

Roland

# R-44 4-CHANNEL PORTABLE RECORDER



Compact and light-weight 4-channel audio field recorder. Professional quality recordings with sampling rates up to 24-bit/192kHz.

Uncompressed  
**24-bit/192kHz**  
linear PCM

Light-weight  
**1.3kg**  
compact body

Supports  
**SDHC**  
large capacity media

AA batteries for  
**4 hours**  
of recording



# A compact, solid state, four channel field recorder.



Pro quality four channels recordings to large capacity SDHC cards.

The Edirol R-44 is designed for professional use within a very conveniently sized package. Capture up to 4 channels of uncompressed audio with selectable bit depths (16-bit or 24-bit) and sampling frequencies (44.1kHz/48kHz/88.2kHz/96kHz). R-44 employs SD cards or large capacity SDHC cards as the recording media. No moving parts enables the most silent and reliable operation possible.



Built-in stereo microphones and monitor speakers.

Although the R-44 is compact, all the necessary functions are included. Built-in high quality microphones and speakers make recording and monitoring without external devices possible.

Built-in limiter, low-cut filter and studio class effects.

An on-board limiter helps suppress sudden peaks in sound from an input source. A low-cut filter is included to help prevent things like wind noise or mic handling noise. Studio class effects such as 3-Band EQ, 6-Band GEQ, Enhancer or DeEsser can be used as tools to greatly improve audio quality. Effects can be applied while recording or simply for monitoring/ playback.

**■ Built-In Effects**

<b>3-Band EQ</b>	3-band parametric EQ ; allows precise equalization with high/low shelving and peaking
<b>6-Band Graphic EQ</b>	6 point frequency band equalization; ideal for recording
<b>Noise Gate</b>	Minimizes noise during low audio levels, cuts low frequency noise
<b>Enhancer</b>	Clearly defines and enhances sound; good for dialogue
<b>Comp &amp; DeEsser</b>	Cuts hissing, smoothen the sound, makes audio level uniform
<b>MS Mic Mixing</b>	Generates stereo mix with specified spread from inputs of Mid-Side Microphones

\* Effects can be applied on both input and output  
\* Effects are not available while sample rate is set to 192kHz

Pre-Record function ensures you never miss that important moment again.

The Pre-Record function buffers input signals for a certain amount of time. When the REC button is pressed, the material from the previous few seconds (selectable) is included. This also helps reduce sound bites at the beginning of a recording by not having to start the recorder too early.

Combo type analog jacks and digital output enables connection with a variety of devices.

The combo input jacks (4) supports the connection of both XLR and 1/4 inch plugs. XLR inputs are equipped with phantom power. Eleven steps of input sensitivity enable the connection of various devices with a variety of inputs levels



■ Built-in mics

Stereo microphones. Input sensitivity knob and high response meter enable precise level adjustment.

■ Phantom Power Switches

On/Off switch to control the phantom power supply to XLR input jacks. Independent control of each input.

■ Hold Switch

Prevents unintentional operations by locking the top and front panel buttons.

■ Exit Button

Returns to previous screen or cancels current operation.

■ Effects Button

Calls up on-board studio class effects. Assign to inputs and outputs as well as individual channels.

■ Marker/Cursor Buttons

Pressing the MARK button adds markers to the project enabling quick access to points of playback. The 4 buttons also work as cursor control while a menu is selected.

■ A-B Repeat Button

Set A-B points in a project to repeat playback between loop points.

■ Display

Organic LED provides high contrast and quick response with benefits of wide angle visibility.

■ Input Sensitivity & Level Knobs

Dual type knobs adjust both input sensitivities and levels for Ch 1-4 independently.

■ Memory Card Slot

For SD and large capacity SDHC cards.

■ Control Sync

Link two R-44 units together for 8-channel recording.

■ USB Port

Mini B type port for computer connection. Enables copying files to or from computers.

■ Combo Type Input Terminals

Support both balanced (XLR/TRS type) and unbalanced (standard type) inputs. Phantom power can be supplied to each XLR jack.

■ Digital Output

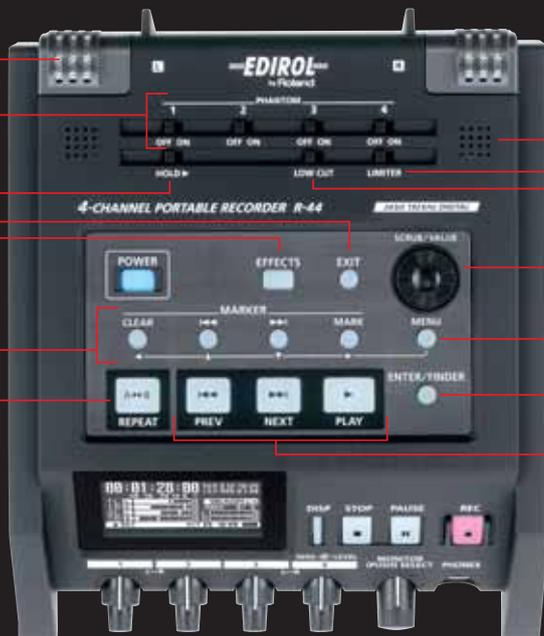
Digital coaxial type connector for output to external digital devices such as speakers/mixers.

