

Roland



R-09HR

24 bit 96 kHz WAVE/MP3 RECORDER

Owner's Manual

Checking the package contents

The R-09HR comes with the following items. After opening the package, please check all items. If any items are missing, please contact the retailer from whom this product was purchased.

* In the interest of product improvement, the appearance of this unit and/or the supplied accessories are subject to change without prior notice.

R-09HR



AC adaptor

This AC adaptor is specifically designed for the R-09HR. Please use only the included AC adaptor.



* For use in your country, a different AC adaptor and plug may have been supplied.

USB cable (mini-B cable)

This cable connects the R-09HR to the USB terminal on the PC.



SD Memory card

This memory card is needed to record or play back sound on the R-09HR.

* Demo songs are contained on this card.

Dedicated cover

Protects the R-09HR from nicks and scratches. Additionally, it's designed to allow you to mount the unit on a commercially available photographer's tripod.



→ "How to put on the dedicated cover" (p.14)

Owner's manual

This document is the owner's manual. Please keep it on hand for easy reference.



Remote control



Lithium battery



CD-ROM

Cakewalk "pyro Audio Creator LE"

Before using this unit, carefully read the sections entitled: “**USING THE UNIT SAFELY**” and “**IMPORTANT NOTES**” (p. 5). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, This Owner’s manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About  **WARNING** and  **CAUTION** Notices

 WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
 CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

	The  symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The  symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The  symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

WARNING

- Do not open (or modify in any way) the unit or its AC adaptor. 
- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the “Information” page. 
- Never install the unit in any of the following locations.
 - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
 - Damp (e.g., baths, washrooms, on wet floors); or are
 - Exposed to steam or smoke; or are
 - Subject to salt exposure; or are
 - Humid; or are
 - Exposed to rain; or are
 - Dusty or sandy; or are
 - Subject to high levels of vibration and shakiness. 
- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces. 
- Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor’s body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock. 
- Use only the attached power-supply cord. Also, the supplied power cord must not be used with any other device. 

WARNING

- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards! 
- This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist. 
- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit. 
- Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the “Information” page when:
 - The AC adaptor, the power-supply cord, or the plug has been damaged; or
 - If smoke or unusual odor occurs
 - Objects have fallen into, or liquid has been spilled onto the unit; or
 - The unit has been exposed to rain (or otherwise has become wet); or
 - The unit does not appear to operate normally or exhibits a marked change in performance. 

WARNING

- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit. 
- Protect the unit from strong impact. (Do not drop it!) 
- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/ amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through. 
- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page. 
- Batteries must never be recharged, heated, taken apart, or thrown into fire or water. 

- Keep lithium batteries of the remote out of reach of small children. If a child has accidentally swallowed a battery, see a doctor immediately. 
- Lithium batteries of the remote must never be recharged, heated, taken apart, or thrown into a fire or water. 

- DO NOT play a CD-ROM disc on a conventional audio CD player. The resulting sound may be of a level that could cause permanent hearing loss. Damage to speakers or other system components may result. 
- Never expose lithium batteries of the remote to excessive heat such as sunshine, fire or the like. 

CAUTION

- The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation. 
- Always grasp only the plug on the AC adaptor cord when plugging into, or unplugging from, an outlet or this unit. 
- At regular intervals, you should unplug the AC adaptor and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire. 

CAUTION

- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children. 
- Never climb on top of, nor place heavy objects on the unit. 
- Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit. 
- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices. 
- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet (p. 20). 
- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet. 
- If used improperly, batteries may explode or leak and cause damage or injury. In the interest of safety, please read and observe the following precautions (p. 21). 
 - Carefully follow the installation instructions for batteries, and make sure you observe the correct polarity. 
 - Avoid using new batteries together with used ones. In addition, avoid mixing different types of batteries.
 - Remove the batteries whenever the unit is to remain unused for an extended period of time.
 - If a battery has leaked, use a soft piece of cloth or paper towel to wipe all remnants of the discharge from the battery compartment. Then install new batteries. To avoid inflammation of the skin, make sure that none of the battery discharge gets onto your hands or skin. Exercise the utmost caution so that none of the discharge gets near your eyes. Immediately rinse the affected area with running water if any of the discharge has entered the eyes.
 - Never keep batteries together with metallic objects such as ballpoint pens, necklaces, hairpins, etc.
- Used batteries must be disposed of in compliance with whatever regulations for their safe disposal that may be observed in the region in which you live. 
- Use only the specified type (CR2025) of lithium battery of the remote (p. 23). Be sure to insert it as directed (to ensure correct polarity). 
- Used lithium batteries of the remote must be disposed of in compliance with whatever regulations for their safe disposal that may be observed in the region in which you live. 
- Keep any battery holder you may remove and the included lithium batteries of the remote in a safe place out of children's reach, so there is no chance of them being swallowed accidentally. 

IMPORTANT NOTES

Power Supply: Use of Batteries

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter (such as a refrigerator, washing machine, microwave oven, or air conditioner), or that contains a motor. Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.
- When installing or replacing batteries, always turn off the power on this unit and disconnect any other devices you may have connected. This way, you can prevent malfunction and/or damage to speakers or other devices.
- Before using the batteries, please read any cautions and other instructions that came with the batteries.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.

- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface. You can place a piece of felt or cloth under the rubber feet to prevent this from happening. If you do so, please make sure that the unit will not slip or move accidentally.

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and Data

- Please be aware that all data contained in the unit's memory may be lost when the unit is sent for repairs. Important data should always be backed up on your computer, or written down on paper (when possible). During repairs, due care is taken to avoid the loss of data. However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data, and Roland assumes no liability concerning such loss of data.

Memory Backup

- If the unit's power is not turned on for several days the contents of certain items you've set, such as the date and time, will be lost.

Additional Precautions

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of losing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit's memory on your computer or written down on paper (when possible).
- Unfortunately, it may be impossible to restore the contents of data that was stored memory card once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.

- A small amount of noise may be heard from the display during normal operation.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.
- Depending on the conditions in which you use the R-09HR, you may notice a slight sensation of discomfort or roughness when touching the R-09HR itself or a metal part of a connected mic. This is due to an extremely small electrical charge which poses absolutely no danger to the human body. If this bothers you, you can use the R-09HR on battery power as desired.

Before Using Cards

Using Memory Cards

- Carefully insert the memory card all the way in—until it is firmly in place (p. 25).
- Never touch the terminals of the memory card. Also, avoid getting the terminals dirty.
- Memory cards are constructed using precision components; handle the cards carefully, paying particular note to the following.
 - To prevent damage to the cards from static electricity, be sure to discharge any static electricity from your own body before handling the cards.
 - Do not touch or allow metal to come into contact with the contact portion of the cards.
 - Do not bend, drop, or subject cards to strong shock or vibration.
 - Do not keep cards in direct sunlight, in closed vehicles, or other such locations (storage temperature: -25 to 85°C).
 - Do not allow cards to become wet.
 - Do not disassemble or modify the cards.

Handling CD-ROMs

- Avoid touching or scratching the shiny underside (encoded surface) of the disc. Damaged or dirty CD-ROM discs may not be read properly. Keep your discs clean using a commercially available CD cleaner.

Copyright

- Recording, duplication, distribution, sale, lease, performance, or broadcast of copyrighted material (musical works, visual works, broadcasts, live performances, etc.) belonging to a third party in part or in whole without the permission of the copyright owner is forbidden by law.
- Do not use this unit 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 unit.
- * Microsoft and Windows are registered trademarks of Microsoft Corporation.
- * Windows® is known officially as: "Microsoft® Windows® operating system."
- * Apple and Macintosh are registered trademarks of Apple, Inc.
- * Mac OS is a trademark of Apple, Inc.
- * The SD logo () and SDHC logo () are trademarks of SD-3C, LLC.
- * MPEG Layer-3 audio compression technology is licensed from Fraunhofer IIS Corporation and THOMSON Multimedia Corporation.



- * All product names mentioned in this document are trademarks or registered trademarks of their respective owners.
- * MMP (Moore Microprocessor Portfolio) refers to a patent portfolio concerned with microprocessor architecture, which was developed by Technology Properties Limited (TPL). Roland has licensed this technology from the TPL Group.
- * Roland is a registered trademark of Roland Corporation in the United States and/or other countries.

Copyright © 2010 ROLAND CORPORATION

All rights reserved. No part of this publication may be reproduced in any form without the written permission of ROLAND CORPORATION.

Contents

USING THE UNIT SAFELY	3
------------------------------	----------

IMPORTANT NOTES	5
------------------------	----------

Names of things and what they do	8
-----------------------------------------	----------

How to put on the dedicated cover	14
-----------------------------------------	----

R-09HR screens and basic operations	16
--------------------------------------------	-----------

Using the R-09HR	20
-------------------------	-----------

Turning power on/off	20
Installing batteries in the remote control	23
Using the remote control	24
Precautions concerning use of the remote control ...	24
Preparing the memory card	25
Setting time and date	29
Recording	31
Playing back	32
Using headphones	32
Deleting	33

Recording	34
------------------	-----------

Configuring recording	34
Recording instruments and voice	37
Using the internal microphones	37
Using external microphones	41
Recording from cassettes or CDs	48
Splitting Files while Recording (Split)	51

Playing back	52
---------------------	-----------

Playing back songs	52
Connecting headphones and speakers	54
Rewinding and fast forwarding	55
Repeated playback of a selected section	56
Repeating a song	58
Shuffle play	60
Playing back in order	62
Changing the playback speed (Speed)	64
Selecting the playback speed	64
Applying reverb effects during playback	65
Song types that can be played	66

Downloading songs to a PC	67
----------------------------------	-----------

Connecting to the PC	67
Loading songs	68
Disconnecting the PC	70

Manipulating songs and folders	72
---------------------------------------	-----------

Displaying the <Finder screen>	72
Selecting (Select)	73
Displaying song or folder information (Information) ..	74
Deleting (Delete)	75
Changing the name (Rename)	76

Moving songs (Move)	77
Copying (Copy)	79
Dividing (Divide)	80
Combining (Combine)	81
Repair files (Repair)	82
Creating folders (Make Folder)	83

R-09HR configuration settings	85
--------------------------------------	-----------

Displaying the <Menu screen>	87
Setting the sampling frequency when recording	87
Setting the recording mode	88
Setting how file names are assigned	89
Setting the maximum file size	90
Using the Self Timer Record function	91
Setting the song playback mode	92
Setting whether to use repeat playback or not	93
Playing sound from the preview monitor	94
Changing the playback speed	95
Setting the reverb type	96
Setting the reverb depth	97
Adjusting the display brightness	98
Setting peak hold for the level meter	99
Setting the time until the screen is darkened when no operations are performed for a set period of time	100
Turning off indicators when the display goes dark ..	101
Setting the time until the power turns off when no operations are performed for a set amount of time ...	102
Setting the battery type (Battery)	103
Setting whether to monitor sound while recording ..	104
Setting the external microphone type	105
Setting the LIMITER/AGC switch function	106
Setting the low cut frequency	107
Setting whether to accept remote control operations .	108
Setting the date and time	109
Displaying SD memory card information	110
Formatting SD memory cards	110
Using the metronome	111
Using the metronome by itself	111
Sounding the metronome during recording	112
Using the tuner	113
Basic operation for the tuner or graphic tuner ...	113
Tuner	114
Graphic Tuner	115
Initializing the R-09HR	116

Message list	117
---------------------	------------

Troubleshooting	119
------------------------	------------

Index	124
--------------	------------

Specifications	128
-----------------------	------------

Names of things and what they do



1 Internal MIC

These stereo microphones are built into the R-09HR. →“Using the internal microphones” (p. 37)

2 Display

The display shows information about the R-09HR.
→“Information shown in the display” (p. 17)

3 FINDER button

Shows a song list and allows names to be edited and songs to be deleted or copied.
→“Basic operations” (p. 18)

4 MENU button

Performs the settings for the R-09HR.
→“Basic operations” (p. 18)

5 PEAK indicator

This indicator lights up when the input or output volume is too high. If the [PEAK Indicator] is lit while recording, the recording will be distorted. Decrease the volume with the [(-) Input Level Button 15].
→“Adjusting recording levels” (p. 45)

6 SPEED button

Changes the playback speed of the song.
→“Changing the playback speed (Speed)” (p. 64)

7 REVERB button

The REVERB button turns the reverb feature on/off and changes the reverb type.
→“Applying reverb effects during playback” (p. 65)

TERM REVERB

REVERB is an effect that can be used to, for example, make it seem as if the sound were being played in a large hall. Four types of reverb are available: HALL1, HALL2, ROOM, or PLATE. →“Reverb type” (p. 65)

8 AB REPEAT/SPLIT button

The AB REPEAT button allows the region between two points (between A - B) to be played back repeatedly. Assign marker A and marker B in the song, and the region between marker A and marker B will be repeated. Pressing the button once assigns marker A. Pressing the button again assigns marker B.
→“Repeated playback of a selected section” (p. 56)
Additionally, the file is split when this button is pressed during recording.
→“Splitting Files while Recording (Split)” (p. 51)

9 PLAY/PAUSE button (▶/II)

The PLAY/PAUSE button starts playback. It can also pause playback or recording. It is also used to move the cursor up in the display or to change the value of a selected item.
→“Basic operations” (p. 18)

Current Screen	Status	Operation
<Main Screen>	Stopped	Plays back
	Playing	Pauses playback
	Recording standby (REC button blinking)	Starts recording
	Recording (REC button lights up)	Pauses recording
<Finder Screen> <Menu Screen>	—	Moves cursor up Changes the value

10 PREV button (◀◀)

The PREV button selects the beginning of the song or the previous song. If it is held down, the song rewinds while the button is pressed.

It can be used during playback or while stopped.

It is also used to move the cursor to the left in the display or to change the value of a selected item.

→“Basic operations” (p. 18)

Current Screen	Current Status	Operation
<Main Screen>	During a song	Moves to beginning of song
	Beginning of a song	Moves to previous song
	During a song, at the beginning of a song, or while stopped	Rewinds while button is pressed
<Finder Screen> <Menu Screen>	—	Moves cursor to the left Changes the value

11 NEXT button (▶▶)

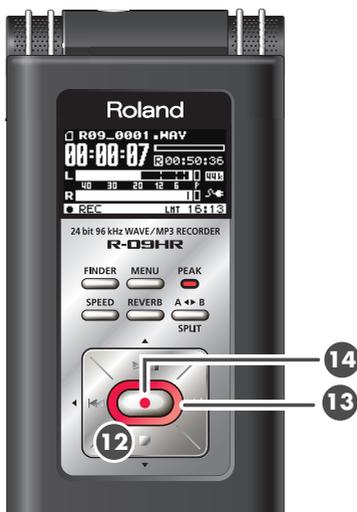
The NEXT button selects the next song. If it is held down, the song fast forwards while the button is pressed.

It can be used during playback or while stopped.

It also functions as the right arrow for the cursor (moves the cursor to the right) and changes the value of a selected item.

→“Basic operations” (p. 18)

Current Screen	Current Status	Operation
<Main Screen>	During a song	Moves to next song
	Beginning of a song	Moves to next song
	During a song, at the beginning of a song, or while stopped	Fast forwards while button is pressed
<Finder Screen> <Menu Screen>	—	Moves cursor to the right Changes the value



12 STOP button (■)

The STOP button stops playback or recording.

It is also used to move the cursor down in the display or to change the value of a selected item.

→“Basic operations” (p. 18)

Current Screen	Status	Operation
<Main Screen>	Playing	Stops playback
	Recording standby (REC button blinks)	Releases from recording-standby mode
	Recording (REC button lights up)	Stops recording
<Finder Screen> <Menu Screen>	—	Moves cursor down Changes the value

13 REC indicator

The REC indicator is lit red during recording.

It blinks while in recording-standby mode (REC PAUSE).

14 REC button

The REC button is used to enter recording-standby mode or to start recording.

It is also used to enter selected items.

→“Basic operations” (p. 18)

Current Screen	Status	Operation
<Main Screen>	Stopped	Puts into recording-standby mode
	Recording standby (REC button blinks)	Starts recording
<Finder Screen> <Menu Screen>	—	Enter



15 (+) and (-) INPUT LEVEL buttons

The INPUT LEVEL buttons adjust the level of the sound from the [Internal MIC 1], [MIC Input Jack 16], and [LINE IN Jack 17].

