

Preliminary

Roland

R-88

8-CHANNEL RECORDER and MIXER

All in One Recorder, Mixer and
Audio Interface - Anytime, Anywhere



 **8^{ch}+2^{mix} Rec**

 **8^{ch} Mixer**

 **10ⁱⁿ × 8^{out} USB**

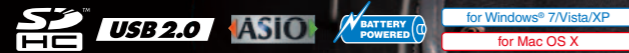
 **8ⁱⁿ × 8^{out} XLR**

Seamless integration of recording, mixing and an audio interface - a new dimension in professional portable recording.

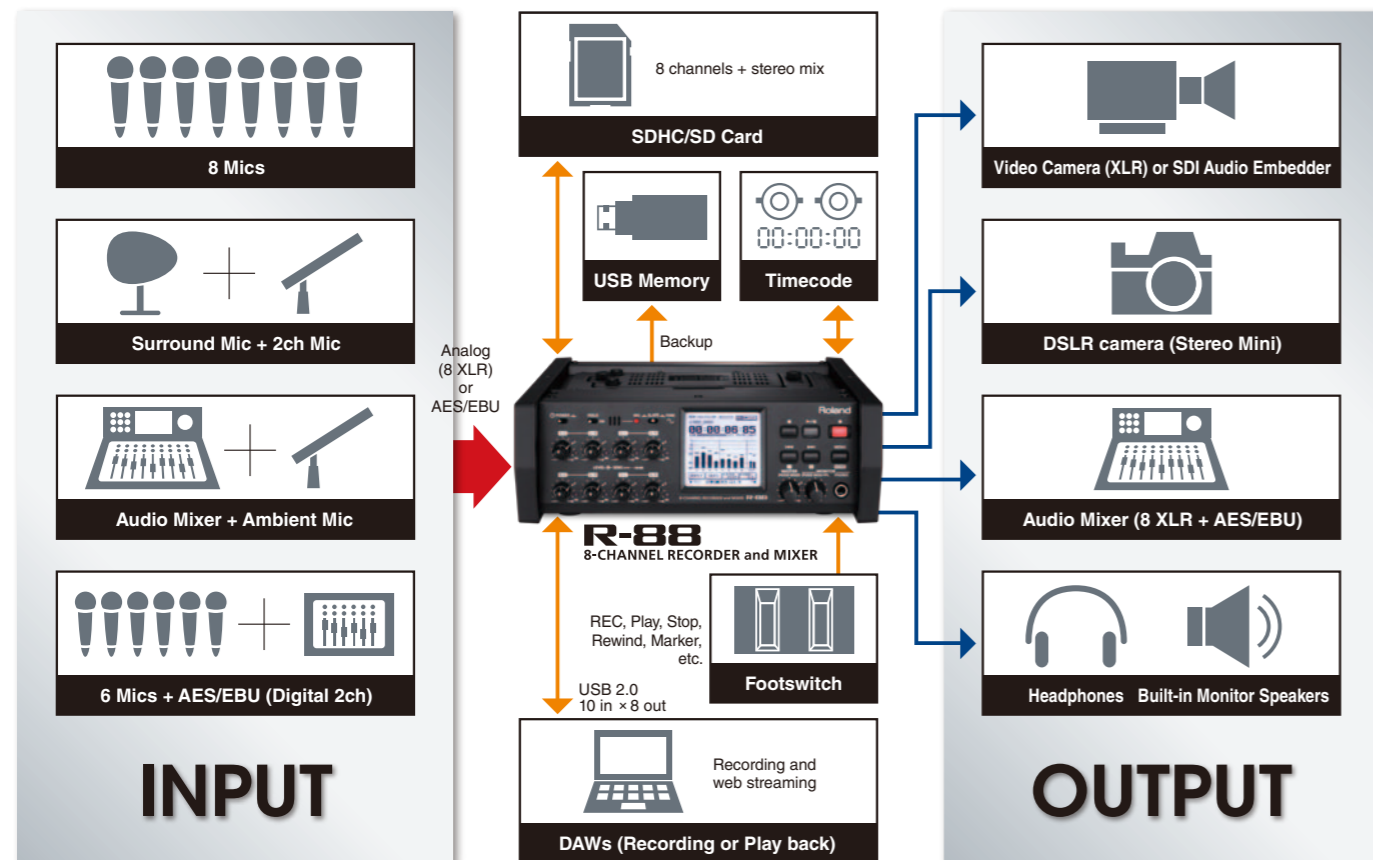
- Simultaneous recording of 8 channels + stereo mix
- Up to 24bit/192kHz uncompressed linear PCM recording
- 3 hours of recording using 32GB SDHC card (24bit/96kHz, 10ch)
- 8 XLR inputs, 8 XLR outputs, AES/EBU input/output
- Built-in 8 channel mixer with 3-band equalizer and MS microphone decoder
- Built-in 10in/8out USB audio interface
- Touch Panel Display for intuitive navigation
- SMPTE timecode In/Out for video sync
- Four different types of power - Alkaline battery (AA), Rechargeable Ni-MH battery (AA), AC Adaptor, External battery (4-pin XLR 9 to 16 V)

