

# R-4

4 CHANNEL PORTABLE RECORDER  
and WAVE EDITOR

4-Channel Recording

24-bit/96-kHz Resolution

40GB Hard Disk Drive

Wave Editing Function



**Edirol R-4 — Introducing the  
new generation portable recorder**

# Superior Sound and Extended Recording Time with 40GB Hard Disk Drive 4-Channel Portable Recorder for Professional Use

## Top Panel

### Hold Switch

Locks all control switches, including power switch.

### Effects Button

Press to enter Effect mode.

### Wave Edit Button

Press to enter Wave Edit mode.

### Marker Set/ Operate Buttons

Use to set markers or to index previously set markers.

### A-B Repeat Button

Press once to set point A, again to set point B, and again to cancel the set points.

### Display Selector

Use to select current playback time, remaining time, or current playback position bar.

### Built-In Stereo Mics

Select between input channels 1/2 and the built-in mics.

### Built-In Speakers

The speakers play the same sound as the headphones.

### Limiter Switch

Turns the limiter of all channels ON or OFF.

### Phantom Power Switch

Turns the phantom power ON or OFF for channels 1/2 and 3/4 during mic input.

### Shuttle Dial

Use to vary forward or reverse speed in playback or in waveform editing.

### Jog Dial

Use to select files and set parameters.

### Cursor Buttons

Use to select files and menu items and to set parameters.



## 4 CHANNEL PORTABLE RECORDER and WAVE EDITOR

# R-4

## Advanced Recording

### Extended Recording with 40GB Hard Disk Drive

Equipped with a 40GB hard disk drive, the R-4 can record up to 17 hours at maximum sound quality or up to 58 hours at CD quality.

### Superior 24-bit/96-kHz Linear Recording

Totally uncompressed recording assures outstanding sound quality. Choose 16-bit or 24-bit quantization and a sampling rate of 44.1 kHz, 48 kHz, or

96 kHz. Save data as WAV files.

#### Recording Time (approx.) (Stereo)

16-bit/44.1-kHz	16-bit/48-kHz	24-bit/96-kHz
58 hours	53 hours	17 hours

### Simultaneous 4-Channel Recording

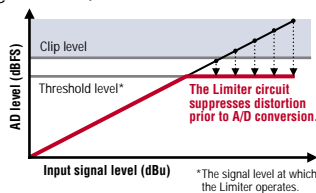
The 4 XLR/Phone combo jacks come with switchable phantom power and give you a choice of MONO, STEREO, STEREO X2, or 4CH recording. Digital input/output is also provided. Four-channel recording gives you exceptional flexibility. For example, you can use mics to capture the ambience of a performance hall

while using line input to record the performance itself. Or you can record at several different level settings simultaneously.

### On-Board Limiter

Built into the analog stage, the Limiter helps deliver a stable and reliable recording free of clipped noise from sudden input surges.

#### ■ Limiter Operation



### Built-In Nondirectional Stereo Microphones

The R-4's nondirectional, back electret condenser microphones offer superb transient characteristics and vibration resistance.

### Pre-Recording Function

When the REC button is pressed, the current material is appended to a buffer that contains recorded material from a few seconds earlier. This helps prevent missed recording

opportunities or sound bites at the beginning of a recording.

### Five High-Quality Effects

The R-4 lets you tailor the sound during both recording and playback.

#### ■ Built-In Effects

<b>3-Band EQ</b>	3-band parametric EQ; allows sharp equalizing with high/low shelving and mid peaking
<b>Graphic EQ</b>	6-point frequency band equalizing — ideal for recording
<b>Noise Gate</b>	Minimizes noise during silences, cuts low-frequency noise
<b>Enhancer</b>	Clearly defines and enhances sounds — good for dialogue
<b>Comp &amp; DeEsser</b>	Cuts hissing, smoothens the sound, makes the sound level uniform

\*Only one effect can be used at a time. Effect ON/OFF and parameters can be set for each track.

\*Effects are not available in 96-kHz operation.