Pressing the (+) input level button increases the input sound level. Pressing the (-) input level button decreases the input sound level.

→“Adjusting recording levels” (p. 45)

16 MIC INPUT jack

The MIC input jack is used to connect an external microphone.

→“Using external microphones” (p. 41)

The volume can be adjusted using the [(+) and (-) INPUT LEVEL buttons 15].

MEMO

When connecting an external microphone, please choose the setting according to the microphone type.

Dynamic microphone	
Battery-powered condenser microphone	Switch OFF the [PLUG-IN POWER Switch 28] on the back.
Plug-in powered condenser microphones	Switch ON the [PLUG-IN POWER Switch 28] on the back.
Stereo microphone	Use the <Menu Screen> to set the external type to stereo.
Monaural microphone	Use the <Menu Screen> to set the external type to monaural.

NOTE

- When connecting a dynamic microphone or a battery-powered microphone, be sure to use the [PLUG-IN POWER Switch 28] on the back to set to off. The microphone may be damaged if used with the improper setting.
- If a cable is connected to the [LINE IN Jack], then no sound is input via the [MIC Input Jack].

TERM

Dynamic microphone

The durable dynamic microphone is suitable for vocal or instrumental recordings. It does not require a power supply.

Condenser microphone

The sensitive condenser microphone is suitable for recording quiet sounds, such as live instrumentals or meetings. It requires a power supply from either batteries or plug-in power.

17 LINE IN jack

When inputting audio signals from audio equipment or digital instruments, use a cable with a stereo-mini plug to connect the R-09HR to the device.

→“Recording from cassettes or CDs” (p. 48)

Volume is adjusted with the [(+) and (-) INPUT LEVEL buttons 15].



18 AC ADAPTOR jack

This is the power jack.
Connect the included AC adaptor to this jack.
→“Using the AC adaptor” (p. 20)

NOTE

Be sure to turn the R-09HR off before unplugging the AC adaptor.

19 POWER switch

Holding down the POWER switch turns power on or off.
→“Turning power on/off” (p. 20)

NOTE

Never switch off the power during playback/recording, while connected to the PC via USB, or while “Now Processing!” appears in the display.

20 (+) and (-) VOLUME buttons

These buttons adjust the output sound level of preview monitor and headphones.



21 HEADPHONE jack

Connect headphones.
→“Playing back” (p. 52)

22 Remote indicator

This indicator lights in different ways depending on whether the unit is in recording standby, is recording, or if there’s excessive input.
→“Adjusting recording levels using the remote control” (p. 46)

23 Optical receiving port for the remote control

Receives the operations from remote control.



24

25

24 Battery compartment

Batteries are inserted here when operating on battery power.
There is no need to insert batteries when using the AC adaptor.
→“Using batteries” (p. 21)

NOTE

Be sure to turn the R-09HR off before unplugging the AC adaptor.

25 Preview Monitor

This is an internal speaker used as a monitor.

* No sound is output from the preview monitor when headphones are connected. Also, no sound is output from the preview monitor during recording or recording standby to prevent feedback.

26 HOLD switch

Set the HOLD switch to the ON position so only the following buttons can be used and to help prevent accidental operations.

Buttons remaining operable when the HOLD switch is set to ON:

- [LIMITER/AGC Switch 27]
- [PLUG-IN POWER Switch 28]
- [LOW CUT Switch 29]
- [MICROPHONE GAIN Switch 30]

27 LIMITER/AGC (Auto Gain Control) switch

This switch turns the LIMITER or AUTO GAIN CONTROL on or off. Ordinarily, it can be set to off.

Switching between LIMITER and AUTO GAIN CONTROL is performed on the <Menu Screen> (p. 106).

ON	Turns the LIMITER or AUTO GAIN CONTROL ON.
OFF	Records input sounds without changing them.

28 PLUG-IN POWER switch

Slide this switch to the appropriate setting when you've connected a plug-in powered microphone to the [MIC Input Jack 16].

ON	Plug-in powered microphone is used.
OFF	Plug-in powered microphone is not used.

* When set to use plug-in powered microphones, using a dynamic microphone or a battery-powered microphone may cause damage.

29 LOW CUT switch

This switch turns LOW CUT on or off. It is usually set to off.

ON	Records while cutting the lower range portion of the input signal. Turn on when breath noise (the sound of breathing while recording a voice) or wind noise (when recording outside) may be a problem.
OFF	Records without cutting the lower range.

30 MIC GAIN switch

This switch changes the sensitivity with respect to the input from the microphone.

L (LOW)	Lowers the microphone sensitivity. Set to L when inputting loud sounds such as band performances.
H (HIGH)	Increases the microphone sensitivity. Set to H when inputting softer sounds such as meetings.



31 Bottom cover

When the cover is opened, the [USB Terminal 32] and [Memory Card Slot 33] are visible.

→“Preparing the memory card” (p. 25)

NOTE

Forcing the cover open may damage the unit.

32 USB terminal

This terminal is used to connect to a PC via the included USB cable. Songs recorded on the R-09HR can be transferred to the PC, and WAV or MP3 files can be copied from the PC to the R-09HR to be played.

→“Preparing the memory card” (p. 25)

MEMO

Since USB 2.0 (HI-SPEED USB) is supported, songs can be transferred quickly.

33 Memory card slot

This slot accepts SD memory cards.

→“SD Memory Card” (p. 28)

How to put on the dedicated cover

1. Orient as shown in the figure and insert the R-09HR into the cover.



2. To keep it from falling out, fasten the two button snaps shown by the arrows.



* If you're using a commercially available strap, pass it through the ring.

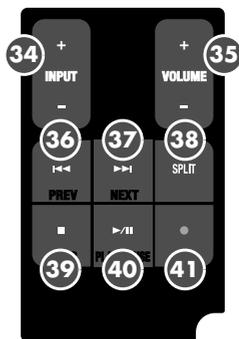


MEMO

Note that the screw hole on the back allows you to mount the unit on a commercially available photographer's tripod. Moreover, the screw hole is provided with cushioning that is designed to absorb vibrations. By absorbing vibrations from the floor or other objects, this feature helps prevent noise from being introduced.



Remote Control



34 (+) and (-) INPUT Level buttons

The INPUT level buttons adjust the level of the sound from the [Internal MIC **1**], [MIC Input Jack **16**], and [LINE IN Jack **17**]. Pressing the (+) input level button increases the input sound level. Pressing the (-) input level button decreases the input sound level.

35 (+) and (-) VOLUME buttons

These buttons adjust the output sound level of preview monitor and headphones.

36 PREV button (⏮)

The PREV button selects the beginning of the song or the previous song. If it is held down, the song rewinds while the button is pressed. It can be used during playback or while stopped. It is also used to move the cursor to the left in the display or to change the value of a selected item.

MEMO

→ "Basic operations" (p. 18)

Current Status	Operation
During a song	Moves to beginning of song
Beginning of a song	Moves to previous song
During a song, at the beginning of a song, or while stopped	Rewinds while button is pressed

37 NEXT button (►►)

The NEXT button selects the next song. If it is held down, the song fast forwards while the button is pressed.

It can be used during playback or while stopped.

It also functions as the right arrow for the cursor (moves the cursor to the right) and changes the value of a selected item.

MEMO

→“Basic operations” (p. 18)

Current Status	Operation
During a song	Moves to next song
Beginning of a song	Moves to next song
During a song, at the beginning of a song, or while stopped	Fast forwards while button is pressed

38 SPLIT button

When pressed during recording, the file is split at that location and saved.

39 STOP button (■)

The STOP button stops playback or recording. It is also used to move the cursor down in the display or to change the value of a selected item.

MEMO

→“Basic operations” (p. 18)

Current Status	Operation
Playing	Stops playback
Recording standby (Remote indicator blinks)	Releases from recording-standby mode
Recording (REC button lights up)	Stops recording

40 PLAY/PAUSE button (►/II)

The PLAY/PAUSE button starts playback. It can also pause playback or recording.

It is also used to move the cursor up in the display or to change the value of a selected item.

MEMO

→“Basic operations” (p. 18)

41 REC button (●)

The REC button is used to enter recording-standby mode or to start recording. It is also used to enter selected items.

MEMO

→“Basic operations” (p. 18)

Current Status	Operation
Stopped	Puts into recording-standby mode
Recording standby (Remote indicator blinks)	Starts recording

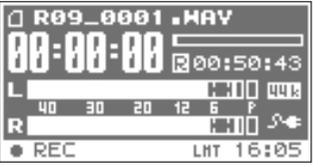
R-09HR screens and basic operations

The R-09HR screen

The <Main Screen> is shown when power to the R-09HR is turned on.

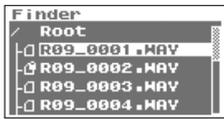
The <Finder Screen> and <Menu Screen> can be opened from the <Main Screen>.

<Main Screen>



This startup screen is shown after power is turned on. Songs can be recorded or played.

<Finder Screen>



This screen shows a song list and allows names to be edited and songs to be deleted or copied.

<Menu Screen>

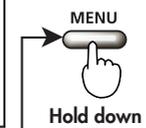
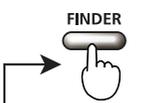


You can do things such as set the date and time, adjust the recording sound quality, adjust the brightness of the display, and perform initializations.

<USB Screen>



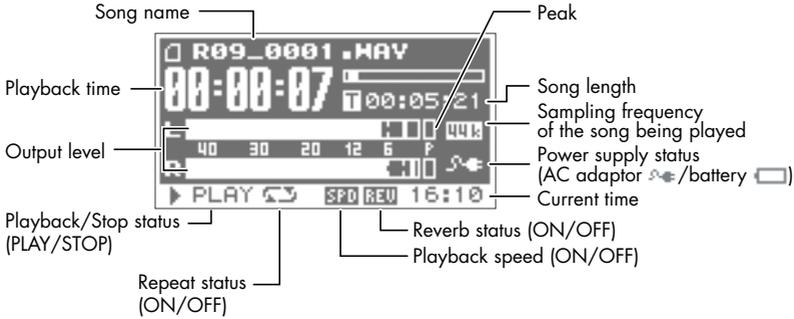
This screen is displayed when a PC is connected via USB. Songs can be copied (moved) between the R-09HR and PC.



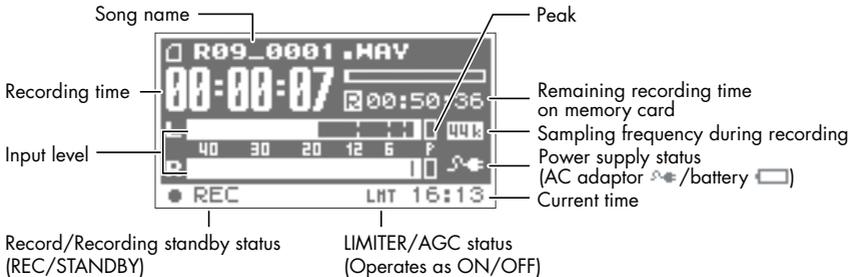
Information shown in the display

This section describes the main icons and information shown in the <Main Screen>.

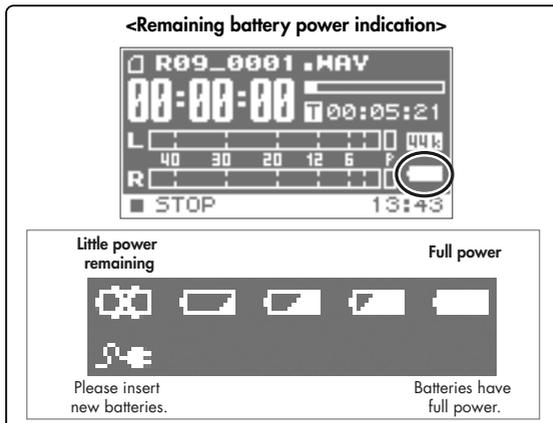
<Play/Stop>



<Record>

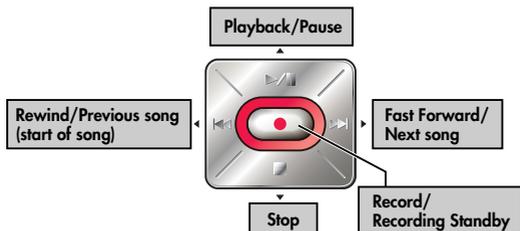


<Remaining battery power indication>

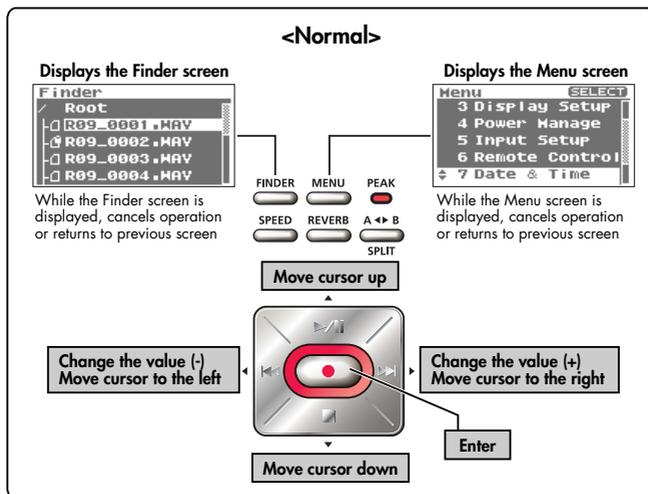


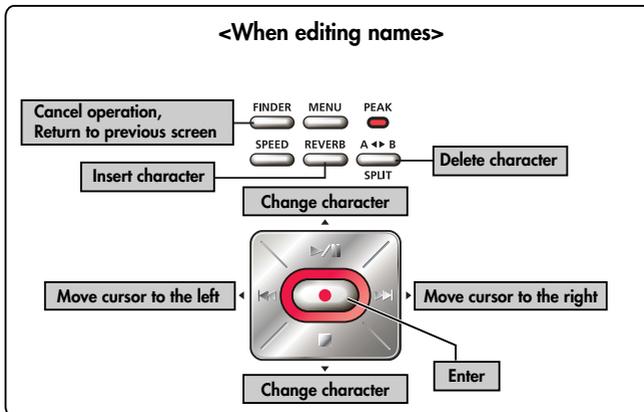
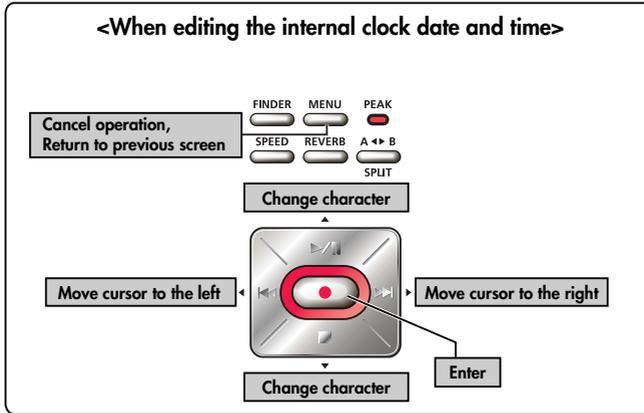
Basic operations

Recording and playback

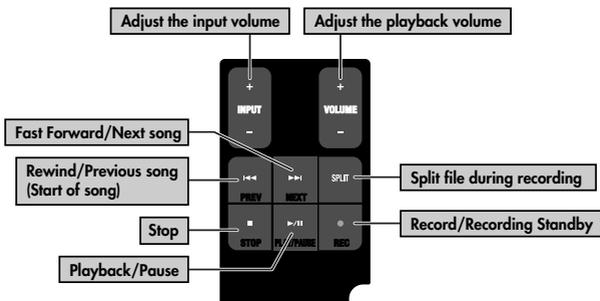


Selecting and entering





Remote Control Operations



Using the R-09HR

Turning power on/off

Using the AC adaptor

NOTE

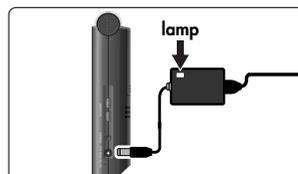
Be sure to use the AC adaptor when connecting to a PC.
If the batteries become exhausted while copying a song, the song may be corrupted.

