# DSC HD-HD

# HDMI TO HDMI SCALER



The Extron DSC HD-HD is a high performance scaler that converts between HDMI resolutions and frame rates. It accepts video from 480i up to 1920x1200, 1080p, and 2K, and generates output rates up to 1920x1200, including HDTV 1080p/60 and 2K. The DSC HD-HD features a host of professional capabilities for integration in demanding environments, including EDID Minder, test patterns, and aspect ratio control, as well as visual confirmation of HDCP status and signal presence.

- ▶ HDMI video cross conversion
- ► Accepts HDMI video from 480i up to 1920x1200, 1080p/60 and 2K
- Advanced scaling engine with 30-bit processing and 1080i deinterlacing
- Selectable output rates from 640x480 to 1920x1200, including HDTV 1080p/60 and 2K
- **▶** HDCP compliant
- **▶ EDID Minder®**
- ▶ Aspect ratio control
- ▶ On-screen menus
- Internal video test patterns and audio pink noise generator
- ▶ Front panel USB configuration port



#### DESCRIPTION

The Extron **DSC HD-HD** is a compact high performance, HDCP-compliant scaler that converts between HDMI resolutions and frame rates. It accepts video from 480i up to 1920x1200, 1080p, and 2K, and offers high performance upscaling and downscaling with multiple output rates up to 1920x1200, including HDTV 1080p/60 and 2K. The DSC HD-HD features advanced Extron video signal processing with 1080i deinterlacing and Deep Color processing for optimal image quality. It includes many integrator-friendly features such as on-screen display, test patterns, and EDID Minder. The DSC HD-HD is ideal for applications that require scaling HDMI video to match the different capabilities and requirements of sources, displays, videoconferencing codecs, and other equipment. The compact form factor allows simple integration at a source, destination, or in a distribution system.

## **FEATURES**

- ▶ HDMI video cross conversion
- ▶ Accepts HDMI video from 480i up to 1920x1200, 1080p/60, and 2K The DSC HD-HD is compatible with standard definition and high resolution video.
- Advanced scaling engine with 30-bit processing and 1080i deinterlacing
- Selectable output rates from 640x480 to 1920x1200, including HDTV 1080p/60 and 2K
- ▶ HDCP compliant Fully supports HDCP-encrypted sources, with selectable authorization for unencrypted content.
- Supported HDMI specification features include data rates up to 6.75 Gbps, Deep Color, and HD lossless audio formats
- ▶ EDID Minder automatically manages EDID communication between connected devices
- ▶ Aspect ratio control
- Front panel LED indicators for signal presence, HDCP status, audio format, and power
- ▶ On-screen menus
- Output Standby Mode
- Internal video test patterns and pink audio noise generator
- Front panel USB configuration port
- Easy setup and commissioning with Extron's PCS Product Configuration Software
- ▶ 1" (2.5 cm) high, quarter rack width metal enclosure
- Highly reliable, energy-efficient external universal power supply included, replacement part #70-775-01