### L Terminal for Linking a Digital Video Camera

The R-4's L terminal lets you connect a similarly equipped digital video camera to synchronize the camera start/stop while R-4 is recording. Counting the camera's two channels, this configuration gives you a total of six audio channels — a wealth of audio data to get creative with.

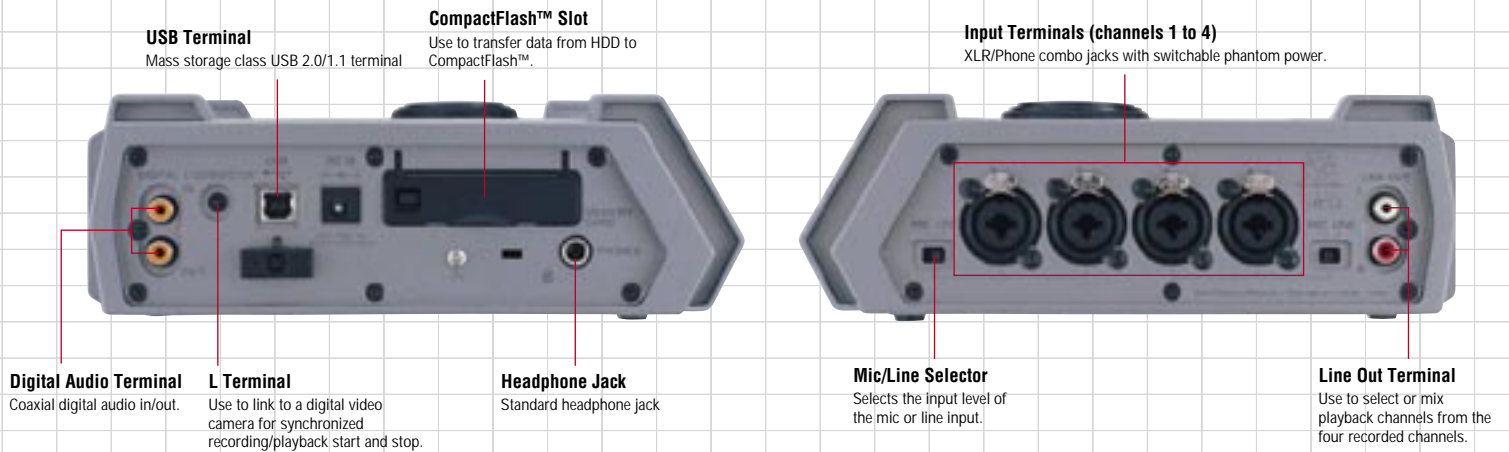
The R-4 brings you a new generation of portable recording. Enjoy superb sound quality. Use the 40GB hard disk drive for extended recording. Record up to four channels at once. Edit waveforms on the recorder itself. All this plus a compact size and light weight that assure outstanding mobility in the field. The Edirol R-4. Gear up for the new generation of portable recording.

### Front Panel



### Left Panel

### Right Panel



## Wave Editing

### Waveform Editing Using Only the R-4

The R-4 is all you need to edit waveforms. Just watch the waveform on the LCD as you edit. Scrubbing playback with the shuttle dial lets you set the edit points precisely by sound.



#### Waveform Editing Functions

<b>Trim (Delete)</b>	Select two points and remove the waveform between them
<b>Divide (Split)</b>	Select one point and divide the file there
<b>Combine (Append)</b>	Combine a file with the one before it
<b>Merge (Bounce)</b>	Merge several channels into one

## Easy Playback

### Index Any Point Instantly

Press the mark button anytime during recording or playback to mark that point for easy, instant indexing later. With the A-B repeat function you can set two points and repeatedly play back the material between them.

### Easy Playback with the Jog Dial

Use the jog dial to fast-forward or rewind at any of seven speed levels.

### Built-In Stereo Speakers

The R-4's built-in speakers make it easy to monitor recorded sound without headphones.

## Computer Linking

### USB 2.0 Terminal Provides a High-Speed Computer Data Link

The USB 2.0 high-speed mode transfers data about 20 times faster than DAT. You can also use the R-4 as a 40GB storage device. Edit R-4 files directly from DAWs and other applications.