1. Check that power is turned off.

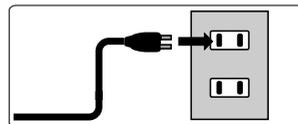
If the power is on, turn it off. Press and hold the [POWER switch] on the R-09HR to turn power on or off.

2. Plug the DC plug of the AC adaptor into the [AC Adapter Jack] on the R-09HR.

Place the AC adaptor so that its lamp light is on the top side.
(it lights up when connected to an AC outlet)

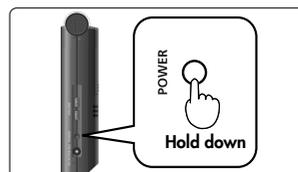


3. Plug the AC adaptor into an electrical power outlet.



4. Turn power on.

Pressing and holding down the [POWER switch] turns on the power and shows an R-09HR image in the display.
To turn off power, press and hold down the [POWER switch].



NOTE

- Be sure to use the AC adaptor supplied with this product.
- If the [HOLD Switch] is in the on position, no operations can be performed.
Be sure to slide it to the off position. (→ p. 12)

MEMO

- If the AC adaptor is connected while power is on, the power supply is drawn from the AC adaptor.
- You may still hear some sound when the power is switched on, but this is normal, and does not indicate a malfunction.

Using batteries

NOTE

Be sure to use the AC adaptor when connecting to a PC.
If the batteries become exhausted while copying a song, the song may be corrupted.

Batteries that can be used

- AA alkaline batteries (LR6)
- AA nickel metal hydride batteries (HR15/51)

NOTE

The R-09HR cannot recharge nickel metal hydride batteries. Please use a separately purchased battery charger.

1. Check that the power is turned off.

If the power is on, turn it off. Press and hold the [POWER switch] on the R-09HR to turn power on or off.

2. Open the battery case cover on the rear of the unit.

1. Turn the R-09HR over.
2. While gently pressing on the cover of the battery compartment, slide it upward.



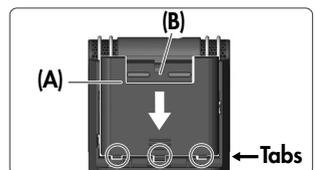
3. Insert the batteries.

Insert two AA batteries into the [Battery Compartment].
Be sure the positive and negative terminals are oriented correctly.



4. Close the battery case cover.

1. Align portion (A) of the cover with portion (B) of the recorder, then place the cover on the recorder.
2. Slide the cover downwards, and insert the cover's tabs into the main unit.

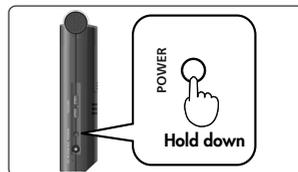


NOTE

Make sure to follow the procedure above when replacing the cover. You risk damaging the cover as well as the recorder itself if you insert the tabs first, then forcibly press the cover shut.

5. Turn power on.

Press and hold down the [POWER switch] to turn on the power.



6. Set the battery type.

Select the battery type (alkaline batteries or nickel metal hydride batteries) on the <Menu Screen>.

cf.

"Setting the battery type (Battery)" (p. 103)

Cautions when using batteries with the R-09HR

- Carefully follow the installation instructions for batteries, and make sure you observe the correct polarity.
- Avoid using new batteries together with used ones. In addition, avoid mixing different types of batteries.
- Remove the batteries whenever the unit is to remain unused for an extended period of time.
- If a battery has leaked, use a soft piece of cloth or paper towel to wipe all remnants of the discharge from the battery compartment. Then install new batteries. To avoid inflammation of the skin, make sure that none of the battery discharge gets onto your hands or skin. Exercise the utmost caution so that none of the discharge gets near your eyes. Immediately rinse the affected area with running water if any of the discharge has entered the eyes.
- When connecting to a PC via a USB cable, always use the AC adaptor to prevent power failures during connection.
- Never keep batteries together with metallic objects such as ballpoint pens, necklaces, hairpins, etc.

Remaining battery power indication

When the battery power becomes low, a low battery icon  is shown in the lower right of the display. Please replace the batteries as soon as possible.

If batteries with low power are used, the "Battery Low" message is displayed and all R-09HR functions will eventually stop.

cf.

"Message list" (p. 117)

Power saving feature

The R-09HR is equipped with a power saving feature designed to prevent the unnecessary consumption of power. If no operation is performed for a set amount of time, the display will be darkened or the power will be shut off according to the settings for the power saving feature.

cf.

Setting the power saving feature

- "Setting the time until the screen is darkened when no operations are performed for a set period of time (Display Timer)" (p. 100)
- "Turning off indicators when the display goes dark (Rec/Peak LED)" (p. 101)
- "Setting the time until the power turns off when no operations are performed for a set amount of time (Auto Power Off)" (p. 102)

Battery life

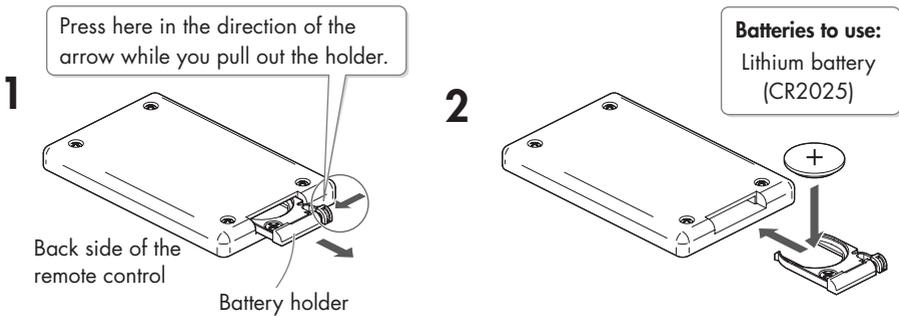
When using alkaline batteries

Continuous playback	approximately 5.5 hours (When using headphones)
Continuous recording	approximately 4.5 hours (When using internal microphone)

* The battery life indicated above is approximate. Battery life will vary depending on the environment in which you are using the R-09HR and your method of use.

Installing batteries in the remote control

Install a coin-type lithium battery (included) in the remote control.



1. Pull out the battery holder.

2. Insert a lithium battery (CR2025) as shown in the illustration.

3. Replace the battery holder.

Push it inward until it clicks into place.

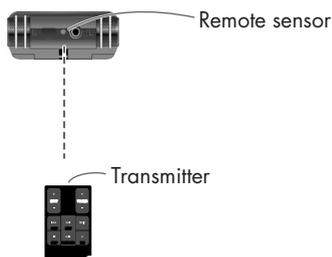
NOTE

Use only the specified type (CR2025) of lithium battery. Be sure to insert it as directed to ensure correct polarity.



Using the remote control

Point the remote control toward the R-09HR's sensor, and operate it within the specified operating range.



Remote control operating range

Distance: 4 meters

Angle: 30 degrees or less to the left and right of the receiver.

Precautions concerning use of the remote control

- The Remote Control cannot perform operations from two buttons at the same time.
- Even if the Remote Control is within the operating range, operation may not be possible because of obstacles or a bad angle.
- Malfunction may occur if used near a device that emits infrared light or if another infrared remote control is used.
- Battery life varies according to use. As the batteries become low, the operating range becomes limited. Please replace the batteries if this occurs.
- If you won't be using the remote control for a long period of time, you should remove the batteries.
- The response of the remote control may be affected if a strong light, such as a spot light, is shined at the remote sensor.
- Operations from remote control can be blocked. (→ p. 108)

Preparing the memory card

The R-09HR uses an SD memory card.

Inserting

Insert the supplied SD memory card.

■ Inserting

1. Check that the power is turned off.

If the power is on, turn it off. Press and hold the [POWER switch] on the R-09HR to turn power on or off.

2. Open the [Bottom Cover] of the unit.

Fold the [Bottom Cover] down using your finger to catch on the depression.

* Forcing the cover open may damage the unit.



3. Insert the memory card.

NOTE

- When inserting the memory card, make sure the front side of the card is facing up and insert the card slowly. If the card is forcibly inserted incorrectly, the R-09HR or the memory card may be damaged. Please exercise caution.
- Carefully insert the memory card all the way in—until it is firmly in place.

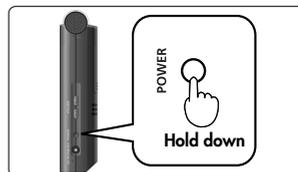


4. Close the [Bottom Cover].



5. Turn power on.

Press and hold down the [POWER switch] to turn on the power.



MEMO

When using a memory card with the R-09HR for the first time, the memory card must be formatted. Please format the memory card following the procedure in "Formatting" (p. 27). "SD Unformatted" is shown when an unformatted memory card is inserted into the R-09HR.

■ Removing

1. Turn off power to the R-09HR.

2. Open the [Bottom Cover].

3. Lightly push the memory card inward, then release it.

Remove the memory card after it pops out toward you.

NOTE

Never insert or remove a memory card while this unit's power is on. Doing so may corrupt the data on the memory card.

Formatting

A memory card must be formatted when using it with the R-09HR for the first time.

NOTE

- Be sure to format the memory card on the R-09HR. Cards formatted on devices other than the R-09HR may not operate properly on the R-09HR.
- The demo songs will be deleted if the SD Memory Card is formatted. You may want to create a backup of the demo songs on a PC. See "Downloading songs to a PC" (p. 67) for details on making a backup.

TERM

Formatting

Formatting refers to initializing a memory card according to a specified data storage format. If a memory card with recordings is formatted, all the recorded songs are deleted.

1. Check that the memory card is inserted.

Check that the memory card to be formatted is inserted in the [Memory Card Slot] on the R-09HR.



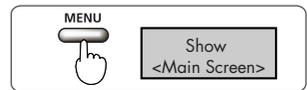
"Inserting" (p. 25)

2. Show the <Menu Screen>.

Press the [MENU Button] to show the <Menu Screen>.

MEMO

To cancel the operation, press the [MENU Button].
You're returned to the previous screen.

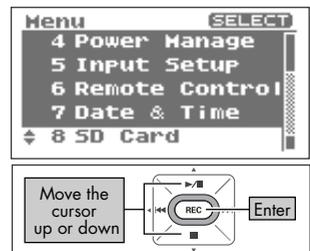


3. Select "SD Card."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "SD Card," then press the [REC Button].

MEMO

To cancel the operation, press the [MENU Button].
You're returned to the previous screen.

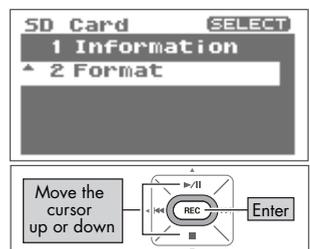


4. Select "Format."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Format," then press the [REC Button].

MEMO

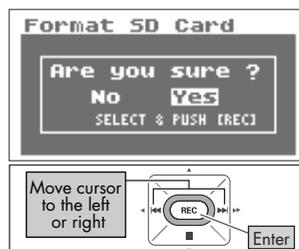
To cancel, press the [MENU Button].
You're returned to the previous screen.



5. Select "Yes."

A confirmation screen is shown.

Use the [PREV button ◀] and [NEXT button ▶] to select "Yes," then press the [REC Button].



NOTE

Do not remove the memory card during formatting. The storage area on the memory card may become damaged.

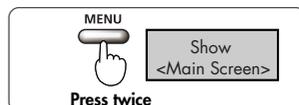


When "Completed!" is shown, formatting has completed.



6. Return to <Main Screen>.

Press the [MENU Button] twice to return to the <Main Screen>.



SD Memory Card

NOTE

- The R-09HR supports SDHC memory cards.
- Some memory card types or memory cards from some manufacturers may not record or play back properly on the R-09HR.
- Never insert or remove a memory card while this unit's power is on. Doing so may corrupt the data on the memory card.
- Carefully insert the memory card all the way in—until it is firmly in place. Do not force the card into the slot.

MEMO

The memory card write protect feature (LOCK)

The contents of the memory card can be protected by write protecting it. To write protect a card, slide the write protect switch on the side of the memory card to the "LOCK" position. Unlock write protect to delete data on the card.



Setting time and date

When turning on power, please follow the procedure below to set the internal clock. The time and date set here are used as information (time stamp) for the recorded songs.

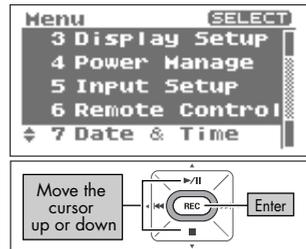
1. Show the <Menu Screen>.

Press and hold down the [MENU Button] to show the <Menu Screen>.



2. Select "Date & Time."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Date & Time," then press the [REC Button].



NOTE

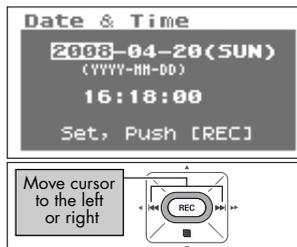
When the power is on, the internal clock draws power from the AC adaptor or the batteries. When the power is off, the internal clock will run temporarily on the power stored in the main unit. However, if the power is off for several days, the internal clock settings return to the original settings (initial status). When power is turned on in initial status, the message "Clock Initialized" is shown.

If "Clock Initialized" is shown, please reset the date and time.

3. Edit the time and date.

1. Move the cursor.

Use the [PREV button ◀] and [NEXT button ▶] to move the cursor to the right or left.



2. Edit the date and time.

Move the cursor over the character to change, use the [PLAY Button ▲] and [STOP Button ▼] to change the date and time, then press the [REC Button] to enter the changes.



4. Return to <Main Screen>.

Press the [MENU Button].



Recording

Recording with the [Internal MIC].

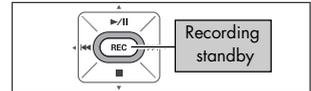
NOTE

When using the [Internal MIC], do not connect anything to the [MIC Input Jack] or [LINE IN Jack]. If a microphone or cable is connected to the [MIC Input Jack] or [LINE IN Jack], input from these jacks take precedence, and input from the [Internal MIC] is disabled.

1. Adjust the input level.

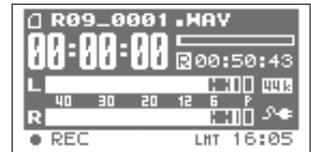
1. Enter the recording-standby mode.

Press the [REC Button] while the <Main Screen> is showing. The [REC Indicator] blinks. The unit is in recording-standby mode.



2. Play the song to record into the microphone.

The level meter indicates the loudness of the input to R-09HR.



3. While the sound is being output, press the [(+) (-) Input Level Button] to adjust the volume gradually.

Adjust so that the level meter moves as far to the right as possible without the [PEAK Indicator] turning on. If the [PEAK Indicator] stays lit, then the input level is too high, and the recorded sound becomes distorted.

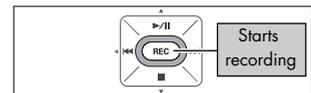


cf.

See "Adjusting recording levels" (p. 45) for details on adjusting the input level.

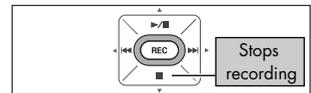
2. Press the [REC Button] to begin recording.

The [REC Indicator] lights up.



3. Press the [STOP Button ■] to stop recording.

The [REC Indicator] goes out, and the recorded song is shown in the display.



NOTE

Power cannot be turned off during recording.

cf.

See "Configuring recording" (p. 34) for details on recording settings.

Playing back

Listen to the recorded voice with the preview monitor.

1. Press the [PLAY/PAUSE Button ►/II] to begin playback.

When the [PLAY/PAUSE Button ►/II] is pressed, the song shown in the display begins to play.

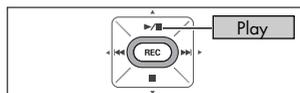
MEMO

When "No Song" is shown in the display, there is no song that the R-09HR can play.

cf.

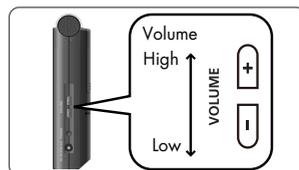
"Manipulating songs and folders" (p. 72)

"Playing sound from the preview monitor (Preview Monitor)" (p. 94)



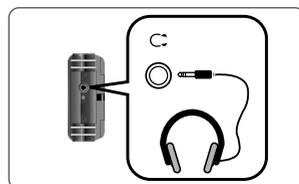
2. Adjust the volume.