### **SPECIFICATIONS**

VIDEO INPUT			
	•	1 LIDMI/D\/L digital video	
Number/signal typ Connector	е	1 HDMI/DVI digital video 1 female HDMI type A	
Resolution range		640x480 @ 60 Hz through 1920x1200 @	60 Hz
nesolution range		480i, 576i, 480p, 576p, 720p, 1080i, 108	
		(2048x1080)	ιορ, απα Ζιτ
Formats		RGB and YCbCr digital video	
Standards		DVI 1.0, HDMI, HDCP	
VIDEO PROCE	SSING		
		0. 10. or 10 bits nor shound	
Digital pixel data b	и аерип	8, 10, or 12 bits per channel	
Colors		165 MHz pixel clock (HDMI) 1.07 billion (10-bit processing)	
		1.07 billion (10-bit processing)	
VIDEO OUTPU			
Number/signal typ	е	1 HDMI (TMDS)	
Connector		1 female HDMI type A	
Peripheral device		250 mA	
Scaled resolutions		640x480 <sup>8</sup> , 800x600 <sup>8</sup> , 1024x768 <sup>8</sup> , 1280x	
		1280x800 <sup>8</sup> , 1280x1024 <sup>8</sup> , 1360x768 <sup>8</sup> , 13	
		1440x9008, 1400x10508, 1600x9008, 16	80x1050°,
		1600x1200 <sup>8</sup> , 1920x1200 <sup>8</sup> HDTV: 480p <sup>7,8</sup> , 576p <sup>6</sup> , 720p <sup>3,4,5,6,7,8</sup> , 108	0:678
		1080p1,2,3,4,5,6,7,8, 2K (2048x1080)1,2,3,4,5	
		$^{1}$ = at 23.98 Hz, $^{2}$ = at 24 Hz, $^{3}$ = at 25 H.	
		$^{4}$ = at 29.97 Hz, $^{5}$ = 30 Hz, $^{6}$ = at 50 Hz,	۷,
		$^{7}$ = at 59.94 Hz, $^{8}$ = at 60 Hz	
Standards		DVI 1.0. HDMI. HDCP	
COMMUNICAT	TON		
	ION	1 female USB mini-B (front panel)	
USB control port	ION	1 female USB mini-B (front panel)	
USB control port GENERAL	ION		=
USB control port	ION	External	=
USB control port GENERAL	ION	External Input: 100-240 VAC, 50-60 Hz	=
USB control port GENERAL Power supply		External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts	,
USB control port GENERAL		External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts Storage: -40 to +158 °F (-40 to +70 °C) /	,
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USB control port GENERAL Power supply Temperature/humi Mounting Rack mount Furniture mount	dity	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing  Yes, with optional rack shelf Yes, with optional under-desk mounting kit	l
USB control port GENERAL Power supply Temperature/humi Mounting Rack mount Furniture mount Enclosure dimensi	dity	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing  Yes, with optional rack shelf Yes, with optional under-desk mounting kit 1.0" H x 4.25" W x 6.0" D (quarter rack wi	l
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USB control port GENERAL Power supply  Temperature/humi  Mounting Rack mount Furniture mount Enclosure dimensi  Regulatory complia Safety EMI/EMC Warranty	dity  ons  ance  levels are at ±10%.	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing  Yes, with optional rack shelf Yes, with optional under-desk mounting kit 1.0" H x 4.25" W x 6.0" D (quarter rack wi (2.5 cm H x 10.8 cm W x 15.2 cm D) (Depth excludes connectors.)  CE, c-UL, UL CE, C-tick, FCC Class A, ICES, VCCI	l
USB control port GENERAL Power supply  Temperature/humi  Mounting Rack mount Furniture mount Enclosure dimensi  Regulatory complia Safety EMI/EMC Warranty NOTE: All nominal	dity	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing  Yes, with optional rack shelf Yes, with optional under-desk mounting kit 1.0" H x 4.25" W x 6.0" D (quarter rack wi (2.5 cm H x 10.8 cm W x 15.2 cm D) (Depth excludes connectors.)  CE, c-UL, UL CE, C-tick, FCC Class A, ICES, VCCI	/ ide)
USB control port GENERAL Power supply  Temperature/humi  Mounting Rack mount Furniture mount Enclosure dimensi Safety EMI/EMC Warranty NOTE: All nominal Model	ons ance levels are at ±10%.  Version Description HDMI to HDMI Scaler	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing  Yes, with optional rack shelf Yes, with optional under-desk mounting kit 1.0" H x 4.25" W x 6.0" D (quarter rack wi (2.5 cm H x 10.8 cm W x 15.2 cm D) (Depth excludes connectors.)  CE, c-UL, UL CE, C-tick, FCC Class A, ICES, VCCI 3 years parts and labor	/ de)
USB control port GENERAL Power supply  Temperature/humi  Mounting Rack mount Furniture mount Enclosure dimensi  Regulatory complia Safety EMI/EMC Warranty NOTE: All nominal Model DSC HD-HD	dity  ons  ance  levels are at ±10%.  Version Description	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing  Yes, with optional rack shelf Yes, with optional under-desk mounting kit 1.0" H x 4.25" W x 6.0" D (quarter rack wi (2.5 cm H x 10.8 cm W x 15.2 cm D) (Depth excludes connectors.)  CE, c-UL, UL CE, C-tick, FCC Class A, ICES, VCCI 3 years parts and labor	Part number 60-1489-01
USB control port GENERAL Power supply  Temperature/humi  Mounting Rack mount Furniture mount Enclosure dimensi  Regulatory complia Safety EMI/EMC Warranty NOTE: All nominal Model DSC HD-HD RSU 129	ons ance levels are at ±10%.  Version Description HDMI to HDMI Scaler 1U 9.5" Deep Universal	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing  Yes, with optional rack shelf Yes, with optional under-desk mounting kit 1.0" H x 4.25" W x 6.0" D (quarter rack wi (2.5 cm H x 10.8 cm W x 15.2 cm D) (Depth excludes connectors.)  CE, c-UL, UL CE, C-tick, FCC Class A, ICES, VCCI 3 years parts and labor  Rack Shelf, Gray k Shelf, Gray	Part number 60-1489-01 60-190-01
USB control port GENERAL Power supply  Temperature/humi  Mounting Rack mount Furniture mount Enclosure dimensi Safety EMI/EMC Warranty NOTE: All nominal Model DSC HD-HD RSU 129 RSB 129	ons levels are at ±10%.  Version Description HDMI to HDMI Scaler 1U 9.5" Deep Universal 1U 9.5" Deep Basic Rac	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing  Yes, with optional rack shelf Yes, with optional under-desk mounting kit 1.0" H x 4.25" W x 6.0" D (quarter rack wi (2.5 cm H x 10.8 cm W x 15.2 cm D) (Depth excludes connectors.)  CE, c-UL, UL CE, C-tick, FCC Class A, ICES, VCCI 3 years parts and labor  Rack Shelf, Gray k Shelf, Gray	Part number 60-1489-01 60-190-01 60-604-02

For complete specifications, please go to www.extron.com Specifications are subject to change without notice.

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