### Advanced Linking with the EDIROL DV-7DL

A USB cable is all you need to connect directly to an EDIROL DV-7DL Video Editor and exchange files.

### CompactFlash™ Slot

The CompactFlash™ slot makes it easy to read or write recorded files. You can use CompactFlash™ memory to give data to colleagues or to transfer data to equipment not equipped with a USB interface.

## And More

### 2-Way Power Supply

The R-4 runs on eight AA batteries or with the AC adaptor.

### Digital Audio Input/Output

Exchange data with other digital equipment while maintaining fidelity with the coaxial digital audio in/out.

### Soft Carrying Case

The R-4 comes with a soft carrying case with a shoulder strap for safe, comfortable use in the field.



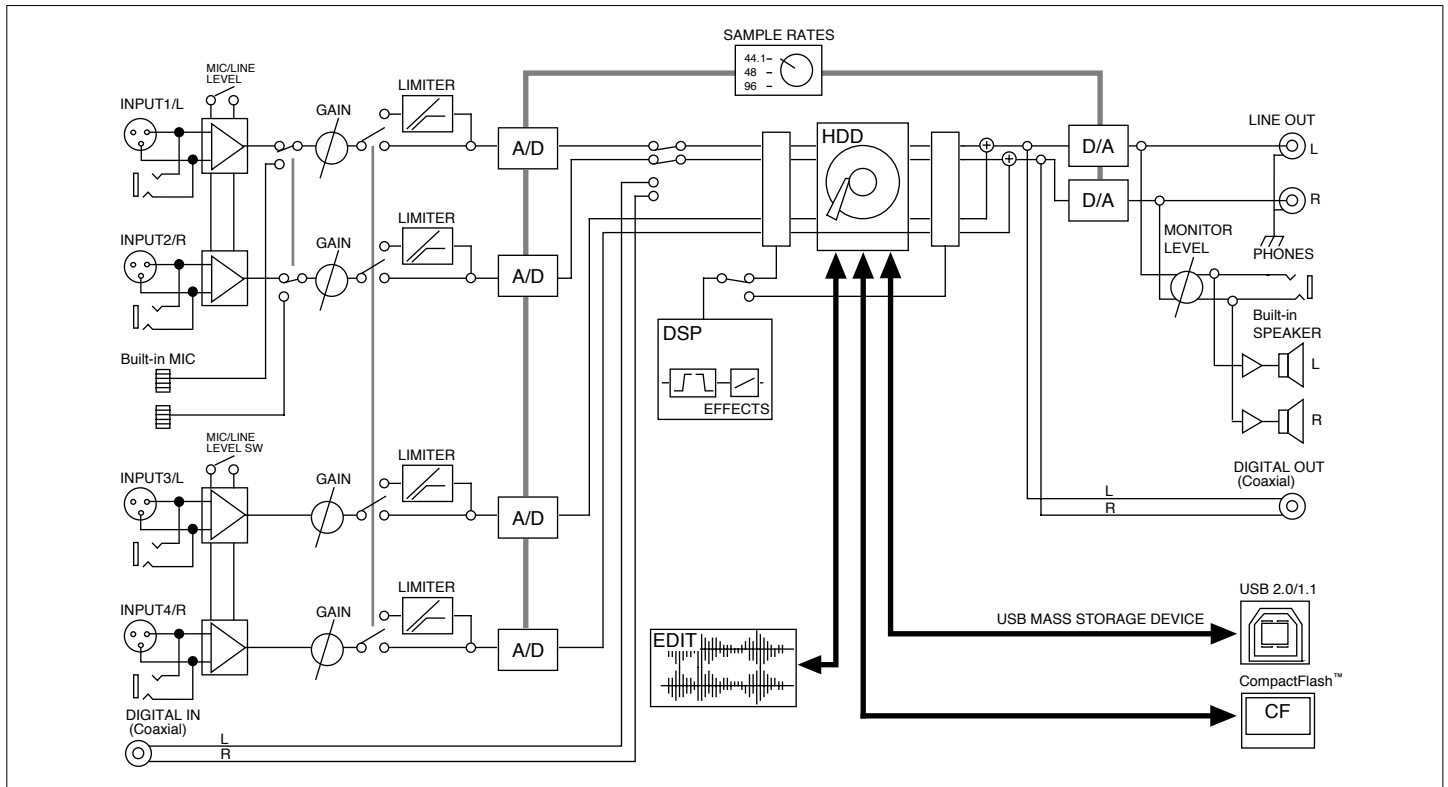
## Specifications

Signal Part		Control	
<b>Input</b>		<b>Controls</b>	
Connectors	Channel 1/2 3/4: XLR/PHONE type (phantom powered: XLR only)	Input Gain Knobs (CH1, CH2, CH3, CH4), Input Level Switch (CH1/2, LINE, MIC), Input Level Switch (CH3/4, LINE, MIC), Monitor Knob, Jog Shuttle, Transport Buttons (PREV, NEXT, STOP, PAUSE, PLAY, REC), Function Buttons, Hold Switch, Phantom Switch (CH1/2, CH3/4), Limiter Switch	
Impedance	4 k Ohms or more	<b>Display</b>	
Frequency Response	44.1 kHz: 20 Hz to 20 kHz (0 dB/-2 dB), 48 kHz: 20 Hz to 22 kHz (0 dB/-2 dB), 96 kHz: 20 Hz to 40 kHz (0 dB/-3 dB)	128 x 64 Graphic LCD	
Nominal Input Level	Channel 1, 2, 3, 4: -60 to +4 dBu (variable)	<b>Signal Processing</b>	
<b>Output</b>		<b>Bit Depth</b>	
Connectors	RCA phono type (L, R)	AD/DA Conversion	24 bits
Headphones Jack	Stereo 1/4 inch Phone Type	Headroom	12 dB