Use [(+) and (-) VOLUME buttons] to set the volume to a comfortable level.



Using headphones

No sound is played from the monitor speaker when headphones are connected.



Rewind/Fast Forward

If the [PREV button ◀◀] is held down during playback, the recording rewinds. If the [NEXT button ▶▶] is held down during playback, the recording fast forwards. Once these buttons are released, playback starts again.

cf.

See "Playing back" (p. 52) for details on playback.

Deleting

Delete the recorded voice.

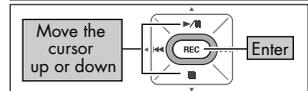
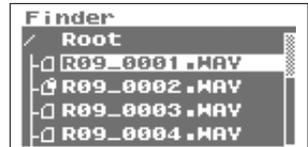
1. Show the <Finder Screen>.

Press and hold down the [FINDER Button] to show the <Finder Screen>.



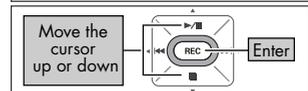
2. Select the song.

Use the [PLAY Button ▲] and [STOP Button ▼] to select the song to delete, then press the [REC Button].



3. Select "Delete."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Delete," then press the [REC Button].



4. Press the [REC Button] to delete the song.

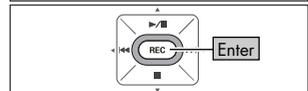
A confirmation screen is shown. Press the [REC Button] to delete the song.

MEMO

To cancel, press the [FINDER Button] before pressing the [REC Button].

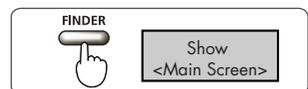
NOTE

Do not turn off power while deleting.



5. Return to <Main Screen>.

Press the [FINDER Button].



Recording

Configuring recording

You can set the sound quality to use when recording.

Improving the sound quality increases the song size and decreases the recording time.

When making a final recording of a performance, it is best to use WAV 16 bit or 24 bit to give priority to sound quality.

MEMO

When making an audio CD, set the sampling frequency to 44.1 kHz and the recording mode to WAV 16 bit.

Test recordings and records of meetings do not usually require sound quality as good as that. For longer recordings that give priority to song size, use MP3 128 kbps at 44.1 kHz.

Decide whether the sound quality or the recording time is to be given precedence, and make the settings accordingly.

Sampling frequency

(Default value is bold)

Sampling frequency values	44.1 kHz
	48 kHz
	88.2 kHz
	96.0 kHz

The larger value provides better sound quality.

When making a digital recording, the sound level is measured periodically, and that level is made into a digital signal. The sampling frequency is a value that defines the time interval and is expressed in kHz. A high sampling frequency is needed to faithfully reproduce high sounds.

MEMO

- Higher sampling frequencies result in larger song sizes and shorter recording times.
- When using the recording as an audio track for a video, we recommend setting the frequency to 48 kHz.
- The sampling frequency of a recorded song cannot be changed on the R-09HR.
- When the sampling frequency is either 88.2 kHz or 96.0 kHz, MP3 cannot be selected with the Recording mode.

Recording mode

Recording mode	MP3 64 kbps
	MP3 96 kbps
	MP3 128 kbps
	MP3 160 kbps
	MP3 192 kbps
	MP3 224 kbps
	MP3 320 kbps
	WAV 16 bit
	WAV 24 bit

■ WAV versus MP3

WAV songs (*.WAV) store all sound information without compression; MP3 songs (*.MP3) store songs using compression. Consequently, WAV songs have a better sound quality recording than MP3 songs. On the other hand, MP3 reduce data volume by removing frequencies that are hard for the human ear to hear.

MEMO

When recording with MP3, the song size is smaller than the WAV setting recording, and a longer recording can be made.

■ bps and bit

The higher the value, the better the sound quality.

The MP3 bps is the bit rate unit (bits per second).

The bit rate indicates data transfer rates in number of bits sent per second.

The WAV bit is used to represent the size of a sample.

The sample size indicates the amount of precision used in capturing subtle changes in the sound. Larger sampling size values allow for more details of the sound to be expressed, and result in sound that is smoother and more natural.

MEMO

- Higher bps and bit values result in larger song sizes and shorter recording times.
- Software such as Windows Media Player cannot play back 24 bit WAV files.

NOTE

MP3 can be selected only when the sampling frequency is 44.1 kHz or 48 kHz.

Estimated recording times

The approximate recording time for memory cards is shown below.

Recording time (estimate)

Unit: minutes

Setting	Memory card size				
	512MB	1GB	2GB	4GB	8GB
WAVE (24bit/96kHz)	13	27	55	110	220
WAVE (24bit/88.2kHz)	15	30	60	120	240
WAVE (24bit/48kHz)	27	54	110	220	440
WAVE (24bit/44.1kHz)	29	59	120	240	480
WAVE (16bit/96kHz)	20	40	80	160	320
WAVE (16bit/88.2kHz)	22	44	88	176	352
WAVE (16bit/48kHz)	40	81	166	332	664
WAVE (16bit/44.1kHz)	44	88	180	360	720
MP3 320kbps	196	392	797	1540	3080
MP3 128kbps	490	980	1993	3990	7980

NOTE

The above recording times are estimates. The times may change depending on the card specifications. Furthermore, the actual recording time is shorter when there are multiple files.

Recording instruments and voice

Using the internal microphones

The internal microphone is a stereo microphone. The sound picked up by the microphone on the right side of the R-09HR is recorded on the right channel (R), while the sound from the microphone on the left captures is recorded on the left channel (L).

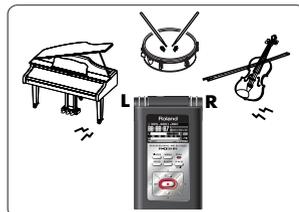
NOTE

- To prevent feedback when recording with a microphone, do not connect speakers.
- If a microphone or other device is connected to the [LINE IN Jack] or [MIC Input Jack], the [Internal Mic] cannot be used. When using the [Internal MIC], do not connect anything to the [MIC Jack] or [LINE IN Jack].

MEMO

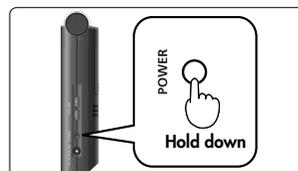
Set monitoring on when recording to monitor the sound through headphones while recording.

→ "Setting whether to monitor sound while recording" (p. 104)



1. Turn on power to the R-09HR.

Turn on power to the R-09HR. See "Turning power on/off" (p. 20)



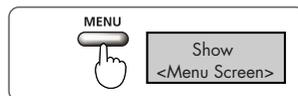
2. Set the sampling frequency.

cf. 

“Configuring recording” (p. 34)

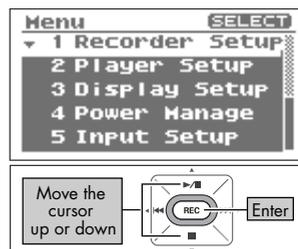
1. Show the <Menu Screen>.

Press the [MENU Button] to show the <Menu Screen>.



2. Select “Recorder Setup.”

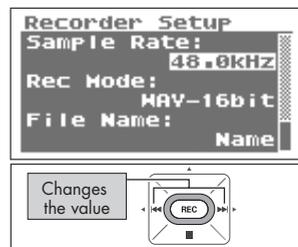
Use the [PLAY Button ▲] and [STOP Button ▼] to select “Recorder Setup,” then press the [REC Button].



3. Select the sampling frequency (Sample Rate).

Use the [PREV button ◀] and [NEXT button ▶] to change the Sample Rate value.

Sampling frequency values	44.1 kHz
	48 kHz
	88.2 kHz
	96 kHz



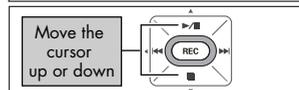
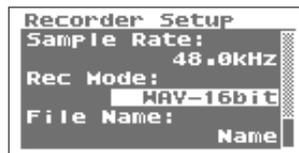
3. Set the recording mode.

cf.

"Configuring recording" (p. 34)

1. Select "Rec Mode."

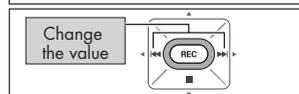
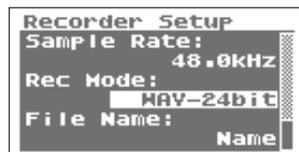
Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Rec Mode line.



2. Select the recording mode.

Use the [PREV button ◀] and [NEXT button ▶] to change the Rec Mode value.

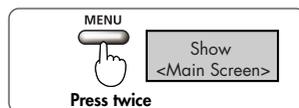
Recording mode	MP3 64 kbps
	MP3 96 kbps
	MP3 128 kbps
	MP3 160 kbps
	MP3 192 kbps
	MP3 224 kbps
	MP3 320 kbps
	WAV 16 bit
	WAV 24 bit



NOTE

MP3 cannot be selected when the sampling frequency is 88.2 kHz or 96 kHz.

4. Press the [MENU Button] twice to return to the <Main Screen>.



5. Adjust the input level.

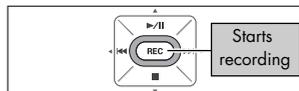
Adjust the volume for the recorded sound.

Follow the procedures in "Adjusting recording levels" (p. 45) to adjust the level.

6. Press the [REC Button] to begin recording.

Press the [REC Button] in recording-standby mode (while the [REC Indicator] is blinking).

The [REC Indicator] lights up, and recording begins.



MEMO

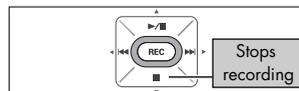
- Recording can also be started by pressing the [PLAY/PAUSE Button ▶/||].
- If you slide the HOLD switch to the ON position after starting recording, the recording will not stop nor will the recording level change even if a button is accidentally pressed.

NOTE

- If a microphone or other device is connected to the [LINE IN Jack] or [MIC Input Jack], the [Internal Mic] cannot be used. When using the [Internal MIC], do not connect anything to the [MIC Jack] or [LINE IN Jack].
- If the [Input Level Button] is used in recording-standby mode or during recording, the input level will change. Be careful to not mistakenly use the [Input Level Button].
- Power cannot be turned off during recording. First stop the recording, then turn off the power.

7. Press the [STOP Button ■] to stop recording.

The [REC Indicator] goes out.



MEMO

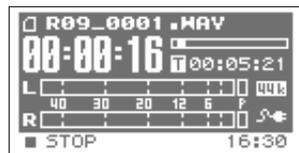
Press the [PLAY/PAUSE Button ▶/||] to pause.

Press the [PLAY/PAUSE Button ▶/||] again to cancel the pause and restart recording.

The display shows the recorded song.

MEMO

- The song name is automatically created, e.g., R09_0001.WAV. The four-digit number forming the latter part of the name is arrived at by adding one to highest-numbered existing song.
- When File Name is set to "Date," the date and time of the recording becomes the song name.



8. Play it back.

Press the [PLAY/PAUSE Button ▶/||] to listen to the just-recorded song.

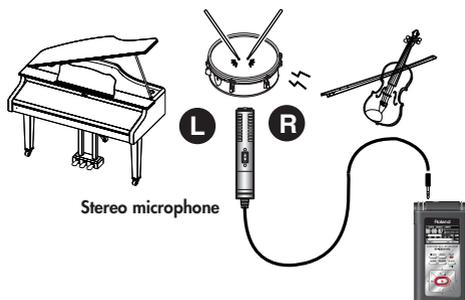


cf.

"Playing back songs" (p. 52)

Using external microphones

The R-09HR can use a dynamic microphone or a condenser microphone, such as the type that are connected to the microphone jack of a PC.

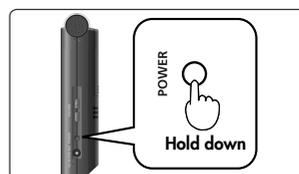


NOTE

- If a cable is connected to the [LINE IN Jack], then the input from the [MIC Input Jack] is ignored. Do not connect anything to the [LINE IN Jack].
- To prevent feedback when recording with a microphone, do not use speakers.
- To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

1. Turn on power to the R-09HR.

Turn on power to the R-09HR. See "Turning power on/off" (p. 20)



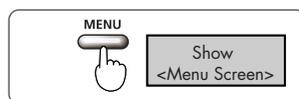
2. Set the sampling frequency.

cf. ➔

"Configuring recording" (p. 34)

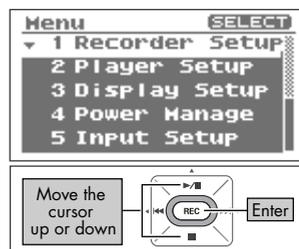
1. Show the <Menu Screen>.

Press the [MENU Button] to show the <Menu Screen>.



2. Select "Recorder Setup."

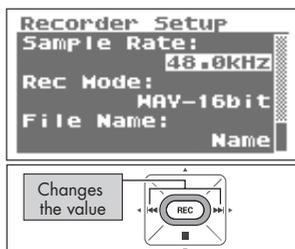
Use the [PLAY Button ▲] and [STOP Button ▼] to select "Recorder Setup," then press the [REC Button].



3. Select the sampling frequency (Sample Rate).

Use the [PREV button ◀] and [NEXT button ▶] to change the Sample Rate value.

Sampling frequency values	44.1 kHz
	48 kHz
	88.2 kHz
	96 kHz



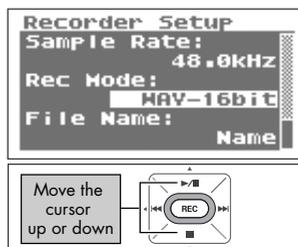
3. Set the recording mode.

cf. ➔

"Configuring recording" (p. 34)

1. Select "Rec Mode."

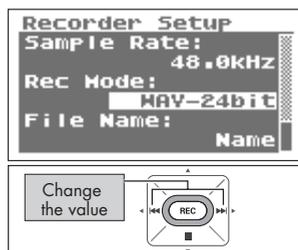
Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Rec Mode line.



2. Select the recording mode.

Use the [PREV button ◀] and [NEXT button ▶] to change the Rec Mode value.

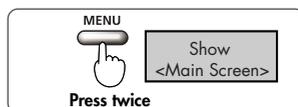
Recording mode	MP3 64 kbps
	MP3 96 kbps
	MP3 128 kbps
	MP3 160 kbps
	MP3 192 kbps
	MP3 224 kbps
	MP3 320 kbps
	WAV 16 bit
	WAV 24 bit



NOTE

MP3 cannot be selected when the sampling frequency is 88.2 kHz or 96 kHz.

4. Press the [MENU Button] twice to return to the <Main Screen>.



5. Set the type of microphone being used.

Dynamic microphone	Switch OFF the [PLUG-IN POWER Switch] on the back.
Condenser microphone powered by self-contained battery	
Plug-in powered condenser microphone	Switch ON the [PLUG-IN POWER Switch] on the back.

Set the [PLUG-IN POWER Switch] to the type of microphone connected to the [MIC Input Jack].

NOTE

- When connecting a dynamic microphone or a battery-powered microphone, be sure to use the [PLUG-IN POWER Switch] to set to off. Damage may result if the wrong setting is used.
- If a cable is connected to the [LINE IN Jack], then no sound is input through the [MIC Input Jack].

TERM

Dynamic microphone

The durable dynamic microphone is suitable for vocal or instrumental recordings. It does not require a power supply.

Condenser microphone

The sensitive condenser microphone is suitable for recording quiet sounds such as live instrumentals or meetings. It requires a power supply from either batteries or plug-in power.

Stereo	Use the <Menu Screen> to set the external microphone type to stereo (p. 105).
Monaural	Use the <Menu Screen> to set the external microphone type to monaural (p. 105).

MEMO

Only the L channel is recorded if a monaural microphone is used when the external microphone type is set to stereo. When set to monaural, the same sound (stereo) is recorded to the L and R channels.

6. Connect the microphone.

Connect a microphone to the [MIC Input Jack] on the R-09HR.

NOTE

To monitor the sound while recording, connect headphones to the [HEADPHONE jack]. Feedback may occur when external speakers are connected, so please do not use speakers.

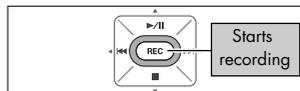
7. Adjust the input level.

Adjust the volume for the recorded sound.

Follow the procedures in "Adjusting recording levels" (p. 45) to adjust the level.

