

1T-VS-658

HDMI Video Scaler

Key Features

- HDMI Max Res: WUXGA and 1080p
- HDMI, RGB, YPbPr, YUV, YC, CV In
- Both Analog & Digital Audio Capable
- Audio Delay for Lip Sync Corrections
- HDMI I/O is fully HDCP Compliant
- Infrared Remote Control
- 3D Motion Adaptive De-Interlace
- Noise Reduction
- 3:2 Pull-Down
- 2:2 Pull-Down Recovery
- Locking DC Power Supply
- Optional Rackmount Kit (RM-220 Single/Dual)



1T-VS-658

Overview

1T-VS-658 Video Scaler is a professional Up and Cross Converter with an HDMI output. Fully scaleable video inputs include HDMI, DVI (via the HDMI connector), Analog RGB via an HD-15, Analog YPbPr or 480i/576i YUV Component via three RCA, YC and Composite Video. It handles I/O Resolutions up to 1080p and WUXGA. Both digital and analog audio processing is supported and audio delays of up to 150ms can be introduced to insure lip sync. Five Analog Stereo and a SPDIF Coaxial Digital Audio input can be selected for embedding into the HDMI output. A separate Coaxial Digital Audio output is also provided.

Advanced features, such as 3D Motion Adaptive De-Interlacing, 3D Noise Reduction and 8-bit triple ADC/PLL technology, combine to provide extremely high quality signal conversion. The HDMI I/O is HDCP Compliant. An OSD (On Screen Display) menu makes the 1T-VS-658 easy to set up. Control is via front panel joystick and buttons, Infrared Remote or RS-232 interface.

Specifications

Video Inputs

HDMI (DVI Compatible)	1x via HDMI Connector
Analog RGBHV	1x via HD-15 Connector
Analog Component (YUV)	1x via 3x RCA Connectors
YC (S-Video)	1x NTSC or PAL via 4-pin Mini Din
Composite Video	1x NTSC or PAL via RCA Connector

Audio Inputs

Digital Audio (S/PDIF)	1x via RCA Connector
Analog Audio (Stereo)	3x via RCA (R/L), 2x via 3.5mm Mini

Video Output

HDMI Video (v1.2)	Via 1x HDMI Connector
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Audio Outputs

Embedded into HDMI	Digital Per HDMI Spec
Digital Audio (S/PDIF)	1x via RCA Coax Connector
Audio Delay Adjustment	Off, 40ms, 110ms, 150ms

Control Methods

Local Control	Front Panel via Buttons and Joystick
Remote Control	IR and RS-232 via DB-9 Connector

Scaling Engine

De-Interlace	3D Motion Adaptive with Noise
Reduction	
Pull-Down	3:2 + 2:2 Recovery
HDMI Compliance	v1.2 with HDCP
Maximum I/O Resolution	WUXGA@60Hz and 1080p

Mechanical (H-W-D)

1T-VS-658	42 x 218 x 164mm (1.7" x 8.5" x 6.45")
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Weight

1T-VS-658	1.21kg (2.68 lbs.)
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Warranty

Limited Warranty	3 Years Parts and Labor
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Environmental

Operating Temperature	0° to +48°C (+32° to +120°F)
Operating Humidity	10% to 85%, Non-condensing
Storage Temperature	-10° to +70°C (+14° to +158°F)
Storage Humidity	10% to 85%, Non-condensing

Power Requirement

External Power Supply	5VDC@2.6A, twist lock connector
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Regulatory Approvals

Encoder/Decoder Unit	FCC, CE, RoHS
Power Supply	UL, CUL, CE, PSE, GS, RoHS

Accessories Included

1x Power Adapter	US, UK and Euro
1x IR Remote Control	
1x Operations Manual	

Optional Accessories

Rackmount Kit	RM-220 Single/Dual
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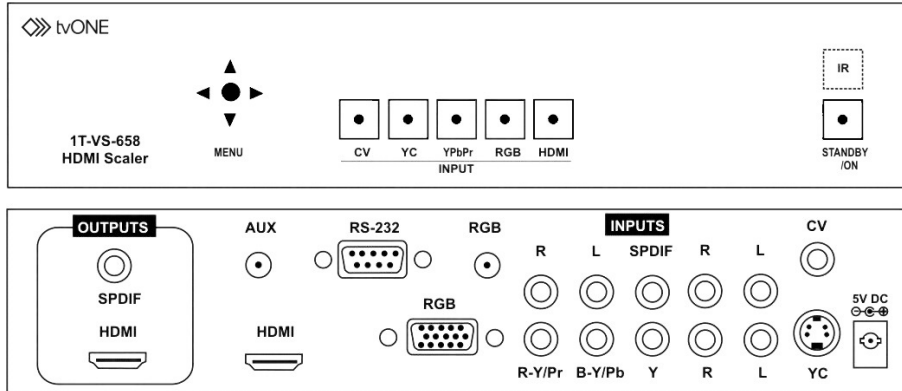
Model Number

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HDMI Video Scaler

Panel Drawings



Input Resolution Table

Resolution		V. Rate/Hz	Scan	Format	Valid Connector
CV	SDTV	60 NTSC, 50 PAL	Interlaced	NTSC/PAL	RCA
YC	SDTV	60 NTSC, 50 PAL	Interlaced	NTSC/PAL	4-Pin Mini-Din
480i	720x480	60	Interlaced	YUV NTSC	RCA, HDMI (1)
576i	720x576	50	Interlaced	YUV PAL	RCA, HDMI (1)
480p	720x480	60	Progressive	YPbPr/RGBHV (2)	HD15, HDMI, RCA
576p	720x576	50	Progressive	YPbPr/RGBHV (2)	HD15, HDMI, RCA
720p	1280x720	50, 60	Progressive	YPbPr/RGBHV (2)	HD15, HDMI, RCA
1080i	1920x1080	50, 60	Interlaced	YPbPr/RGBHV (2)	HDMI, RCA
1080p	1920x1080	50, 60	Progressive	YPbPr/RGBHV (2)	HD15, HDMI, RCA
VGA	640x480	60, 72, 75, 85	Progressive	RGBHV	HD15, HDMI
SVGA	800x600	56, 60, 72, 75, 85	Progressive	RGBHV	HD15, HDMI
XGA	1024x768	60, 70, 75, 85	Progressive	RGBHV	HD15, HDMI
SXGA	1280x1024	60, 75, 85	Progressive	RGBHV	HD15, HDMI
UXGA	1600x1200	60	Progressive	RGBHV	HD15, HDMI
WXGA	1280x800	60	Progressive	RGBHV	HD15, HDMI
WSXGA	1680x1050	60	Progressive	RGBHV	HD15, HDMI
WUXGA	1920x1200	60	Progressive	RGBHV	HD15, HDMI

Note 1 – This signal is actually 480i@30Hz doubled or 576i@ 30Hz doubled.

Note 2 – Analog YPbPr input is only available via the 3-RCA Connectors and not via the HD-15 Connector.