■ Line Output Terminals

Four RCA jacks for independent monitoring of all channels.

■ Digital Input

Digital coaxial type connector for inputting digital signals.



# R-44 4-CHANNEL PORTABLE RECORDER

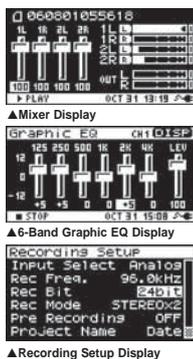
USB 2.0 Windows Vista®/Windows®XP/2000

\* SD Memory Card and Batteries are not included.

from microphones to musical instruments. High quality analog circuitry in the preamp ensures superior recording results.

## High-contrast Organic LED display and operation-oriented user interface.

The high contrast, high response organic LED screen, viewable from wide angles ensures fluid operation in field recording situations. The high response of level meters makes precise level adjustments possible. All the necessary switches and knobs are located on the top and front panels. Self-lit buttons on all the key controls enable clear-cut recording operations.



## Capture eight channels by linking two units.

The Control Sync terminal enables synchronized operation of 2 units. Control the second unit from the master by simply connecting two with a stereo mini cable. The master unit can remotely control REC standby, REC start and REC stop of the slave unit. This function enables 8-channel recording in a compact space and at an affordable price.



## Link to computer via high speed USB.

The R-44 can be mounted on computers with a simple USB 2.0 connection. It is seen as an USB

storage device on a computer. You can copy data back and forth with a simple drag & drop operation.



## Four hours of recording with four AA batteries.

The R-44 can be operated with 3 types of power supply, AC adaptor, external battery and AA batteries. Four hours\* of operation is possible with NiMH or alkaline batteries.



\* at 16-bit/44.1kHz stereo. No phantom power and pre-record disabled.

