

**CSC-1600HD** is a high-performance Video Scaler for up-converting Composite Video, S-Video or YUV (YCbCr) Component Video to high resolution computer and HDTV signals. The output resolution is selectable as VGA, SVGA, XGA, SXGA, WXGA, 1365x768, 720p or 1080i in the RGBHV format and as 480p or 576p in the YPbPr format. The output signal can be assigned to either an HD-15 or 5 BNC connectors on the rear panel. The CSC-1600HD is ideally suited for use with LCD Projectors, CRT Monitors, Projection TV Systems, Plasma or HDTV Displays to improve picture quality. Adjustments are provided for Color, Hue, Brightness, Contrast and Sharpness and each video input has its own non-volatile memory to retain these settings, even when the power to the unit has been turned off. There is also a computer signal pass-through feature that can accommodate RGBHV or YPbPr formats.

CSC-1600HD has an Adaptive Film Mode, which is an automatic 3:2 Pull-down detector that provides clear and crisp de-interlacing video from 24 fps film, which offers significant enhancements when viewing movies on a large screen. A Vertical Temporal Filter removes jagged edges and other de-interlacing artifacts for video motion sequences. Superior motion compensation circuitry insures a smooth presentation of fast moving images. The unit will automatically detect a wide variety of PAL, SECAM and NTSC input standards.

CSC-1600HD can be controlled from the front panel, via its Infrared Remote Control or by RS-232. The Navigation Menu is shown via an OSD (On-Screen Display) to facilitate operational control. The OSD may be disabled when desired, such as during live events. The front panel buttons may be locked out to prevent accidental or unauthorized access to the controls. The unit is available in Desktop and Rackmount versions.



**CSC-1600HD Desktop Version**

**Key Features of the CSC-1600HD**

- Direct Video Input Selection
- Composite, S-Video, YCbCr Component Inputs
- PC/HDTV (RGBHV-YPbPr) Input for Bypass
- Individual Input Video Adjustments
- Automatic Input TV Standards Detection
- PAL, NTSC, SECAM Operation
- Direct Output Resolution Selection
- RGBHV Resolutions up to 1365x768
- YPbPr Output at 480p and 576p
- Output Signal Selectable on HD-15 or 5 BNC's
- OSD (On-Screen Display) for Menu Navigation
- RS-232 Interface and Windows Control Panel
- Infrared Remote Control
- IR and Front Panel Lockout Feature
- Desktop or Rackmount Cases
- Universal Internal Power Supply

**Output Resolutions and Signal Formats**

Scaled Output - PC Resolutions		Vert Refresh Rate	Horiz Scan Rate	Composition	Scan
VGA	640x480	60, 72, 75 or 85 Hz	31.25 to 43.27 KHz	RGBHV	Progressive
SVGA	800x600	60, 72, 75 or 85 Hz	37.88 to 53.66 KHz	RGBHV	Progressive
XGA	1024x768	60, 70 or 75 Hz	48.36 to 60.03 KHz	RGBHV	Progressive
SXGA	1280x1024	60 Hz	63.98 KHz	RGBHV	Progressive
WXGA	1280x768	60 Hz	48.36 KHz	RGBHV	Progressive
1365x768	1365x768	60 Hz	48.37 KHz	RGBHV	Progressive
Scaled Output - HD Resolutions		Vert Refresh Rate	Horiz Scan Rate	Composition	Scan
480p	852x480	60 Hz	31.47 KHz	YPbPr	Progressive
576p	852x576	60 Hz	37.62 KHz	YPbPr	Progressive
720p	1280x720	60 Hz	44.85 KHz	RGBHV	Progressive
1080i	1920x1080	60 Hz	33.64 KHz	RGBHV	Interlaced