Impedance	L, R: 950 Ohms, PHONES: 10 Ohms	<b>Sample Rate</b>	
Output Level	L, R: -7.8 dBu (-10 dBV), PHONES: 30 mW + 30 mW (32 Ohms load)	AD/DA Conversion	44.1 / 48 / 96 kHz
<b>Digital Input/Output</b>		Digital Output	44.1 / 48 / 96 kHz
Connectors	Digital Output Jacks: Coaxial Type (conform to IEC60958), Digital Input Jacks: Coaxial Type (conform to IEC60958)	Digital Input	32 kHz to 96 kHz (convert to internal sample rate)
<b>Other Connectors</b>		<b>Others</b>	
USB Connector	B Type	Hard Disk Drive Capacity	40 GBytes
L-connector	Mini-Miniature Phone Type *Receive Only.	Recording Time	16 bits 44.1 kHz: 58 hours, 16 bits 48 kHz: 53 hours, 24 bits 96 kHz: 17 hours
Card Slot	CompactFlash™	Power Supply	DC 9 V (AC adaptor), AA battery x 8
<b>Effect Unit</b>		Dimensions, Weight	254 (W) x 221.8 (D) x 72.2 (H) mm, 1.7 kg
Tone Control	Shelving EQ, Graphic EQ, Enhancer, Noise Reducer, Compressor * 96 kHz : Invalid	Accessories	USB Cable, AC Adaptor (PSB-1U), AC Cord, Owner's Manual, Carrying Case

System Requirements : Windows® XP/2000/Me, MacOS9.2 or MacOS X, OS standard driver

\* 0 dBu = 0.775 Vrms

## Block Diagram



**EDIROL**  
www.edirol.com  
www.edirol.co.uk

**Roland**  
WE DESIGN THE FUTURE  
www.roland.co.jp

All specifications and appearances are subject to change without notice.  
CompactFlash is a trademark of SanDisk Corporation and licensed by CompactFlash association.  
Roland Corporation is an authorized licensee of the CompactFlash™ trademark.  
Windows® is known officially as: "Microsoft® Windows® operating system."  
Mac OS is a trademark of Apple Computer, Inc.