R-88

8-CHANNEL RECORDER and MIXER



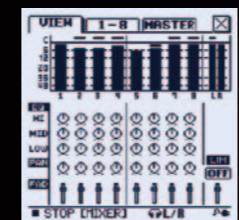
Input, Output, Mix and Interface Options to Cover a Multitude of Recording Applications



8 channels + stereo mix recording simultaneously



Built-in, powerful digital mixer allows simultaneous recording and mix-down



● Hold Switch
Prevents unintentional operations by disabling control from the front panel buttons and touch panel display.

● Power Switch

● Input Sensitivity & Level Knobs
Dual type knobs adjust both input sensitivity and level for Ch 1 to 8 independently.

● Peak Indicators

● Slate Mic
For recording voice memos

● Slate Switch
On/Off switch to turn on Slate Mic or Slate Tone (1kHz/-20dBFS)

● REC Button
REC button lights during recording and blinks in standby mode. During recording, markers are set by pushing the button.

● PREV/NEXT Buttons
PREV and NEXT allow selection of the previous or next file. Hold down these buttons for rewind or fast forward.

● MENU Button
This button accesses the menu settings, such as recording/playback settings and specifying the date and time, recording mode, etc

● Monitor Level knob
Volume control for built-in speakers and headphones. When pushing the knob, the monitor/PFL/RTA setting menu screen appears.

● Master Level knob
Volume control for stereo mix from internal mixer. When pushing the knob, the mixer menu screen appears.

Touch Panel Display
The front touch panel displays a variety of contextual information making control and adjustments intuitive.

Front Panel

Right Side Panel

● Inputs/Phantom Power Switches
XLR type jacks support line level to mic level. Individual on/off switches control the phantom powered supply to each XLR input.

● Memory Card Slot
Audio is recorded on SD or SDHC cards (up to 32G).

● Digital Audio Input/Output
AES/EBU Input/Output. Provides digital input capability and stereo mix output from internal mixer.

● DC Input
Power via the included AC adaptor or professional external battery systems. (4-pin XLR 9 to 16 V)

● Outputs 1-2
XLR balance outputs. Assignable from Channel 1/2, 3/4, 5/6, 7/8 or mixed audio via internal mixer. Selectable output level (+4/-60dBu).

● Mix Out Terminal
Stereo miniature phone type. This output offers mixed audio from the internal mixer.

Left Side Panel

● USB Memory Port
Backup files to USB memory flash drives.

● USB Port
Enables copying files to or from computers or using as a 10 in/8 out USB audio interface.

● Battery Pack
The R-88 works with eight (8) AA batteries.

Rear Side Panel

External Control jack
Enables REC, Play, Stop, Rewind, Marker, etc. using optional FS-6 or FS-5U footswitches.
Option: Dual Footswitch FS-6, Footswitch FS-5U

● Outputs 3-8
XLR balance output. Together with Ch.1 and 2, a total of 8 independent outputs are available. Also, mixed audio via internal mixer can be output.

Top Panel

● Time Code Input/Output
The R-88 accepts SMPTE time code offering slave mode to video cameras or VTRs. In addition, the R-88 can be the master, sending out time code to slave devices.

