

Main Specifications

Video

Video Processing	4:2:2 (Y/Pb/Pr), 8-bit																																																																																																											
Number of Video Channels	12 channels																																																																																																											
Input Connectors	HDMI IN 1–6	HDMI type A x 6 * HDCP Supported, Multi-format Supported																																																																																																										
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Stream and Record formats	Audio Video	<p>Protocols: RTMP, RTMPS, SRT (Caller, Listener) Container: FLV (RTMP, RTMPS), MPEG2-TS (SRT) Recording File Format: MP4 Codec: H.264, target bitrate up to 20,000 kbps AAC-LC, 16 bits, 48 kHz, stereo, target bitrate up to 384 kbps</p> <p>* When the format of either Stream & Record or Video Player/SRT In exceeds 1080/30p, the Stream & Record and Video Player/SRT In functions cannot be used simultaneously. * When the sum of the bitrate for Stream & Record and Video Player/SRT In exceeds 20,000 kbps, the Stream & Record and Video Player/SRT In functions cannot be used simultaneously.</p>																																								
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Still Image	File Format	<p>Bitmap File (.bmp) Maximum 1920 x 1080 pixels, 24-bit color, uncompressed. PNG File (.png) Maximum 1920 x 1080 pixels, 24-bit color JPEG File (.jpg, .jpeg) Maximum 1920 x 1080 pixels, 24-bit color</p> <p>* It can be stored up to 16 files in the internal memory. * It can be exported in the SD Card and USB flash drive. * PNG alpha channel supported.</p>																																								
Video Effects	Transition	Cut, Mix (Dissolve/FAM/NAM), WIPE (8 types), SPLIT (2 types)																																								
	Composition	Composition: PinP x 4 (Square, Circle, Diamond), Keyer x 4 (Luminance Key, Chroma Key), DSK x 2 (Luminance Key, Chroma Key, Alpha Key, External Key), Roland FILL+KEY Mode																																								
	Other	Multi-View (3 types), Flip horizontal, Flip vertical, Still Image capture, Still Image playback, Output fade (Audio, Video: White or Black), Test pattern output, Stream Delay																																								

Audio			
Audio Processing	Sample rate	24 bits, 48 kHz	
Number of Audio Channels	42 channels		
Audio Formats	USB STREAM (input/output)	Linear PCM, 16 bits, 48 kHz, 2 ch	
	Bluetooth In (input)	Linear PCM, 16 bits, 48 kHz, 2 ch	
	HDMI IN	Linear PCM, 24 bits, 48 kHz, 2 ch	
	HDMI OUT	Linear PCM, 24 bits, 48 kHz, 8 ch	
	SDI IN	Linear PCM, 24 bits, 48 kHz, 2 ch (Conforms to SMPTE 299M)	
	SDI OUT	Linear PCM, 24 bits, 48 kHz, 8 ch (Conforms to SMPTE 299M)	
Audio Player	File Format	WAV (Linear PCM, 16 bits, 48 kHz/44.1 kHz, stereo) * It can be stored up to 16 tracks in the internal memory.	
Audio Effects	Channel Effects	High pass filter, Echo canceller, Anti-feedback, Noise gate, De-esser, Compressor, 4-Band equalizer, Voice changer, Delay, Auto mixing	
	Master Effects	Reverb, 4-Band equalizer, Compressor/Limiter, Loudness Auto Gain Control, Adaptive Noise Reduction, Low Frequency Cut, 15-Band GEQ, Delay	
	Other	Output fade, Test tone output	
Input Connectors	Analog	AUDIO IN 1–6	Combo type (XLR, 1/4-inch TRS phone), phantom power DC 48 V (unloaded maximum), 14 mA (maximum load)
		AUDIO IN 7/L, 8/R	RCA phono type
		AUDIO IN 9/L, 10/R	
	Digital	USB STREAM	USB Type-C®
		Bluetooth In	
		HDMI IN 1–6	HDMI type A x 6
Output Connectors	Analog	AUDIO OUT 1	XLR type
		AUDIO OUT 2	
		AUDIO OUT 3	RCA phono type
		PHONES	Stereo 1/4-inch phone type, Stereo miniature phone type
	Digital	USB STREAM	USB Type-C®
		HDMI OUT 1–3	HDMI type A x 3
	SDI OUT 1–3	BNC type x 3	
Nominal Input Level	AUDIO IN 1–6	-64–+4 dBu (Maximum: +24 dBu)	
	AUDIO IN 7/L, 8/R	-10 dBu (Maximum: +10 dBu)	
	AUDIO IN 9/L, 10/R		
Input Impedance	AUDIO IN 1–6	30 kΩ	
	AUDIO IN 7/L, 8/R	7 kΩ	
	AUDIO IN 9/L, 10/R		
Nominal Output Level	AUDIO OUT 1 (XLR)	+4 dBu (Maximum: +24 dBu)	
	AUDIO OUT 2 (XLR)		
	AUDIO OUT 3 (RCA)	-10 dBu (Maximum: +10 dBu)	
	PHONES	92 mW + 92 mW (32 Ω)	
Output Impedance	AUDIO OUT 1 (XLR)	600 Ω	
	AUDIO OUT 2 (XLR)		
	AUDIO OUT 3 (RCA)	1 kΩ	
	PHONES	56Ω	
Residual Noise Level (IHF-A, typ.)	AUDIO OUT 1 (XLR)	-92 dBu (All faders: Min)	
	AUDIO OUT 2 (XLR)	-89 dBu ([MAIN] Fader: Unity, Input faders: Unity only one AUDIO IN 1 Connector, Analog gain: Min)	
	* Input 150 Ω terminate	-62 dBu ([MAIN] Fader: Unity, Input faders: Unity only one AUDIO IN 1 Connector, Analog gain: Max)	
	AUDIO OUT 3 (RCA)	-101 dBu (All faders: Min)	
	* Input 150 Ω terminate	-100 dBu ([MAIN] Fader: Unity, Input faders: Unity only one AUDIO IN 1 jack, Analog gain: Min)	
		-75 dBu ([MAIN] Fader: Unity, Input faders: Unity only one AUDIO IN 1 jack, Analog gain: Max)	