8. Press the [REC Button].

Press the [REC Button] while in recording-standby mode (while the [REC Indicator] is blinking). The [REC Indicator] lights up, and recording begins.



MEMO

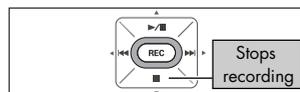
- Recording can also be started by pressing the [PLAY/PAUSE Button ▶/II].
- If you slide the HOLD switch to the ON position after starting a recording, the recording will not stop nor will the recording level change even if a button is accidentally pressed.
- When the [SPLIT Button] is pressed during recording, the file is split at that location and saved (p. 51).

NOTE

- If the [Input Level Button] is used during recording, the input level will change. Be careful to not mistakenly use the [Input Level Button].
- Power cannot be turned off during recording. First stop the recording, then turn off the power.

9. Press the [STOP Button ■] to stop recording.

The [REC Indicator] goes out.



MEMO

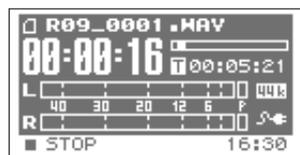
Press the [PLAY/PAUSE Button ▶/II] to pause.

Press the [PLAY/PAUSE Button ▶/II] again to cancel the pause and restart recording.

The display shows the recorded song.

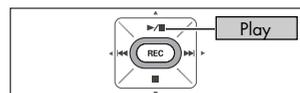
MEMO

- The song name is automatically created, e.g., R09_0001.WAV. The four-digit number forming the latter part of the name is arrived at by adding one to highest-numbered existing song.
- When File Name is set to "Date," the date and time of the recording becomes the song name.



10. Play it back.

Press the [PLAY/PAUSE Button ▶/II] to listen to the just-recorded song.



cf.

"Playing back songs" (p. 52)

Adjusting recording levels

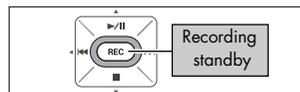
The R-09HR is designed to record a wide variety of sounds, but it can also make high-quality recordings when a recording level (volume) appropriate for the sound to be recorded is set. Level settings should be the highest input level (volume) that has no distortion. This principle is the same for both the [Internal Microphone] and external microphones.

1. Point the microphone used for recording.

Point the R-09HR microphone toward the target for recording.

2. Enter recording-standby mode.

Press the [REC Button] while the <Main Screen> is showing. The [REC Indicator] blinks. The unit is in recording-standby mode.

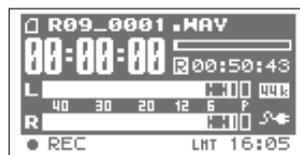


MEMO

Recording has not started when in this state.

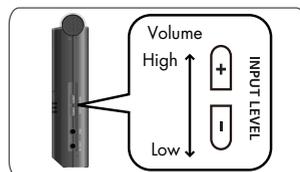
3. Play the song to record into the microphone.

The level meter indicates the loudness of the input to R-09HR.



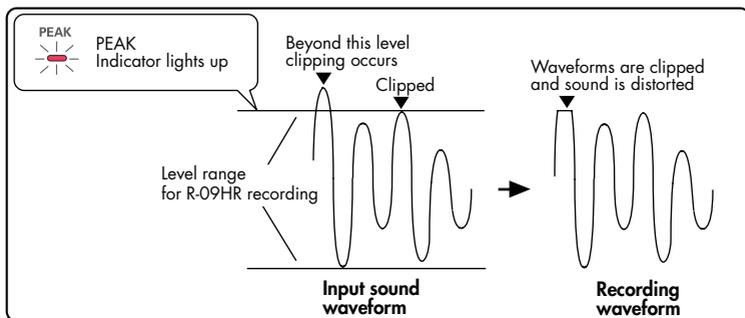
4. Adjust the volume.

Adjust the input volume gradually by pressing the [Input Level Button] while the sound is playing.



MEMO

The level meter indicates when louder sounds are being recorded by growing toward the right. Adjust by pressing [Input Level Button] to allow for the loudest recording. However, the input volume is too loud when the [PEAK Indicator] lights up. When the [PEAK Indicator] is lit, the input volume has reached the maximum input volume that R-09HR can record (clipping status), and any louder sounds cannot be recorded with the current volume setting. The resulting recording will be severely distorted.



Use the [Input Level Button] to adjust the volume so that the [PEAK Indicator] does not light up even when the loudest sound is produced by the target. Doing this prevents clipping during the loudest parts of a song or during instrumental passages played fortissimo.

Once the level is set, press the [REC Button] once more to start recording.

MEMO

- Press the [STOP Button ■] to stop recording and return to the <Main Menu>. Because the level settings are saved, press the [REC Button] again to start recording with the same input level.
- Some noise may be heard when the input level is being adjusted with the [Input Level Buttons]. This is not a malfunction.

■ Adjusting recording levels using the remote control

The recording level can be adjusted using the remote indicator.

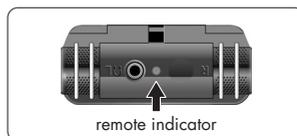
The remote indicator indicates either recording-standby mode or excessive input by the way it blinks.

1. Position the microphone so it faces the sound you intend to record.

Point the R-09HR's microphone toward the target for recording.

2. Enter recording-standby mode.

When the [REC Button] of the remote control on the [Main Screen] is pressed, the remote indicator blinks slowly, and the unit enters recording-standby mode.

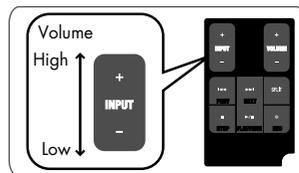
**MEMO**

Recording has not yet started while in this state.

3. Play the sound to record into the microphone.

4. Adjust the volume.

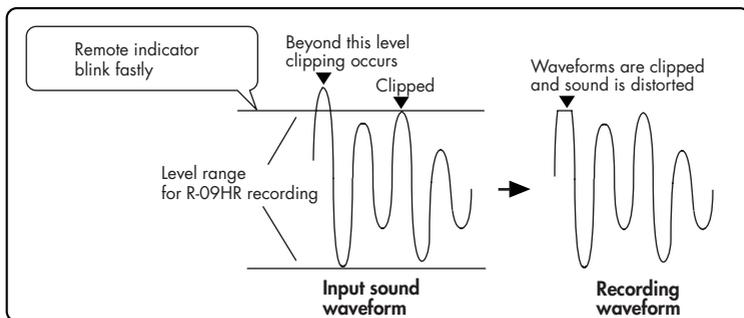
Adjust the input volume gradually by pressing the [Input Level Buttons] on the remote while the sound is playing.



MEMO

The further to the right the level meter moves, the greater the volume of the audio that's being recorded. Adjust by pressing the [Input Level Buttons] to allow for the loudest recording. However, when the remote indicator blinks faster than usual, the input volume is too loud. The remote indicator blinks at a fast rate when the input volume has reached the maximum input volume that the R-09HR can record (clipping stage), and any louder sounds cannot be recorded at the original volume.

In such situations, the resulting recording will be severely distorted.



Use the [Input Level Buttons] to adjust the volume so that the remote indicator does not blink faster (clipping stage is not reached) even when the loudest sound is produced by the recording target. Doing this prevents clipping during the loudest parts of a song or during instrumental passages played fortissimo.

Once the level setting is finished, press the [REC Button] on the remote control once more to start recording.

MEMO

- Press the [STOP Button ■] to stop the recording. Because the level settings are maintained, the [REC Button] can be pressed again to start recording at the same input level.
- Some noise may be heard when the input level is being adjusted with the [Input Level Buttons]. This is not a malfunction.

Recording from cassettes or CDs

The R-09HR can be used for recording instrumental performances and taking voice memos, but it can also be used to record cassettes or CDs using the [LINE IN Jack].

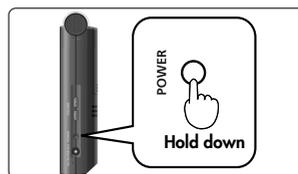
NOTE

If a device or cable is connected to the [LINE IN Jack], input from the microphones is disabled. Therefore, it is not possible to mix microphone and line input during recording. If there is sound input via both the [LINE IN Jack] and the [MIC Input Jack], only the sound from the line input is recorded.

This example describes recording from a CD player to the R-09HR.

1. Turn on power to the R-09HR.

Turn on the R-09HR's power. See "Turning power on/off" (p. 20).



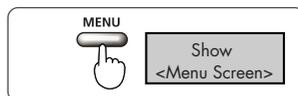
2. Set the sampling frequency.

cf. ➤

"Configuring recording" (p. 34)

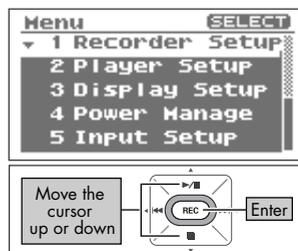
1. Show the <Menu Screen>.

Press the [MENU Button] to show the <Menu Screen>.



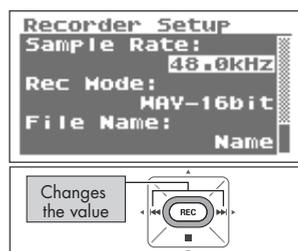
2. Select "Recorder Setup."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Recorder Setup," then press the [REC Button].



3. Select the sampling frequency (Sample Rate).

Use the [PREV button ◀] and [NEXT button ▶] to change the Sample Rate value.



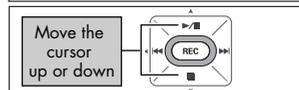
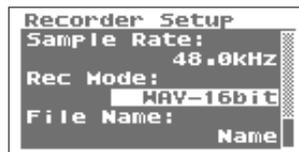
3. Set the recording mode.

cf. ➤

“Configuring recording” (p. 34)

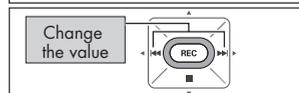
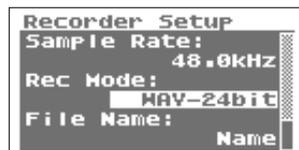
1. Select “Rec Mode.”

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Rec Mode line.

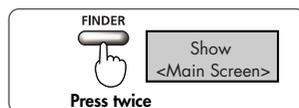


2. Select the recording mode.

Use the [PREV button ◀] and [NEXT button ▶] to change the Rec Mode value.

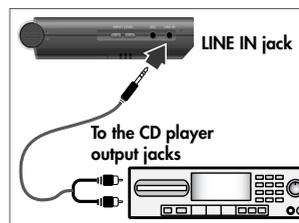


3. Press the [FINDER Button] twice to return to the <Main Screen>.



4. Connect the CD player.

Use an audio cable to connect the line out jack on the CD player to the [LINE IN Jack] on the R-09HR.



5. Adjust the input level.

Adjust the input level while playing the song to be recorded on the CD player.

After adjusting the input level, rewind the song to be recorded to the start.

cf. ➤

“Adjusting recording levels” (p. 45)

6. Press the [REC Button] to begin recording.

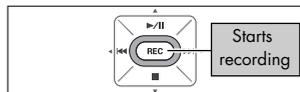
Press the [REC Button] while in recording-standby mode (the [REC Indicator] blinks). The [REC Indicator] lights up, and recording begins.

MEMO

Recording can also be started by pressing the [PLAY/PAUSE Button].

NOTE

If the [Input Level Button] is used during recording, the input level will change. Be careful to not mistakenly use the [Input Level Button].



7. Press the play button on the CD player.

The song playing on the CD player is recorded on the R-09HR. Waiting until the song finishes playing.

8. Press the [STOP Button ■] to stop recording.

The [REC Indicator] goes out.

MEMO

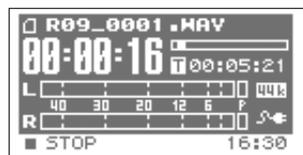
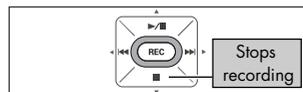
Press the [PLAY/PAUSE Button ►/II] to pause.

Press the [PLAY/PAUSE Button ►/II] again to cancel the pause and restart recording.

The display shows the recorded song.

MEMO

- A song name (such as "R09_0001.WAV") is automatically created. The four-digit number forming the latter part of the name is arrived at by adding one to highest-numbered existing song.
- When File Name is set to "Date," the date and time of the recording becomes the song name.

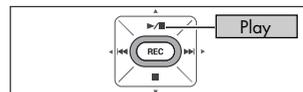


9. Play it back.

Press the [PLAY/PAUSE Button ►/II] to listen to the just-recorded song.

cf. ➔

"Playing back songs" (p. 52)



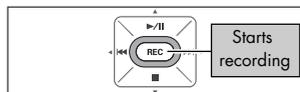
Splitting Files while Recording (Split)

A file can be split during recording.

When a file is split, playback can start from the split location.

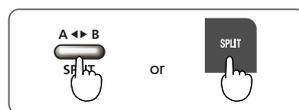
When carrying out long recordings, you may find it convenient to split the file at places that will need to be located later.

1. Start recording.

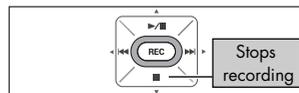


2. Press the [SPLIT Button].

The file is split at the location where the button is pressed.



3. Finish the recording.



NOTE

- In rare cases, the recording may be interrupted due to the specifications of the memory card.
- Although there won't be any interruptions in the recording, when carrying out playback on the R-09HR, the files before and after cannot be played without interruptions (gapless recording).
- File splitting becomes possible after a file has more than two seconds of recording. File splitting cannot be performed on an interval of less than two seconds.
- The sound of the button clicking may be recorded when a file is split by pressing the button on the R-09HR unit while recording with the internal microphone. Please use the remote control in such situations.

Playing back

Playing back songs

Use the [PREV button ◀◀] and [NEXT button ▶▶] to select a song to play, then press the [Play Button ▶/||] to start playback. Sound is played from the monitor speaker.

cf. ➤

“Song types that can be played” (p. 66)



1. Show the <Main Screen>.

If the <Main Screen> is not showing, press the [FINDER Button] until the <Main Screen> appears.

MEMO

How many times the [FINDER Button] needs to be pressed depends on the screen that is showing.



2. Use the [PREV button ◀◀] and [NEXT button ▶▶] to select the song to play.

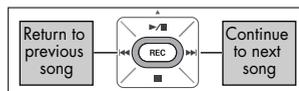
Press the [PREV button ◀◀] to move back one song at a time. Press the [NEXT button ▶▶] to move forward one song at a time.

MEMO

When “No Song” is shown, there is no song in the current folder that the R-09HR can play.
When “No Card” is shown, there is no memory card in place.

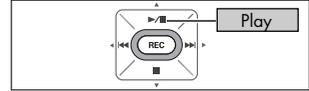
cf. ➤

“Manipulating songs and folders” (p. 72)

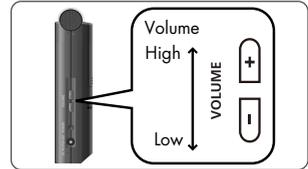


3. Play back the song.

When the [PLAY Button ►/||] is pressed, the song shown in the display begins to play.



4. Use the [(+) and (-) OUTPUT VOLUME buttons] to set the volume to a comfortable loudness.



MEMO

• The order of songs

The songs are shown in the order described below. They are not shown in the order in which they were recorded.

(Space) ! # \$ % & ' () + , - . 0 1 2 3 4 5 6 7 8 9 ; = @
 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
 a b c d e f g h i j k l m n o p q r s t u v w x y z { }

- Song names beginning with a period (".") are ignored and are not shown.
- Any songs with an extension other than .WAV or .MP3 are ignored and are not shown.
- The song names shown in the display do not support MP3 ID3 tagging.

cf.

See "Song types that can be played" (p. 66) for songs that can be played back on the R-09HR.

■ Demo Songs

The SD Memory Card has demo songs recorded on it.

- With the demo songs on the SD Memory Card, the recording time is reduced by the space occupied by the demo songs.
- The demo songs will be deleted if the SD Memory Card is formatted. You may want to create a backup of the demo songs on a PC. See "Downloading songs to a PC" (p. 67) for details on making a backup.

* Use of the song data supplied with this product for any purpose other than private, personal enjoyment without the permission of the copyright holder is prohibited by law. Additionally, this data must not be copied, nor used in a secondary copyrighted work without the permission of the copyright holder.