Specifications

Recorder Part	
Channels	8 channels + 2 channels (stereo mix from built-in mixer) (44.1, 48, 88.2 and 96 kHz), 4 channels (192kHz)
Signal Processing	AD Conversion: 24 bits, DA Conversion: 24 bits
Data Type	Format: BWF (mono/stereo), Sampling Frequency: 44.1/48/88.2/96/192 kHz, Bit Depth : 16/24 bits
Recording Media	SDHC Memory Card: 4 GB to 32 GB, SD Memory Card: 2 GB
Mixer Part	
Mixing Channels	Input: 8 channels, Output: 2 channels (stereo)
Channel Strip	3-band equalizer, Fader, Panpot, Stereo channel link
Master	Fader, Limiter
Audio Input and Output Part	
IN 1-8 (Analog Inputs): XLR type (Phantom powered)	Nominal Input Level: Input Sens Knob: -56, -50, -44, -38, -32, -26, -20, -14, -8, -2, +4 dBu (Input Level Knob: 0), Input Level Knob: Minus infinity to +8 dB Maximum Input Level: +26 dBu Input Impedance: Mic Input (Input Sens Knob: -56 to -20 dBu): 4 k ohms Line Input (Input Sens Knob: -14 to +4 dBu): 5.6 k ohms
OUT 1-2 (Analog Outputs): XLR type	Output Bus: Channel 1/2, 3/4, 5/6, 7/8 or Stereo mix from internal mixer, Output Level: +4 dBu/-60 dBu, Maximum Output Level: +24 dBu, Output Impedance: 600 ohms
OUT 3-8 (Analog Outputs): XLR type	Output Bus: Channel 1/2, 3/4, 5/6, 7/8 or Stereo mix from internal mixer, Output Level: +4 dBu, Maximum Output Level: +24 dBu, Output Impedance: 600 ohms *When sampling rate is 192kHz, outputs 5-8 are inactive.
MIX OUT (Analog Outputs): Stereo miniature phone type	Output Bus: Stereo mix from internal mixer, Maximum Output Level: 2Vrms/-30dBu, Output Impedance: 1 k ohms
Digital Input/Output: XLR type (AES/EBU, conforms to IEC 60958-4)	Output Bus: Stereo mix from internal mixer
Headphones: Stereo 1/4 inch phone type	Headphones: Stereo 1/4 inch phone type, Output Level: 80mW (32 ohms), Output Impedance: 10 ohms
Built-in Speaker	Stereo
Phantom Power	48 V + or - 4 V, 20 mA per 1 channel (100mA or less in all channels)
Residual Noise Level	OUT 1-8: -80dBu (Input Level Knob: Min), MIX OUT: -90dBu (Input Level Knob: Min)
Total Harmonic Distortion + Noise	0.02 % or less (SENS Knob: +4 dBu, Input Level Knob: 0)

Frequency Response	20 Hz to 40 kHz (0 to -3 dB, Sampling Frequency: 96 kHz/192 kHz)
Input Effects	Limiter, Low cut, Stereo channel link
MS microphone decoder	For REC, for play and monitor
Slate Mic/Tone	Slate Mic: Built-in, Slate Mic: 1 kHz, -20 dBFS/Alarm Tone
Monitor	Pre Fader Listening (PFL), Real Time Analyzer (RTA)
Other Terminals	
USB Interface	A Type Connector (For USB Memory) supports USB 2.0 and 1.1 Mass Storage Device Class. B Type Connector (For Computer) supports USB 2.0 and 1.1 Mass Storage Device Class or USB Audio (Hi-Speed USB, 10 channels inputs and 8 channels outputs) *When sampling rate is 192kHz, the USB audio interface is inactive.
SMPT E Timecode connectors	BNC Connectors (Conforms SMPT E 12M-1999)
CONTROL 1,2 jack	1/4-inch TRS phone type
Others	
Display	160 x 160 dots graphic display (touch screen)
Indicators	IN 1 to 8 Peak Indicators, Slate Mic Indicator, REC Indicator, Play Indicator
Power Supply	AC Adaptor (PSB-1U), Alkaline battery (AA, LR6) x 8, or Rechargeable Ni-MH battery (AA, HR6) x 8, External Power Supply: 4-pin XLR type (9 to 16 V)
Dimensions	260 (W) x 235 (D) x 93 (H) mm, 10-1/4 (W) x 9-1/4 (D) x 3-11/16 (H) inches
Weight	2.67 kg, 5 lbs 15 oz (including batteries)
Accessories	Owner's Manual, AC Adaptor (PSB-1U), AC Adaptor - 4pin XLR type connector conversion cable