# Video Scaler (Up Converter)

Model CSC-1600HD

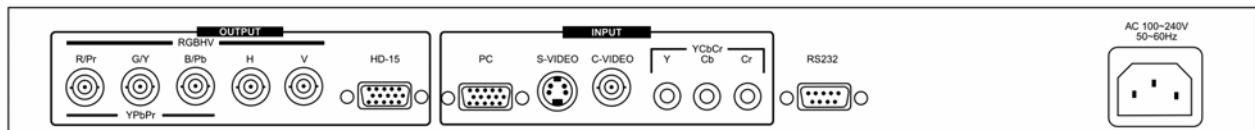
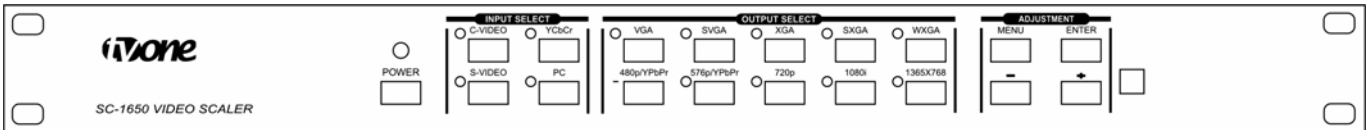
## Specifications

<b>Scaled Output</b>	
Menu Selectable	1x via HD-15 Female Connectors 1x via 5x BNC Connectors
<b>Video Inputs</b>	
Television Standards	PAL-B/G/I/D, NTSC 3.58/4.43, PAL-M, PAL-N, SECAM
Impedance	75Ω
Composite Video	1x via BNC Connector
S-Video (Y/C)	1x via 4-PIN Mini-DIN Connector
YUV (YCbCr)	1x via 3x RCA Connectors
PC/HDTV Loop-thru	1x via HD-15 Female Connector
<b>Menu Selections</b>	
Proc Amp Adjustments	Contrast, Brightness, Chroma, Sharpness, Hue (NTSC Only)
Vertical Freq Select	If available for selected resolution
On-Screen Display	On / Off
Output Terminal Select	HD-15 / 5 BNC
IR Sensor	On / Off
Front Panel Lockout	On / Off
<b>Control Methods</b>	
Local Front Panel	via Push Buttons and OSD
RS-232 Interface	via DB-9 Male Connector
Infrared	IR-16 Remote Control Unit
<b>Mechanical</b>	
CSC-1600HD (HWD)	1.75"x17.25"x7" (44x438x178mm)
Weight (Net)	5.0 lbs (2.25 kg)
CSC-1600HD-R (HWD)	1.75"x19"x7" (44x482x178mm)
Weight (Net)	5.0 lbs (2.25 kg)

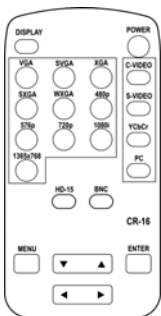
<b>Environmental</b>	
Operating Temperature	0° to +48° C (+32° to +120° F)
Operating Humidity	10% to 85%, Non-condensing
Storage Temperature	-10° to +70° C (+14° to +158° F)
Storage Humidity	10% to 85%, Non-condensing
<b>Power Requirement</b>	
Internal Power Supply	100-240VAC, 50-60Hz, 10W
<b>Warranty</b>	
Limited Warranty	2 Years Parts and Labor
<b>Regulatory Approvals</b>	
Video Scaler Unit	FCC, CE
Power Supplies	UL, CE, CSA
<b>Accessories Included</b>	
1x C-Video Input Cable	6' (2m) BNC to BNC
1x S-Video Input Cable	6' (2m) 4-Pin S-V to 4-Pin S-V
1x YCbCr Input Cable	6' (2m) 3RCA to 3 RCA
1x VGA Output Cable	6' (2m) HD-15 Male to Male
1x RGBHV Out Cable	6' (2m) 5 BNC to 5 BNC
1x AC Power Cord	6' (2m) US, UK or Euro or Type
1x IR Remote Control	IR-16
1x Operations Manual	CSC-1600 Series
4x Rackmount Screws	CSC-1600HD-R Only
1x Software Disk	Windows Control Panel
<b>Product Item Numbers</b>	
CSC-1600HD	Desktop Version
CSC-1600HD-R	Rackmount Version (Note 1)
<b>Notes</b>	
(1) Changeable Front Panel is the only difference.	

## Panel Drawings

### CSC-1600HD-R



## Infrared Remote



## Windows Control Panel

