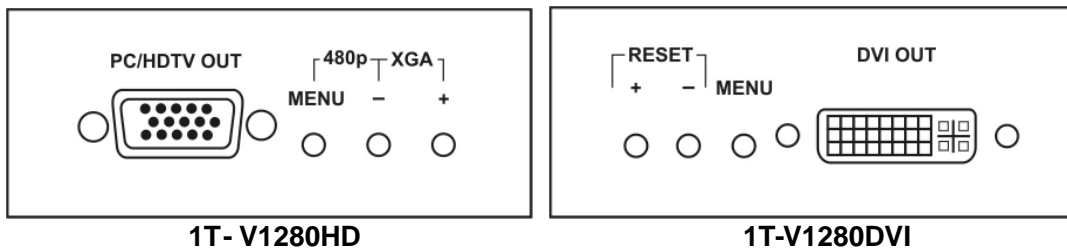
4.3   Connecting Power to the Unit

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.

5.0   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	**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@50/60Hz	720p	1280x720@50/60Hz
SXGA	1280x1024@50/60Hz	576p	720x576@50/60Hz
WXGA	1280x768@50/60Hz	480p	720x480@50/60Hz
XGA	1024x768@50/60/70/75/85Hz	1080i	1920x1080@50/60Hz
SVGA	800x600@60/72/75/85Hz	1080p (Note 1)	1920x1080@50/60Hz
VGA	640x480@60/72/75/85Hz	**Note 1**–Available on 1T-V1280HD 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 allows changes to be made to the Scaler's current Output Resolution and Vertical Refresh Rate.

6.0   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.

7.0   LIMITED WARRANTY

TV One warrants the original purchaser that the equipment it manufactures or sells will be free from defects in materials and workmanship for a fixed term from the date of purchase. The warranty term for specific product lines is defined below.

1. TV One branded products based on TV One's CORIO technology are warranted for a period of five years from the date of purchase. This includes products with the model number prefix of C2, 1T-C2, CX, A2 or S2.

2. TV One-task branded products, other than those based on TV One's CORIO technology mentioned above, are warranted for a period of three years from the date of purchase. This includes products with the model number prefix of 1T, with the exception of 1T-C2.

3. LCD Monitors are warranted for a period of three years from the date of purchase, with the exception of the LCD panels integrated into the monitors that are supplied by third parties. LCD panels are limited to the term and conditions of the warranty offered by the respective LCD panel manufacturer. Such specific LCD panel warranties are available upon request to TV One.

Should a 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.

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.

8.0 REGULATORY COMPLIANCE

The 1T-V1280HD and 1T-V1280DVI have been tested for compliance with appropriate FCC and CE rules and regulations. The Power Adaptor/Supplies have been tested for compliance with appropriate UL, CUL, CE, PSE, GS Rules, Regulations and/or Guidelines. These Products and Power Adapters are RoHS Compliant.

9.0   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.

TV One USA
2791 Circleport Drive
Erlanger, KY 41018
USA
Tel 859-282-7303
Fax 859-282-8225
sales@tvone.com
www.tvone.com

TV One Europe
Continental Approach
Westwood Industrial Estate
Margate, Kent CT9 4JG, UK
Tel +44 (0)1843 873311
Fax +44 (0)1843 873312
sales.europe@tvone.com
www.tvone.eu

TV One Latin America
6991 NW 82 Avenue #8
Miami, FL 33166
USA
Tel 305-396-6275
Fax 305-418-9306
sales.latinoamerica@tvone.com
www.tvonela.com

TV One Mercosur
Av. Diaz Velez 3965 #PB
(1200) Capital Federal
Buenos Aires, Argentina
Tel +54 11 5917-2525
Fax +54 11 4032-0281
sales.mercosur@tvone.com
www.tvonela.com

TV One Asia
16F-4, NO.75, Sec. 1
Hsin Tai Wu Road, Hsichih
Taipei Hsien 22101
Taiwan R.O.C.
Tel +886 2 2698-2296
Fax +886 2 2698-2297
sales.asia@tvone.com
www.tvoneasia.com

TV One China
Rm. 1007, Golden Peach Bldg.
No. 1900 Shangcheng Road
Pudong, Shanghai
China 200120
Tel +86 21 5830-2960
Fax +86 21 5851-7949
Email: sales.china@tvone.com
www.tvonechina.com

End of Manual