Connecting headphones and speakers

Connect headphones or speakers to listen to playback.



MEMO

- No sound is played from the R-09HR's preview monitor when headphones or speakers are connected to the [Headphone Jack].
- You may still hear some sound when the power is switched on, but this is normal, and does not indicate a malfunction.

NOTE

To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

When connecting speakers

Turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

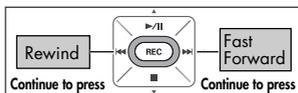
1. Turn off power to the R-09HR.
2. Turn the volume of the speakers all the way down and then turn off the power.
3. Connect the speakers.
Only speakers with internal amplifiers can be connected.
Use an audio cable to connect the line out jack on the speaker to the [Headphone Jack] on the R-09HR.
4. Turn on power to the R-09HR.
5. Turn on power to the speakers, and gradually increase the volume to the desired level.

Rewinding and fast forwarding

The song rewinds while the [PREV Button ◀◀] is pressed during playback; the song fast forwards while the [NEXT Button ▶▶] is pressed during playback. Once these buttons are released, playback starts again.

MEMO

If the buttons are held down continuously, the rewind or fast forward speed increases.



Rewinding or fast forwarding during playback

NOTE

When rewinding or fast forwarding during playback a song, the rewind or fast forward operation on some memory cards may stop because the rate that the data can be read is too slow.

If this happens, press the [STOP Button ■] once to end playback. Then start playback again.

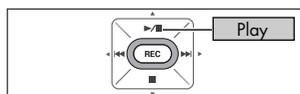
Repeated playback of a selected section

Play back a specific section in a song repeatedly.
A section can be played repeatedly to check the recording.



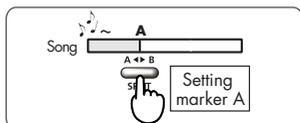
1. Play back.

When the [PLAY Button ►/||] is pressed, the song shown in the display begins to play.



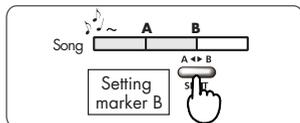
2. Set the start position (marker A).

Press the [AB REPEAT Button] once during playback.
That position becomes the start position (marker A) for the playback loop.

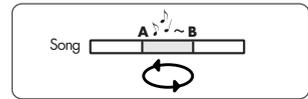


3. Set the end position (marker B).

Press the [AB REPEAT Button] again.
That position becomes the end position (marker B) for the playback loop.



The section set in steps 1 and 2 (A-B) is played back repeatedly. To cancel repeat playback, press the [AB REPEAT Button] again.



Cautions during setting

- If marker B is not set after setting marker A and playback continues to the end of the song, the section between marker A and the end of the song is repeated.
- The repeat settings are cancelled if the [PREV button ◀◀] or [NEXT button ▶▶] are used to move within a song.

■ Canceling the settings

- When the [AB REPEAT Button] is pressed with both the A and B markers set, the settings for the A and B markers are cancelled.
- To stop playback as well, press the [STOP Button ■]. The repeat playback settings (A and B markers) are saved.

Repeating a song

Repeats a selected song.

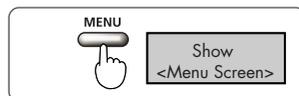


1. Show the <Menu Screen>.

Press the [MENU Button] to show the <Menu Screen>.

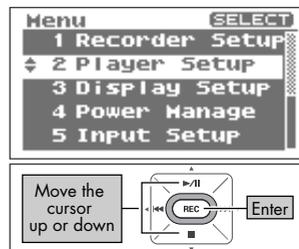
NOTE

The <Menu Screen> is not shown during playback. Press the [STOP Button ■] to stop playback.



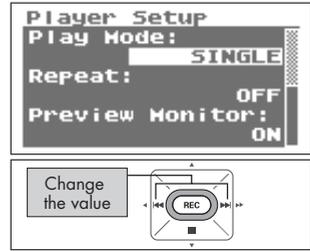
2. Select "Player Setup."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Player Setup," then press the [REC Button].



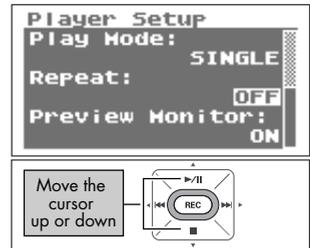
3. Select "SINGLE."

Use the [PREV button ◀] and [NEXT button ▶] to change the Play Mode value, and select "SINGLE."



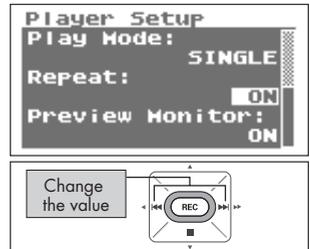
4. Select "Repeat."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the "Repeat" line.



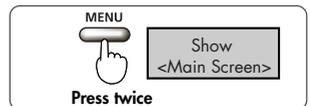
5. Select "ON."

Use the [PREV button ◀] and [NEXT button ▶] to change the Repeat value, and select "ON."



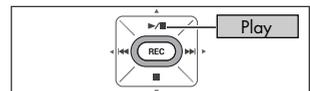
6. Return to <Main Screen>.

Press the [MENU Button] twice to return to the <Main Screen>.



7. Play back.

Press the [PLAY Button ▶/II].

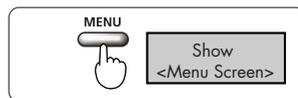


Shuffle play

Automatically change the song order and play back.

1. Show the <Menu Screen>.

Press the [MENU Button] to show the <Menu Screen>.



NOTE

The <Menu Screen> is not shown during playback. Press the [STOP Button ■] to stop playback.

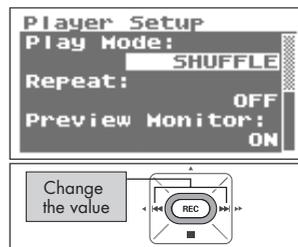
2. Select "Player Setup."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Player Setup," then press the [REC Button].



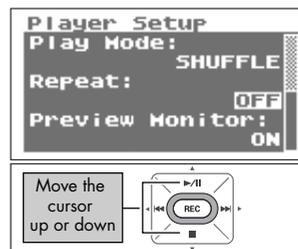
3. Select "SHUFFLE."

Use the [PREV button ◀] and [NEXT button ▶] to change the Play Mode value, and select "SHUFFLE."



4. Select "Repeat."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the "Repeat" line.

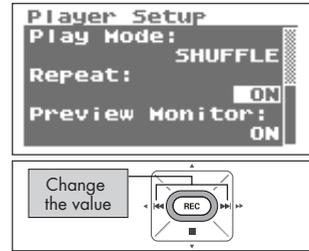


5. Set repeat playback.

Use the [PREV button ◀] and [NEXT button ▶] to change the Repeat value.

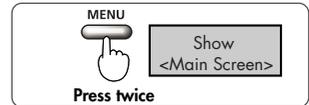
MEMO

- If "Repeat" is set to OFF, playback automatically stops once all the songs in the selected folder have been played with the shuffle feature.
- If "Repeat" is set to ON, songs are repeated in the same order once all the songs in the selected folder have been played with the shuffle feature.



6. Return to <Main Screen>.

Press the [MENU Button] twice to return to the <Main Screen>.

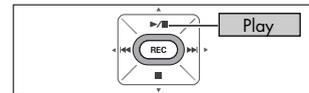


7. Play back.

Press the [PLAY Button ▶/||].

MEMO

To reshuffle the songs, press the [Stop Button ■] once, then press the [PLAY Button ▶/||] again.



Playing back in order

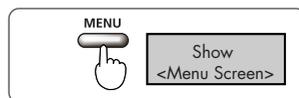
The recorded songs are played back in order of their song number.

cf. ➤

"The order of songs" (p. 53)

1. Show the <Menu Screen>.

Press the [MENU Button] to show the <Menu Screen>.

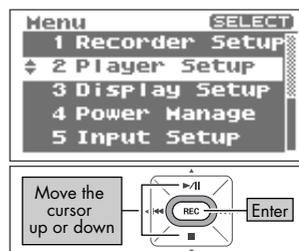


NOTE

The <Menu Screen> is not shown during playback. Press the [STOP Button ■] to stop playback.

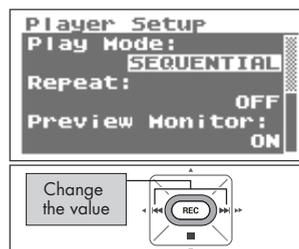
2. Select "Player Setup."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Player Setup," then press the [REC Button].



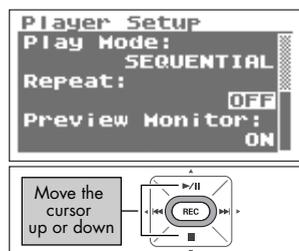
3. Select "SEQUENTIAL."

Use the [PREV button ◀] and [NEXT button ▶] to change the Play Mode value, and select "SEQUENTIAL."



4. Select "Repeat."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the "Repeat" line.

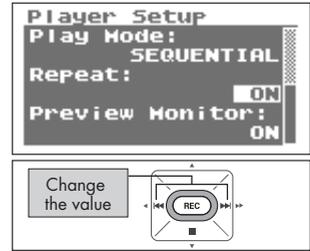


5. Set repeat playback.

Use the [PREV button ◀] and [NEXT button ▶] to change the Repeat value.

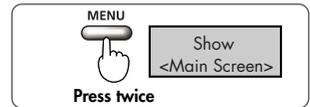
MEMO

- If "Repeat" is set to OFF, playback automatically stops once all the songs in the selected folder have been played in song order.
- If "Repeat" is set to ON, songs are repeated in the same order once all the songs in the selected folder have been played in song order.



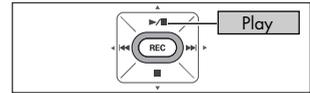
6. Return to <Main Screen>.

Press the [MENU Button] twice to return to the <Main Screen>.



7. Play back.

Press the [PLAY Button ▶/II].



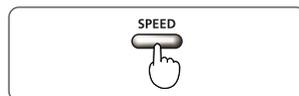
Changing the playback speed (Speed)

The R-09HR can change the playback speed of the song.

1. Press the [SPEED button].

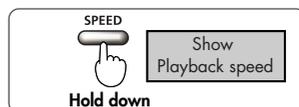
NOTE

The speed cannot change when the sampling frequency of 88.2 kHz or 96 kHz.



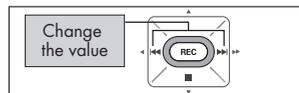
Selecting the playback speed

1. Press the [SPEED Button] for a number of seconds.



2. Set the playback speed.

Press the [PREV button ◀] and [NEXT button ▶] while the playback speed is displayed to change the speed value.



Setting	50, 60, 70 , 80, 90, 110, 120, 130, 140, 150 (%)
---------	---------------------------------------------------------

Applying reverb effects during playback

The R-09HR can apply reverb effects to the song being played. Such reverberation simulates the experience of being in a hall or on stage.

TERM

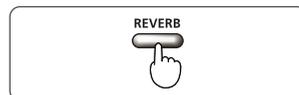
REVERB is an effect that can be used to, for example, make it seem as if the sound were being played in a large hall.

NOTE

- Sounds with applied reverb cannot be recorded. Reverb cannot be applied while monitoring recordings.
- The reverb effect cannot be applied to the playback of songs with a sampling frequency of 88.2 kHz or 96 kHz.

Applying reverb effects

1. Press the [REVERB Button].



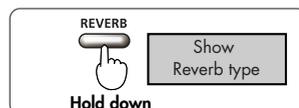
Reverb type

Set the reverb type. Various spaces can be simulated by changing the settings.

Type	Effect
HALL1	This reverb effect simulates the reverberation in a concert hall. A mild reverberation with a long, spreading sound is obtained. Hall 2 has shorter reverberation than Hall 1.
HALL 2	
ROOM	This reverb effect simulates the reverberation in a room. A short, bright reverberation that simulates a live stage is obtained.
PLATE	This reverb effect simulates plate reverberation (a reverberation unit using vibrations from metal plates). A metallic-sounding reverberation with an extended high range is obtained.

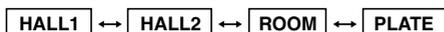
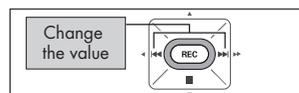
1. Press the [REVERB Button] for a number of seconds.

The types of reverb are displayed.



2. Change the reverb type.

Press the [PREV button ◀] and [NEXT button ▶] while the reverb type is displayed to change the reverb type.



Song types that can be played

The R-09HR can play back the following songs.

		Sampling frequency (kHz)	Sample size (bits)
WAV	Playback	32, 44.1, 48, 88.2, 96	16, 24
		Sampling frequency (kHz)	Bit rate (kbps)
MP3	Playback	32, 44.1, 48	32–320 kbps, VBR

TERM

VBR

Variable Bit Rate.

Bit rates are decreased for low sound density situations. Bit rates are increased for high sound density situations.

Downloading songs to a PC

By connecting a PC to the R-09HR via a USB cable, songs from the R-09HR's memory card can be downloaded to the PC and used by music software. Also, songs on the PC can be sent to the R-09HR for playback.

MEMO

Supports USB 2.0 (HI-SPEED USB). When connected to a PC supporting USB 2.0, high-speed transfer is possible.

NOTE

Be sure to use the AC adaptor when connecting to a PC.
If the batteries become exhausted while copying a song, the song may be corrupted.

Connecting to the PC

1. **Start up the PC.**
2. **Check that the memory card is in place.**

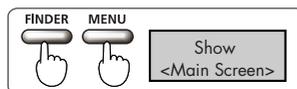
Check that the memory card is inserted in the [Memory Card Slot] on the R-09HR.

cf.
"Inserting" (p. 25)

3. **Show the <Main Screen>.**

MEMO

How many times the [FINDER Button] or [MENU Button] needs to be pressed depends on the screen that is showing.

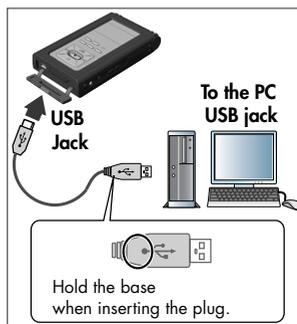


4. **Connect with the USB cable.**

The R-09HR connects to the PC with the included USB cable.

NOTE

- When connecting the USB cable to the PC, avoid touching the metal portions. Hold the base when inserting the plug.
- If you connect to a PC without having a memory card in place, the R-09HR's display shows "No Card."
- The PC will not recognize the R-09HR if connecting while the <Menu Screen> is showing or during playback or recording. First, disconnect the USB cable connecting the R-09HR to the PC, and then return to step 3.
- Once connected to the PC with the <USB Screen> showing, no features can be used. All other buttons and switch operations will be ignored.
- When "Insert the disk for this file type?" is shown on the PC, click on [Cancel].



After a while, the R-09HR is recognized by the PC, and the <USB Screen> is shown in the R-09HR's display.



Loading songs

Windows

1. Open My Computer.

A name such as "Removable Disk" is displayed for the R-09HR's memory card.



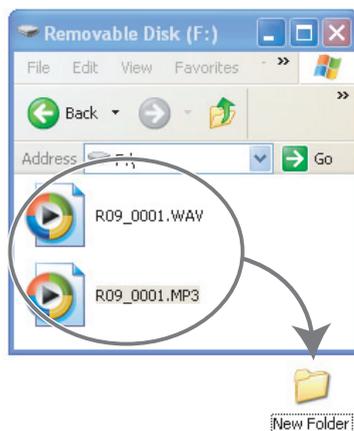
2. Double click on the removable disk.

3. Copy the songs.

Select the songs to copy from the removable disk to the PC, and then drag them to an appropriate location.

MEMO

- It is advisable to create a new folder to copy into.
- Software such as Windows Media Player cannot play back 24 bit WAV files.
- This section uses screens from Windows XP. The actual display may differ depending on the environment.



Downloading songs from a PC

To load songs from the PC into the R-09HR, select the songs on the PC and drag them to the removable disk icon.

Songs that can be played on the R-09HR

		Sampling frequency (kHz)	Sample size (bits)
WAV	Playback	32, 44.1, 48, 88.2, 96	16, 24
		Sampling frequency (kHz)	Bit rate (kbps)
MP3	Playback	32, 44.1, 48	32-320, VBR

TERM

VBR

Variable Bit Rate.