Other		
Recording Media	SDHC/SDXC card (commercially available)	* SDXC card is required for video recording.
	USB flash drive (commercially available)	
Other Connectors	USB HOST	USB A type (for USB flash drive, for remote control from USB numeric keypad)
	USB STREAM	USB STREAM: USB Type-C® (for remote control from PC and iPad, Graphics Presenter)
	Bluetooth connection	for remote control from iPad
	CTL/EXP 1, 2	1/4-inch TRS phone type (for remote control from footswitch and expression pedal)
	TALLY/GPIO	DB-25 type (Female)(Tally/GPO: 16, GPI: 8)
	RS-232	DB-9 type (Male) (for Remote Control)
	DIRECT STREAM	RJ45, 1000BASE-TX (for Live Streaming, SRT In/Out, and Remote Control)
Other Functions	REFERENCE IN/THRU	BNC type * Black Burst (Sync to frames), Bi-Level, Tri-Level
	Scene Memory (32 types), Macro Control (100 types), Sequencer Control (1,000 steps), Panel lock function, EDID Emulator, Auto Switching, Auto Input Detect, Smart Tally, Remote Camera Control (Up to 12 units), External Rec Control, Menu language (English, Japanese, Simplified chinese)	
Bluetooth Function	Ver 5.0	
	Profile Support	A2DP (Audio), GATT (MIDI over Bluetooth Low Energy)
	Codec	SBC (Support to the content protection of the SCMS-T method)
Display	Graphic Type, 7"; Wide VGA (800 x 480 dots), backlite LCD (Color/Touch screen)	
Power Supply	AC adaptor	
Current Draw	3.0 A	
Power onsumption	69 W	
Operation Temperature	+0 to +40 degrees Celsius	
	+32 to +104 degrees Fahrenheit	
Dimensions	437 (W) x 304 (D) x 109 (H) mm	
	17-1/4 (W) x 12 (D) x 4-5/16 (H) inches	
	482 (W) x 304 (D) x 109 (H) mm	
	19 (W) x 10 (D) x 4-1/16 (H) inches * When rack mount angles are fitted.	
Weight	5,3 kg, 11 lbs 11 oz (excluding AC adaptor)	
Accessories	Startup Guide, Leaflet "USING THE UNIT SAFELY", AC adaptor, Power cord, Rack-mount angle x 2 Rack-mount angle mounting screw x 6	
Options	Footswitch: BOSS FS-5U, FS-6, FS-7 Expression Pedal: EV-5, EV-30, BOSS FV-500L, FV-500H	

* 0 dBu = 0.775 Vrms

* This product is a Class A digital device under FCC part 15.

* 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.