

Roland VR-50HD Multi-Format A/V Mixer with USB Stream/Record

VIDEO	
Processing	4:4:4 (RGB), 10-bit 4:2:2 (Y/Pb/Pr), 10-bit
Input Connectors	3G/HD/SD-SDI: BNC type x 4 (INPUT 1--4) * Conforms to SMPTE 424M (SMPTE 425M-AB), 292M, 259M-C. HDMI(DVI-D): Type A(19pin) x 4 (INPUT 1--4) * HDCP Supported. Analog RGB/HD-Component: Mini D-sub 15-pin type x 2 (INPUT 1--2) Analog Video (SD): Composite (BNC type) x 2 (INPUT 1--2) * INPUT 1-2: Select SDI, HDMI or Analog RGB, Composite using menu. * INPUT 3-4: Select SDI, HDMI using menu.
Output Connectors	3G/HD/SD-SDI: BNC type x 2 (PGM OUT, AUX OUT) * Conforms to SMPTE 424M (SMPTE 425M-AB), 292M, 259M-C HDMI(DVI-D): Type A(19pin) x 3 (PGM OUT, AUX OUT, MULTI VIEW) * HDCP Supported Analog RGB/HD-Component: Mini D-sub 15-pin type x 2 (PGM OUT, AUX OUT)
Input/Output Level and Impedance	Composite: 1.0 Vp-p 75 ohms Analog RGB: 0.7 Vp-p 75 ohms (H, V: 5 VTTL) Analog HD: 1.0 Vp-p 75 ohms (Sync-Signal: Bi-Level/Tri-Level)
SUPPORTED VIDEO FORMATS	
SDI	480/59.94i, 576/50i, 720/59.94p, 720/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p * Conforms to SMPTE 274M, SMPTE 296M, ITU-R BT.601-5.
HDMI>(*2)	480/59.94i, 576/50i, 480/59.94p, 576/50p, 720/59.94p, 720/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p 1024x768/60Hz(*1), 1280x720/60Hz(*1), 1280x800/60Hz(*1), 1280x1024/60Hz(*1), 1400x1050/60Hz, 1920x1080/60Hz
HDMI(MULTI-VIEW Output):(*2)	1080/59.94p
Component	480/59.94i, 576/50i, 480/59.94p, 576/50p, 720/59.94p, 720/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p
RGB(*2)	1024x768/60Hz(*1), 1280x720/60Hz(*1), 1280x800/60Hz(*1), 1280x1024/60Hz(*1), 1400x1050/60Hz, 1920x1080/60Hz
Composite	NTSC, PAL
*Note	*1 Output refresh rate is 75 Hz when frame rate is set to 50 Hz. *2 Conforms to CEA-861-E or VESA DMT Version 1.0 Revision 11. * The video signal frame rate must match the unit's frame rate setting. * The output format of HDMI and RGB/Component is always the same. When a Video format is selected, component signal is output from the RGB/COMPONENT connector. When a RGB format is selected, RGB signal is output from the RGB/COMPONENT connector.
USB-VIDEO	480/29.97p, 576/25p, 480/59.94p, 576/50p, 720/29.97p, 720/25p, 720/59.94p, 720/50p, 1080/29.97p, 1080/25p, 1080/59.94p, 1080/50p
Still Image	Windows(R) Bitmap File (.bmp) * Maximum 1920 x 1080 pixels, 24-bit per pixel, uncompressed.
Effects	Transition: Mix, Cut, Wipe (9 patterns) Composition: PinP, Chrominance Key, Luminance Key Others: Output Fade, Output Freeze, User Logo
AUDIO	
Audio Processing	Sampling Rate: 24-bit/48 kHz
Input Connectors	AUDIO IN (1 to 4) jacks (XLR/TRS combo type) * XLR type: 1 GND, 2 HOT, 3 COLD * Phantom Power: DC 48 V (unloaded maximum), 5 mA (maximum load) (Current value per channel). AUDIO IN (5 to 8) jacks (RCA phono type) AUDIO IN (9 to 12) jacks (TRS type)

Output Connectors	AUDIO OUT L,R jacks (XLR-3-32 type) * XLR type: 1 GND, 2 HOT, 3 COLD AUDIO OUT L,R jacks (RCA phono type) PHONES jack (Stereo 1/4-inch phone type) (headphones) PHONES jack (Stereo miniature type) (headphones)
Input Level and Impedance	XLR/TRS: -68 to +4 dBu (Maximum: +22 dBu, 4 k ohms) RCA phono: -10 dBu (Maximum: +8 dBu, 11 k ohms) TRS: +4 dBu (Maximum: +22 dBu, 98 k ohms)
Output Level and Impedance	XLR: +22 dBu (Maximum: +22 dBu, 600 ohms) RCA phono: -10 dBu (Maximum: +8 dBu, 1 k ohms) Headphones: 25 mW + 25 mW, 20 ohms
Audio Formats	SDI: Linear PCM, 24bit, 48kHz, 2ch * SMPTE 299M, SMPTE 272M-C HDMI: Linear PCM, 24bit, 48kHz, 2ch USB-AUDIO: Linear PCM, 16bit, 48kHz, 2ch
Audio Effects	Channel Effects: Compressor, Noise Gate, 3-Band EQ, Delay Master Effects: Mastering, 3-Band EQ, Reverb
OTHERS	
Remote	Remote MIDI: 5 pin DIN type (IN, OUT/THRU) RS-232C: D-sub 9 pin type x 1
USB Interface	USB2.0 port(host): Hi-Speed USB: Type A (for USB memory) USB3.0 port(device): Type B for USB-VIDEO (Super-Speed/Hi-Speed), USB-AUDIO (Full-Speed) - Uncompressed Video 4:2:2 (Y/Pb/Pr), 8-bit - Bit-rate: max 2Gbit/s (1080/59.94p only active pixels) - UVC (USB Video Class) supported uncompressed Video - Certified USB3.0 cable is required when running at super-speed (anything at 720p or higher)
Display	7 inch Graphic color LCD 800 x 480 dots (touch screen)
Power Supply	AC Adaptor DC 24V Secondary AC Adaptor DC 9 V to 16 V (XLR-4-32 type)
Current Draw	2.5 A (DC 24V)
Operation Temperature	+0 to +40 degrees Celsius +32 to +104 degrees Fahrenheit
Accessories	AC Adaptor, Power Cord, Owner's Manual
SYSTEM RECOMMENDATIONS FOR RECORDING (VR CAPTURE) OR STREAMING HD MATERIAL	
Windows	8.0 or higher
Mac	OS X 10.7 and higher
Common	Ivy Bridge Core i7 and higher 8GB Memory or more USB 3.0 (supported USB3.0 Intel Chipset e.g. 7Series) Note: USB Controller Chip by Renesas (formerly NEC) is not suitable Current VR-50HD Streaming Software Compatibility list.
SIZE AND WEIGHT	
Width	434 mm 17-1/8 inches
Depth	306 mm 12-1/16 inches
Height	149 mm 5-7/8 inches
Weight	5.3 kg 11 lbs. 11 oz.
Notes	* 0dBu=0.775 Vrms * This product is a Class A digital device under FCC part 15. * In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice. * This product is intended for use in the following Electromagnetic environments: E1:residential, E2:commercial and light industrial, E3:urban outdoors, E4:controlled EMC environment, ex. recording studio (broadcasting studio) which are specified in EN55103-1 and EN55103-2.