

4K VIDEO SCALER VC-100UHD



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Appendix

Main Specifications

Video		
Processing	4:4:4 (Y/Pb/Pr), 10-bit	
Formats	SDI	2160p (DCI)/59.94 Hz, 50 Hz (SMPTE ST2048)
		2160p (UHD)/59.94 Hz, 50 Hz (SMPTE ST2036)
		1080p/59.94 Hz, 50 Hz (SMPTE ST274)
		1080i/59.94 Hz, 50 Hz (SMPTE ST274)
	HDMI (*1)	2160p (DCI)/59.94 Hz, 50 Hz (CEA-861-F)
		2160p (UHD)/59.94 Hz, 50 Hz (CEA-861-F)
		1080p/59.94 Hz, 50 Hz (CEA-861-F)
		1080i/59.94 Hz, 50 Hz (CEA-861-F)
		4096 x 2160/60 Hz (CEA-861-F)
		3840 x 2160/60 Hz (CEA-861-F)
		2560 x 1440/60 Hz (VESA CVT Reduced blanking)
		1920 x 1200/60 Hz (VESA CVT Reduced blanking)
		1280 x 1024/60 Hz (VESA DMT)
1920 x 1080/240 Hz (Pixel Clock 556.8 MHz, 567.0 MHz) (*2)		
1920 x 1080/144 Hz (Pixel Clock 346.54 MHz) (*2)		
1920 x 1080/120 Hz (VESA CVT Reduced blanking) (*2)		
1920 x 1080/60 Hz (CEA-861-F)		
USB Streaming (*3) (*4) (*5)	1080p, 720p, 640 x 480	
Functions	4K Scaler	
	FHD Down Scaler for USB Streaming	
	Fade to Black	
	Test Pattern Generator	
	Rotation (*6)	
	Flip H, V	
	Edge Enhancer	
	Motion Adaptive Deinterlacer	
	Color Correction	
	Dynamic Range Conversion	
	Frame Rate Conversion (up to 240 Hz)	

(*1) HDCP 1.4, 2.2 supported.

(*2) Input and through output.

(*3) UVC (USB Video Class) Uncompressed Video 4:2:2 (Y/Pb/Pr), 8-bit

(*4) The video signal frame rate can be selected Full or Half of System frame rate.

(*5) Color Gamut: Rec.601, Rec.709, Dynamic Range: SDR

(*6) The following functions cannot be used at the same time. Sub Processing, Rotation, HDMI Through.

Audio		
Processing	24 bits/48 kHz	
Formats	12G-SDI	Linear PCM, 24 bits/48 kHz, 16 ch (SMPTE 299M)
	HDMI 4K	Linear PCM, 24 bits/48 kHz, 8 ch
	STREAMING	Linear PCM, 16 bits/48 kHz, 2 ch (UAC (USB Audio Class))
Input Level	LINE IN	-10 dBu (Maximum: +8 dBu)
	AUDIO IN	+4 dBu (Maximum: +24 dBu)
Input Impedance	LINE IN	38 kΩ
	AUDIO IN	15 kΩ
Output Level	LINE OUT	-10 dBu (Maximum: +8 dBu)
	AUDIO OUT	+4 dBu (Maximum: +24 dBu)
Output Impedance	LINE OUT	1 kΩ
	AUDIO OUT	600 Ω
Functions	Output Level	
	Patchbay	
	Delay	
	Equalizer	
	Mastering	
Test Tone Generator		

■ Connectors		
Input Connectors	12G-SDI IN	BNC type (SMPTE 2082, 2081, 424M (SMPTE 425M-AB), 292M, 259M)
	HDMI 4K IN	HDMI type A
	STREAMING	USB type B (USB3.0)
	LINE IN	RCA phono type
	AUDIO IN	DB-25 female type (Balanced audio 2 ch)
	REFERENCE IN	BNC type (Black Burst (Sync to frames), Bi-Level, Tri-Level)
Output Connectors	12G-SDI OUT	BNC type (SMPTE 2082, 2081, 424M (SMPTE 425M-AB), 292M, 259M)
	12G-SDI THRU	BNC type
	HDMI 4K OUT	HDMI type A
	STREAMING	USB type B (USB3.0)
	LINE OUT	RCA phono type
	AUDIO OUT	DB-25 female type (Balanced audio 2 ch)
	REFERENCE THRU/OUT	BNC type (Black Burst)
Other Connectors	USB HOST	USB A type (USB2.0) (for USB flash drive)
	REMOTE	RJ45 type, 100BASE-TX

■ Others	
Functions	EDID emulator
	Genlock
	Preset memory x 8
Display	Graphic LCD 256 x 64 dots
Power Supply	AC adaptor
Current Draw	2.3 A (DC 24 V)
Power Consumption	55 W
Operation Temperature	+0 to +40 degrees Celsius
	+32 to +104 degrees Fahrenheit
Dimensions	210 (W) x 284.5 (D) x 43 (H) mm
	8-5/16 (W) x 11-1/4 (D) x 1-3/4 (H) inches
Weight (excluding Accessories)	2.2 kg
	4 lbs 14 oz
Accessories	Owner's Manual
	Leaflet "USING THE UNIT SAFELY"
	AC adaptor
	Power cord
	Rubber feet (4 pcs.)
	Rack mount angle set
	DC plug stopper

* 0 dBu = 0.775 Vrms

* This document explains the specifications of the product at the time that the document was issued. For the latest information, refer to the Roland website.

Dimensions

Unit: mm