Bit rates are decreased for low sound density situations. Bit rates are increased for high sound density situations.

Macintosh

1. "NO NAME" or "Untitled" is displayed on the desktop.

The R-09HR appears on the desktop as "NO NAME" (for OS X).



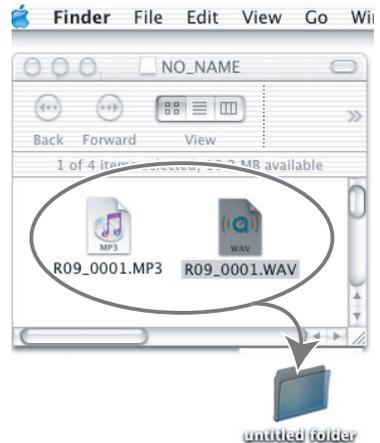
2. Double click on "NO NAME."

3. Copy the songs.

Select the songs to copy from "NO NAME," then drag them to an appropriate location.

MEMO

- It is advisable to create a new folder to copy into.
- This section uses screens from Mac OS 10.4.
- The actual display may differ depending on the environment.



Downloading songs from a PC

To load songs from a Macintosh into the R-09HR, select the songs on the Macintosh and drag them to the "NO NAME" icon.

Songs that can be played on the R-09HR

		Sampling frequency (kHz)	Sample size (bits)
WAV	Playback	32, 44.1, 48, 88.2, 96	16, 24
		Sampling frequency (kHz)	Bit rate (kbps)
MP3	Playback	32, 44.1, 48	32–320, VBR

TERM

VBR

Variable Bit Rate.

Bit rates are decreased for low sound density situations. Bit rates are increased for high sound density situations.

Disconnecting the PC

Disconnect the PC and R-09HR. Follow the procedure below to disconnect and unplug the USB cable.

NOTE

Do not turn off power to the R-09HR or remove the USB cable or memory card while the PC and R-09HR are connected.

Windows

1. Display the "Safe to remove hardware" dialogue box.

Double click on the safely remove hardware icon  in the Windows task tray.

2. Select the memory card.

Select the R-09HR from the displayed list of hardware devices.

Windows Vista	USB Mass Storage Device
Windows XP, 2000	USB Mass Storage Device
Windows Me	USB disk



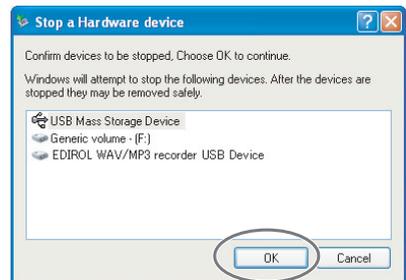
3. Click on [Stop] in the dialogue box.

4. Click on [OK].

When the safely remove hardware dialog box appears, select the R-09HR memory card and click on [OK].

5. Disconnect.

If "The USB Mass Storage Device can now be safely removed from the system" appears, the USB cable connecting the R-09HR and PC can be unplugged.



Macintosh

1. Disconnect the R-09HR.

Disconnect the R-09HR connection shown on the desktop.

- With Mac OS X, drag the "NO NAME" icon to the  Dock. When dragging to the garbage can on the right side of the Dock, the garbage can changes to  and the connection can be terminated.

MEMO

- This section uses screens from Mac OS 10.4.
- The actual display may differ depending on the environment.



2. Disconnect.

Once the "NO NAME" or "untitled" icon has been deleted from the desktop, the USB cable connected the R-09HR and PC can be removed. The power to the R-09HR can also be turned off.

Manipulating songs and folders

The R-09HR saves songs to the memory card.

The <Finder Screen> lists these songs, and the songs can be deleted or copied from this screen. Also, folders can be created, so songs can be moved to and managed in folders.

<Finder Screen> Operation List

Menu	Selection	Effect	Procedure
Select	Song	Selects a song and moves to the <Main Screen>.	p. 73
	Folder	Selects a folder and moves to the <Main Screen>.	
Information	Song	Shows information about the song. Or protects it.	p. 74
	Folder	Shows information about the folder.	
Delete	Song	Deletes the song.	p. 75
	Folder	Deletes the folder.	
Rename	Song	Changes the song name.	p. 76
	Folder	Changes the folder name.	
Move	Song	Moves the song.	p. 77
Copy	Song	Copies the song.	p. 79
Repair	Song	Repairs the song. * This menu is displayed only when the R-09HR detects a damaged song.	p. 82

Menu	Selection	Effect	Procedure
Make Folder	Folder, Directory	Creates a new folder.	p. 83

Displaying the <Finder screen>

Press the [FINDER Button].

The <Finder screen> is shown.

MEMO

The songs are shown from the top in alphabetical order.



Selecting (Select)

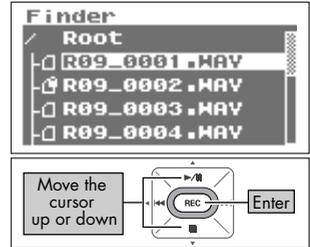
This operation is used to select and play back a song from the list of recorded songs. If a folder is selected, the current directory changes to the selected folder and the songs in the folder can be selected from the <Main Screen>.

1. Select a song or folder from the <Finder Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select a song or folder, then press the [REC Button].

MEMO

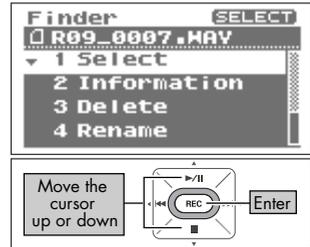
To select a subfolder, select the folder then press the [NEXT button ▶]. To move up a level, press the [PREV button ◀].



2. Choose "Select."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Select," then press the [REC Button].

The song or folder is selected, and the <Main Screen> is shown.



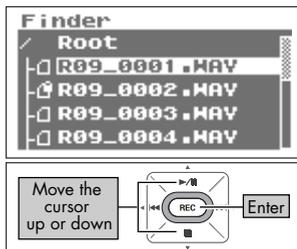
Displaying song or folder information (Information)

1. Select a song or folder from the <Finder Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select a song or folder, then press the [REC Button].

MEMO

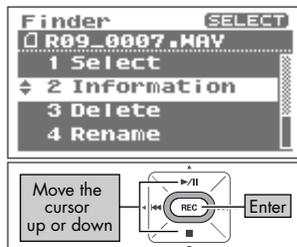
To select a subfolder, select the folder then press the [NEXT button ►]. To move up a level, press the [PREV button ◀].



2. Select "Information."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Information," then press the [REC Button]. The information is displayed.

Displayed information	Name (song or folder name)
	Date (date created)
	Size
	Type (recording mode)
	Sample Rate (sampling frequency)
	Write Protect (protect on/off)



■ Protecting file (Protect)

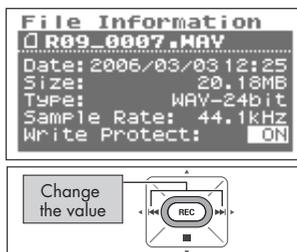
A song can be protected to prevent being deleted accidentally or having its name changed.

Set protection on or off.

Use the [PREV button ◀] and [NEXT button ►] to switch it on or off.

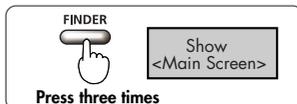
MEMO

When protection is on, a lock is shown on the icon.



3. Return to <Main Screen>.

Press the [FINDER Button] three times to return to the <Main Screen>.



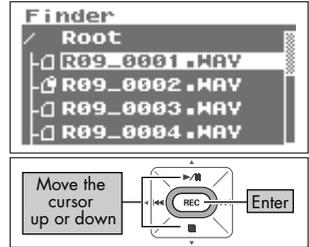
Deleting (Delete)

1. Select a song or folder from the <Finder Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select a song or folder, then press the [REC Button].

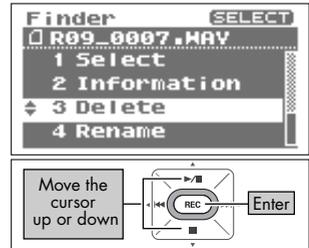
MEMO

To select a subfolder, select the folder then press the [NEXT button ▶]. To move up a level, press the [PREV button ◀].



2. Select "Delete."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Delete," then press the [REC Button].

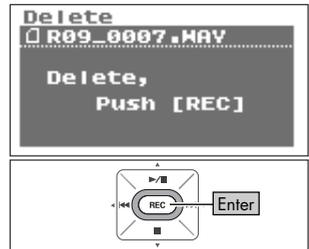


3. Press the [REC Button] to delete the song.

A confirmation screen is shown. Press the [REC Button] to delete the song.

MEMO

To cancel, press the [FINDER Button] before pressing the [REC Button].



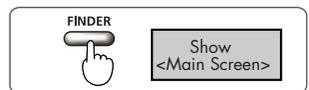
NOTE

Do not turn off power while the deletion takes place.



4. Return to <Main Screen>.

Press the [FINDER Button].



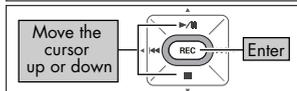
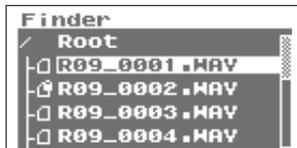
Changing the name (Rename)

1. Select a song or folder from the <Finder Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select a song or folder, then press the [REC Button].

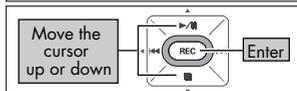
MEMO

To select a subfolder, select the folder then press the [NEXT button ►]. To move up a level, press the [PREV button ◀].



2. Select "Rename."

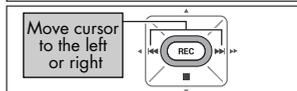
Use the [PLAY Button ▲] and [STOP Button ▼] to select "Rename," then press the [REC Button].



3. Edit the song (file) name.

1. Move the cursor.

Use the [PREV button ◀] and [NEXT button ►] to move the cursor to the right or left.



2. Edit.

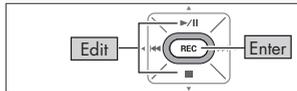
Move the cursor to the character to change, use the [PLAY Button ▲] and [STOP Button ▼] to change the character, then press the [REC Button] to enter the changes.

MEMO

- Insert a character with the [REVERB Button]. Delete a character with the [AB REPEAT Button].
- To cancel, press the [FINDER Button] before pressing the [REC Button].
- If the name already exists, "Already Exists" is shown. Use a different name.

NOTE

Do not turn off power or remove the memory card while making changes.



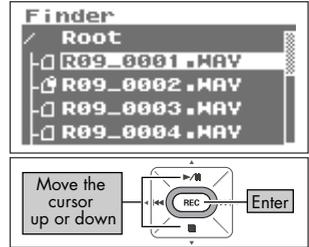
Moving songs (Move)

1. Select a song from the <Finder Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select a song, then press the [REC Button].

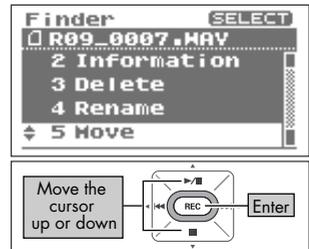
MEMO

To select a subfolder, select the folder then press the [NEXT button ▶]. To move up a level, press the [PREV button ◀].



2. Select "Move."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Move," then press the [REC Button].



3. Select where to move the song.

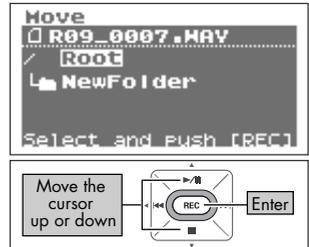
Use the [PLAY Button ▲] and [STOP Button ▼] to select the destination, then press the [REC Button].

MEMO

- Select "Root" to move the song to the top level. When a folder is selected, the song is moved into that folder.
→ "R-09HR memory card structure" (p. 78)
- To cancel, press the [FINDER Button] before pressing the [REC Button].
- To select a subfolder, select the folder then press the [NEXT button ▶]. To move up a level, press the [PREV button ◀].

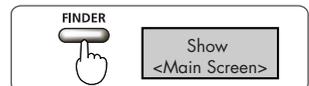
NOTE

- Do not turn off power or remove the memory card while moving songs.
- The Move operation cannot be used if the song being moved is larger than the available free memory on the memory card.



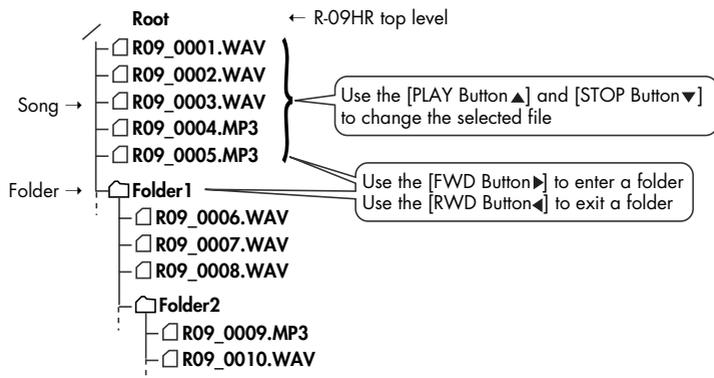
4. Return to the <Main Screen>.

Press the [FINDER Button].



R-09HR memory card structure

The song and folder structure for the R-09HR memory card is shown below.



MEMO

- The song and folder names can be changed. →“Changing the name (Rename)” (p. 76)

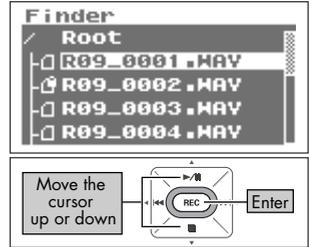
Copying (Copy)

1. Select a song from the <Finder Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select a song, then press the [REC Button].

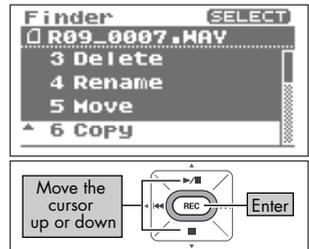
MEMO

To select a subfolder, select the folder then press the [NEXT button ▶]. To move up a level, press the [PREV button ◀].



2. Select "Copy."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Copy," then press the [REC Button].



3. Select where to copy the song.

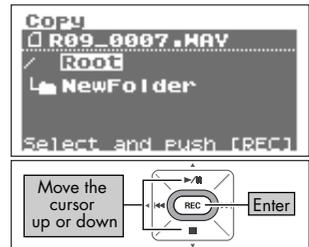
Use the [PLAY Button ▲] and [STOP Button ▼] to select where to copy the song, then press the [REC Button].

MEMO

- Select "Root" to copy the song to the top level. When a folder is selected, the song is copied into that folder. →"R-09HR memory card structure" (p. 78)
- To cancel, press the [FINDER Button] before pressing the [REC Button].
- To select a subfolder, select the folder then press the [NEXT button ▶]. To move up a level, press the [PREV button ◀].

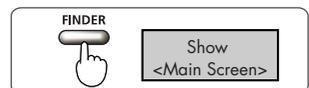
NOTE

Do not turn off power or remove the memory card while copying songs.



4. Return to <Main Screen>.

Press the [FINDER Button].



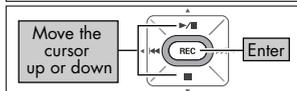
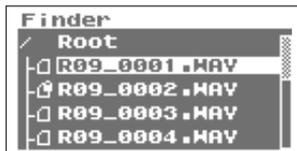
Dividing (Divide)

1. Select a song from the <Finder Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select a song, then press the [REC Button].

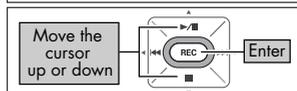
MEMO

To select a subfolder, select the folder then press the [NEXT button ►]. To move up a level, press the [PREV button ◀].



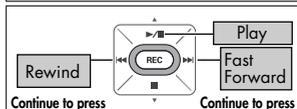
2. Select "Divide."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Divide," then press the [REC Button].



3. Find the location at which you want to divide the song.

Using the [PLAY Button ▲], [STOP Button ▼], [PREV Button ◀], and [NEXT Button ►] to fast-forward or rewind, find the location at which you want to divide the song. When you've found the desired location, press the [REC Button].