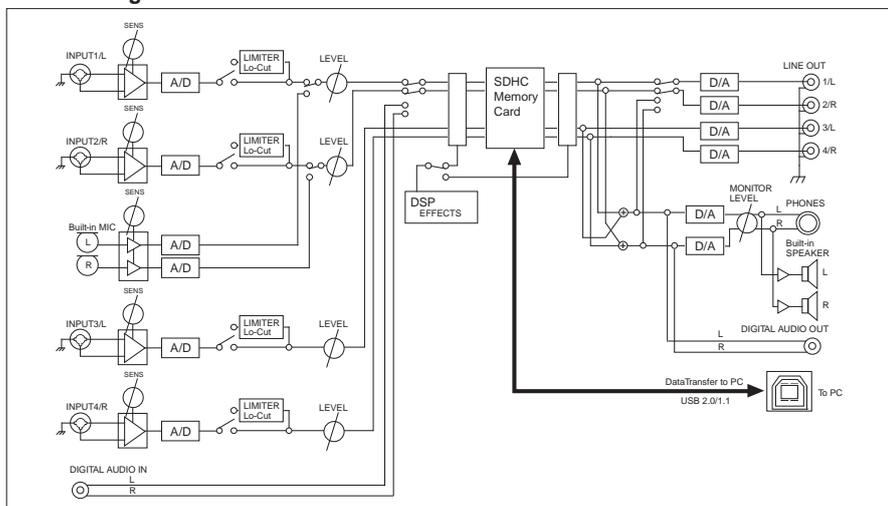
## Specifications

Recorder Section		Recommended Load Impedance	Line : 4k ohms or greater Headphone : 16 ohms or greater																		
Channels	4	Output Level	Line Output : -20 dBu (fixed) Headphone : 40 mW + 40 mW																		
Data Type	Format : WAV/BWF	Total Harmonic Distortion + Noise	Line Output : 0.02 % (Input Sens : +4 dBu)																		
Sampling Bit Rate	16/24-bit	Noise Level	Line Output : -103 dBu (Input Sens : +4 dBu, Input Level : Center)																		
Sampling Frequency	44.1kHz/48kHz/88.2kHz/96kHz/192kHz (Limited to Stereo x 1 at 192kHz) * 16 or 24-bit sampling rate can be selected with any frequency	Residual Noise Level	Line Output : -103 dBu (Input Sens : +4 dBu, Input Level : Minimum)																		
Recording Media	SDHC memory card (compatible with 64 MB - 8 GB*) * As of November 2007.	Frequency Response	20Hz - 40kHz(0/-3 dB)																		
Recording Time using 8 GB SDHC card	<table border="1"> <thead> <tr> <th></th> <th>16 bit/44.1kHz</th> <th>16 bit/48kHz</th> <th>24 bit/48kHz</th> <th>24 bit/96kHz</th> <th>24 bit/192kHz</th> </tr> </thead> <tbody> <tr> <td>Stereo</td> <td>755 minutes</td> <td>694 minutes</td> <td>462 minutes</td> <td>231 minutes</td> <td>115 minutes</td> </tr> <tr> <td>4 ch</td> <td>377 minutes</td> <td>347 minutes</td> <td>231 minutes</td> <td>115 minutes</td> <td></td> </tr> </tbody> </table>		16 bit/44.1kHz	16 bit/48kHz	24 bit/48kHz	24 bit/96kHz	24 bit/192kHz	Stereo	755 minutes	694 minutes	462 minutes	231 minutes	115 minutes	4 ch	377 minutes	347 minutes	231 minutes	115 minutes		Dynamic Range	AD : 100 dB DA : 104 dB
		16 bit/44.1kHz	16 bit/48kHz	24 bit/48kHz	24 bit/96kHz	24 bit/192kHz															
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4 ch	377 minutes	347 minutes	231 minutes	115 minutes																	
	* Recording times are approximate. Actual results may vary somewhat. * If more than one recorded file exists, the total recordable time will be less than listed.	Phantom Power	48 V + or - 4 V, 8 mA per 1 channel (20 mA or less in all channels)																		
Input and Output		Other Terminals																			
Analog Input	Ch 1 - 4 : XLR/TRS Combo type, XLR type (phantom powered), TRS type (balanced/unbalanced), Stereo Built-in Microphones	USB Port	Mini-B Type Connector USB 1.1 or 2.0 High Speed (Mass Storage Class)																		
Analog Output	Ch 1 - 4 : RCA Pin type (line output) Headphone : Stereo Phone type (1/4 inch)	Control Sync Jack	Stereo Mini Type Jack Word clock sync and start/stop remote control of 2 units * Remote control function does not guarantee the exact same REC start time																		
Digital In/Out	RCA Pin type (IEC 60958-3)	Others																			
Input Impedance	XLR: 4k ohms or greater (balanced), TRS: 6k ohms or greater (balanced)	Display	128 x 64 dot organic LED																		
Nominal Input Level	11 steps : -56, -50, -44, -38, -32, -26, -20, -14, -8, -2, +4 (Input Level Knob : Center)	Power Supply	AC adaptor (PSB-1U), AA type battery x 4 (Alkaline or NiMH)																		
Maximum Input	+24 dBu (Input Sens Knob: +4 dBu)	Current Draw	1.2 A																		
Output Impedance	Line Output : 600 ohms	Dimensions	157(W) x 183(D) x 61(H) mm (6-3/16(W) x 7-1/4(D) x 2-7/16(H) inches)																		
		Weight	1.3 kg (2 lbs 14 oz) including batteries																		

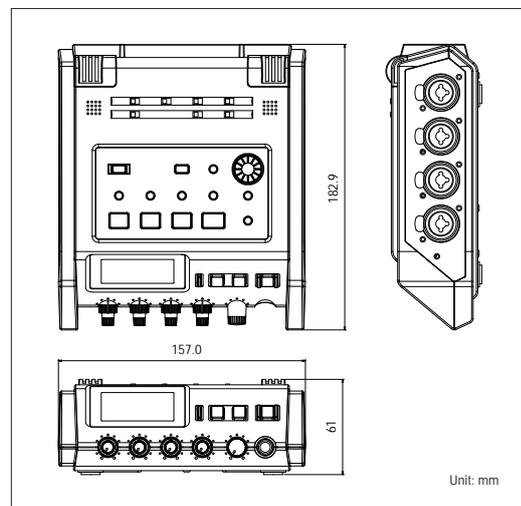
\* 0 dBu = 0.775 Vrms

System Requirements Microsoft® Windows® Vista®/XP/2000, Mac OS X 10.2 or later

## Block Diagram



## Dimensions



## Optional Items

### CB-R44

#### Carrying Bag

Dedicated carrying bag with shoulder strap for safe, comfortable use in the field.



### CS-50

#### Stereo Shotgun Microphone

Stereo condenser type microphone for stereo recording.



### RH-200

#### Monitor Headphones

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### RH-300

#### Monitor Headphones

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## Related Items

### R-4 4-Channel Portable Recorder and Wave Editor

The R-4 with built-in 40GB HDD is a great companion for many DV and HDV cameras not equipped with time code. The L-control connector allows the R-4 to record, pause and stop via the camera controls.



### R-4 Pro 4-Channel Portable Recorder with SMPTE Timecode

The R-4 Pro with built-in 80GB HDD shares the R-4's rugged construction and robust feature set. The R-4 Pro also includes AES/EBU digital input/output and SMPTE time code to work with professional video cameras or decks.



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