* 0dBu=0.775Vrms

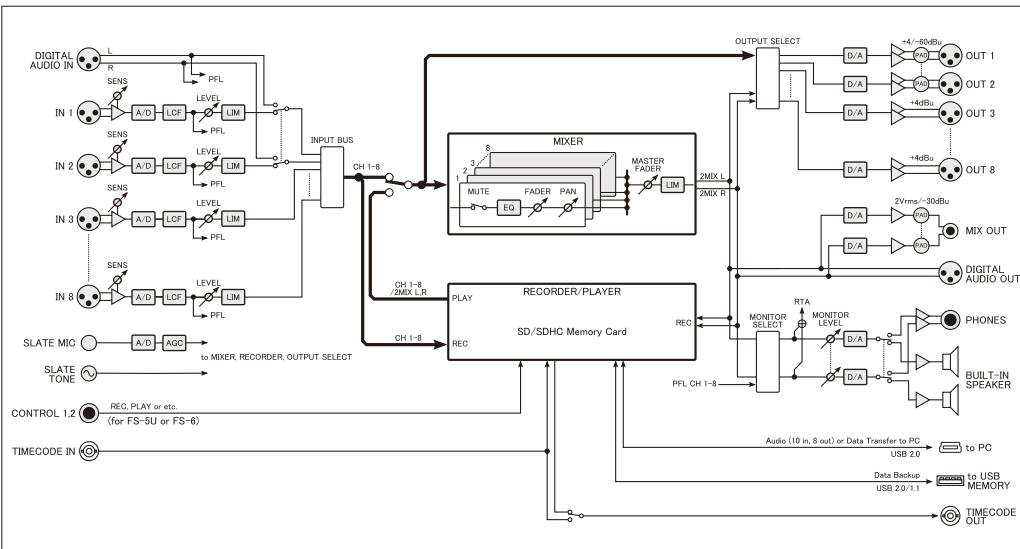
Recording Time using 32GB SDHC memory card

UNIT: hours

	16 bits/ 44.1 kHz	24 bits/ 44.1 kHz	16 bits/ 48 kHz	24 bits/ 48 kHz	16 bits/ 88.2 kHz	24 bits/ 88.2 kHz	16 bits/ 96 kHz	24 bits/ 96 kHz	16 bits/ 192 kHz	24 bits/ 192 kHz
1ch	100	67	92	61	50	33	46	30	23	15
2ch	50	33	46	30	25	16	23	15	11	7.7
4ch	25	16	23	15	12	8.4	11	7.7	5.7	3.8
8ch	12	8.4	11	7.7	6.3	4.2	5.7	3.8	—	—
10ch	10	6.7	9.2	6.1	5	3.3	4.6	3	—	—

* These recording times are approximate. Actual results may vary somewhat.
* If more than one recorded file exists, the total recordable time will be less.

Block Diagram



Options



Roland Systems Group, a member of the worldwide group of Roland companies, is dedicated to the support of audio and video professionals demanding excellence in both performance and system design. Through the development and support of video and audio products, we endeavor to improve workflow and maximize creative possibilities.

Ensuring high quality while protecting the environment: Roland is ISO9001 and ISO14001 certified

At Roland, several group companies have obtained ISO9001 certification. In addition, in January 1999, Roland also received ISO14001 international environmental management system certification. We're actively seeking ways to maintain harmony with the environment.

(ISO=International Standardization Organization: an organization for the promotion of standardization of international units and terms. They provide different categories of certification: ISO9001 Series certification is a product quality certification for products that undergo a certain level of quality control from the design stage to the after service stage; ISO14001 Series certification is for environment-related standards. Each member of the Roland Group is striving to obtain certification.)



ISO9001

ISO14001



www.rolandsystemsgroup.net

All specifications and appearances are subject to change without notice. Company names and product names appearing in this document are registered trademarks or trademarks of their respective owners. Roland and BOSS are either registered trademark or trademark of Roland Corporation in the United States and/or other countries. It is forbidden by law to make an audio recording, video recording, copy or revision of a third party's copyrighted work (musical work, video work, broadcast, live performance, or other work), whether in whole or in part, and distribute, sell, lease, perform, or broadcast it without the permission of the copyright owner. Do not use this product for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this product. Copyright 2012 Roland Corporation. All right reserved.