4. Press the [REC Button] to divide the song.

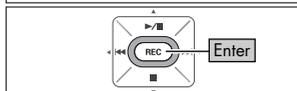
A confirmation screen is shown. Press the [REC Button] to divide the song. If you decide to cancel the operation, press the [STOP Button ▼].

MEMO

Each of the divided songs are saved as new songs. As their name, the characters "-1" and "-2" will be appended to the original name of the source song. The source song will remain in its original state. For example, if the source song was named R09_0001.WAV, the Divide operation would create new songs named R09_0001-1.WAV and R09_0001-2.WAV.

NOTE

- Do not turn off power while the division takes place.
- If the card has insufficient free space, the message "SD Card Full" will appear, and this editing operation will not be possible.



Combining (Combine)

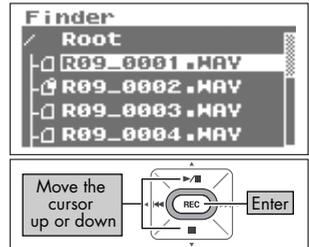
Two different songs that were recorded with the same sample rate and recording mode can be combined into a single song.

1. Select a song from the <Finder Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select a song, then press the [REC Button].

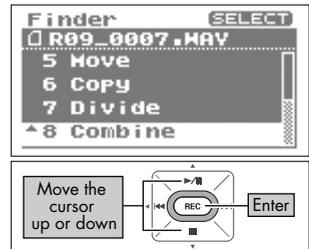
MEMO

To select a subfolder, select the folder then press the [NEXT button ▶]. To move up a level, press the [PREV button ◀].



2. Select "Combine."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Combine," then press the [REC Button].

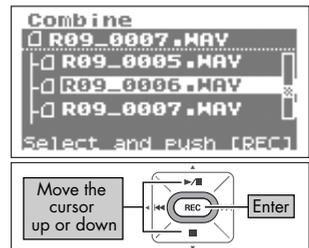


3. Select the songs that you want to combine.

Use the [PLAY Button ▲] and [STOP Button ▼] to select the song that you want to combine onto the end of the song you selected in step 1, and then press the [REC Button]. If you decide to cancel the operation, press the [STOP Button ▼].

MEMO

- The combined song will be saved as a new song. As its name, the characters "-1" will be appended to the name of the source song. The source song will remain in its original state. For example, if the source song was named R09_0001.WAV, the Combine operation would create a new song named R09_0001-1.WAV.
- You can't join songs that have a different sample rate or recording mode.



NOTE

- Do not turn off power while the combining takes place.
- If the card has insufficient free space, the message "SD Card Full" will appear, and this editing operation will not be possible.
- You can't join songs that would result in a file size greater than 2 GB.



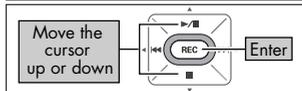
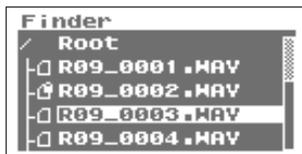
Repair files (Repair)

This feature allows you to repair files that cannot be played because an accident occurred during recording; for example, an adaptor was mistakenly disconnected or a card was removed.

When the R-09HR detects a damaged file, the "Repair" Menu is shown in the Finder.

1. Select a song from the <Finder Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select a song, then press the [REC Button].

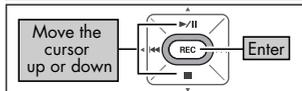


2. Select "Repair."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Repair," then press the [REC Button].

MEMO

This menu is displayed only when the R-09HR detects a damaged song.



3. Press the [REC Button] to repair the file.

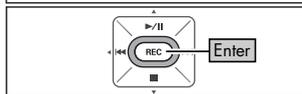
A confirmation screen is shown. Press the [REC Button] to repair the song.

MEMO

To cancel, press the [FINDER Button] before pressing the [REC Button].

NOTE

Do not turn off power while repairing songs.

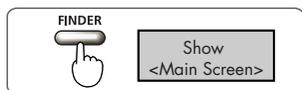


4. Return to <Main Screen>.

Press the [FINDER Button].

NOTE

This feature cannot restore all files. Do not turn off the power or remove the memory card while the R-09HR is being used.

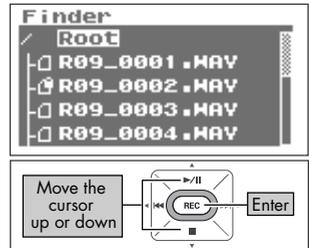


Creating folders (Make Folder)

1. Select where to create a folder from the <Finder Screen>.

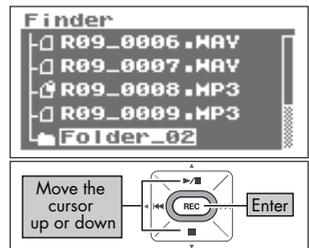
■ Selecting Root

1. Use the [PLAY Button ▲] and [STOP Button ▼] to select Root, then press the [REC Button].

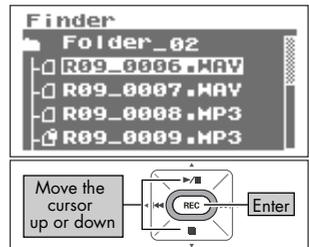


■ Selecting a folder

1. Use the [PLAY Button ▲] and [STOP Button ▼] to select the folder where the new folder is to be created.

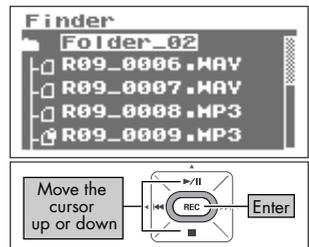


2. Use the [NEXT button ►] to enter a folder.



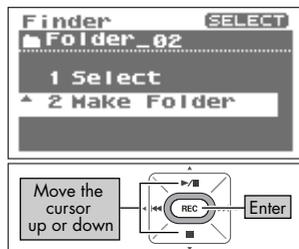
3. Select a folder.

Use the [PLAY Button ▲] and [STOP Button ▼] to select the name of the folder at the top and press the [REC Button].



2. Select "Make Folder."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Make Folder," then press the [REC Button].



3. Press the [REC Button] to enter.

A confirmation screen is shown. Press the [REC Button] to enter.

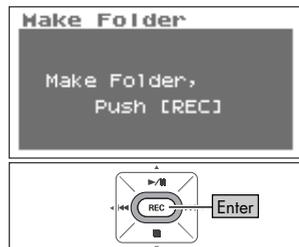
A "New Folder" is created.

MEMO

To cancel, press the [FINDER Button] before pressing the [REC Button].

NOTE

Do not turn off power or remove the memory card while creating a folder.



4. Return to <Main Screen>.

Press the [FINDER Button].



R-09HR configuration settings

Various R-09HR settings, such as recording and playback settings and date and time settings, are done from the <Menu Screen>.

List of Settings

Category	Menu/Effect	Value (Default value in bold)	Procedure
Recorder Setup	Sample Rate Rate Sets the sampling frequency when recording.	44.1/48.0/88.2/96.0	p. 87
	Rec Mode Sets the song type (recording mode) when recording.	MP3 64/96/128/ 192/224/320	p. 88
		WAV 16/24	
	File Name Sets how file names are assigned.	Date/ Name	p. 89
	Max File Size Sets a limit on the file size of the file generated during recording.	64MB/128MB/256MB/ 512MB/1GB/ 2GB	p. 90
	Self Timer Sets the amount of time that is to pass before recording starts after the [REC Button] is pressed.	OFF/2sec/5sec/10sec	p. 91
Metronome Lev Sets the volume of the metronome sounded during recording.	OFF/1-10	p. 112	
Player Setup	Play Mode Sets the order songs are played back.	SINGLE/ SEQUENTIAL / SHUFFLE	p. 92
	Repeat Sets whether to use repeat playback.	OFF/ ON	p. 93
	Preview Monitor Sets whether sound is played from the monitor speaker.	OFF/ ON	p. 94
	Speed Sets the playback speed when the [SPEED Button] is pressed.	50%, 60%, 70% , 80%, 90%, 110%, 120%, 130%, 140%, 150%	p. 95
	Rev Type Selects the reverb type.	HALL1 /HALL2/ROOM/ PLATE	p. 96
	Rev Depth Sets the depth for the reverb	1- 10	p. 97
Display Setup	Brightness Adjusts the display brightness.	1- 5 -10	p. 98
	Peak Hold Sets peak hold for the Level Meter.	OFF/ ON	p. 99
	Display Timer Sets the time to wait for some input before darkening the screen.	OFF/2/ 5 /10/20	p. 100
	Rec/Peak LED The [REC Indicator], [PEAK Indicator], and [Remote Indicator] can be linked to the Display Timer settings. When the display goes dark, the [REC Indicator] and [PEAK Indicator] also turn off.	Normal /Power Save	p. 101
Power Manage	Auto Power Off Sets the time to wait for input before turning off the power.	OFF/3/5/10/15/ 30 / 45/60	p. 102
	Battery Sets the battery type used.	ALKALINE /Ni-MH	p. 103
Input Setup	Rec Monitor Sw Turn on when monitoring the input sound with headphones during recording. Turn off when not monitoring.	OFF/ ON	p. 104
	EXT Mic Type Changes the type of the microphone connected to the microphone jack.	MONO/ STEREO	p. 105
	Limiter/AGC Sets the function of the LIMITER/AGC switch.	Limiter /AGC	p. 106
	Low Cut Freq Sets the frequency to apply Low Cut	100 Hz/ 200 Hz /400 Hz	p. 107

Category	Menu/Effect	Value (Default value in bold)	Procedure
Remote Control	Remote Control Sets whether to accept remote control operations.	Disable/ Enable	p. 108
Date & Time	— Sets the date and time.	—	p. 109
SD Card	Information Shows information about the SD memory card.	—	p. 110
	Format Formats the SD memory card.	—	p. 27
Metronome	Tempo Sets the tempo of the metronome.	30- 120 -250	p. 111
	Beat Sets the beat of the metronome.	0- 4 -8	
Tuner	Type/NOTE Sets Note to be detected automatically or sets it manually.	AUTO /C/C#/D/D#/E/ F/F#/G/G#/A/A#/B	p. 114
	Reference Pitch Sets the reference pitch of the tuner.	435- 440 -445 Hz	
Graphic Tuner	Type/NOTE Sets Note to be detected automatically or sets it manually.	AUTO /C/C#/D/D#/E/ F/F#/G/G#/A/A#/B	p. 115
	Reference Pitch Sets the reference pitch of the tuner.	435- 440 -445 Hz	
Factory Reset	Initializes the R-09HR.	—	p. 116

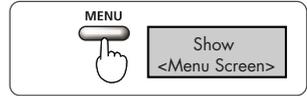
Displaying the <Menu screen>

Press the [MENU Button].

The <Menu screen> is shown.

NOTE

The screen cannot be changed while playing or recording a song. Please try while the unit is stopped.



Setting the sampling frequency when recording (Sample Rate)

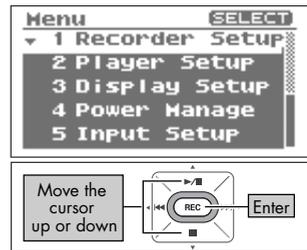
Decide on whether the sound quality or a longer recording time is to be given precedence, and set the sampling frequency accordingly.

cf. >

"Configuring recording" (p. 34)

1. Select "Recorder Setup" from the <Menu Screen>.

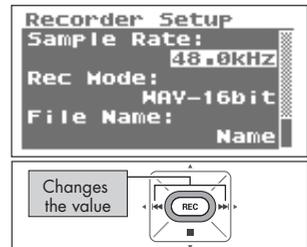
Use the [PLAY Button ▲] and [STOP Button ▼] to select "Recorder Setup," then press the [REC Button].



2. Set the sampling frequency (Sample Rate).

Use the [PREV button ◀] and [NEXT button ▶] to change the Sample Rate value.

Setting	44.1 kHz
	48.0 kHz
	88.2 (kHz)
	96.0 (kHz)



MEMO

When finished with the settings, press the [MENU button] to return to previous screens, in order.

Setting the recording mode (Rec Mode)

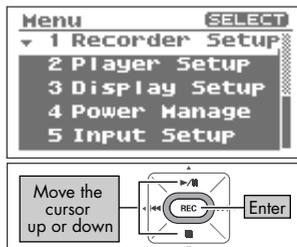
Please make the sampling frequency according to whether sound quality or recording time has precedence.

cf.

"Configuring recording" (p. 34)

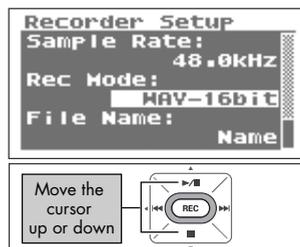
1. Select "Recorder Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Recorder Setup," then press the [REC Button].



2. Select "Rec Mode."

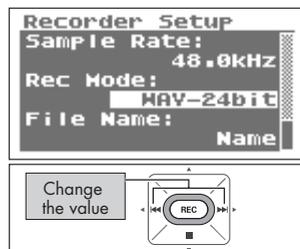
Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Rec Mode line.



3. Set the recording mode.

Use the [PREV button ◀] and [NEXT button ▶] to change the Rec Mode value.

Setting	MP3 64 kbps
	MP3 96 kbps
	MP3 128 kbps
	MP3 160 kbps
	MP3 192 kbps
	MP3 224 kbps
	MP3 320 kbps
	WAV 16 bit
WAV 24 bit	



MEMO

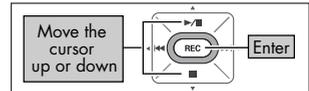
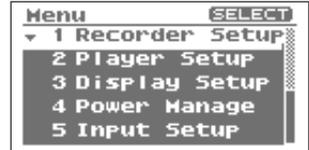
When finished with the settings, press the [MENU button] to return to previous screens, in order.

Setting how file names are assigned (File Name)

This feature sets how file names are assigned to recorded and generated files. File names can be created from the date or from serial numbers.

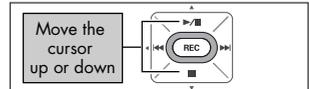
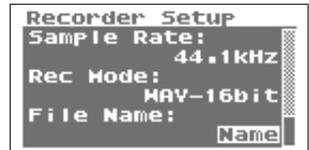
1. Select "Recorder Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Recorder Setup," then press the [REC Button].



2. Select "File Name."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the File Name line.



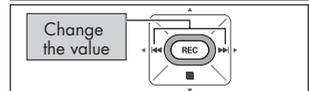
3. Set how the file names are to be assigned.

Use the [PREV button ◀] and [NEXT button ▶] to change the File Name value.

Setting	Date
	Name

MEMO

When finished with the settings, press the [MENU button] to return to the previous screens, in order.



Setting the maximum file size (Max File Size)

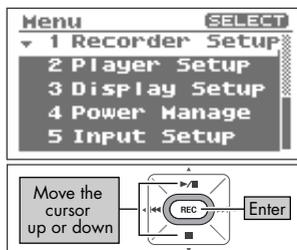
This feature sets a limit on the file size of the file generated during recording.

Use this feature to prevent long MP3 recordings from becoming too large to be read by some software, after the data has been converted to WAV.

When the song being recording reaches the set size limit, the R-09HR closes that file and continues the recording in a new file.

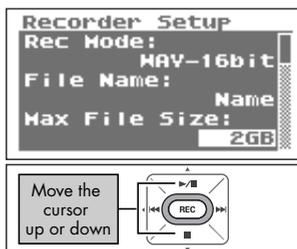
1. Select "Recorder Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Recorder Setup," then press the [REC Button].



2. Select "Max File Size."

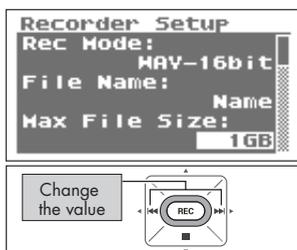
Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Max File Size line.



3. Set the maximum file size.

Use the [PREV button ◀] and [NEXT button ▶] to change the Max File Size value.

Setting	64MB
	128MB
	256MB
	512MB
	1GB
	2GB



MEMO

When finished with the settings, press the [MENU button] to return to previous screens, in order.

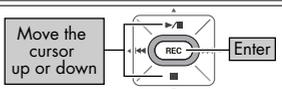
Using the Self Timer Record function (Self Timer)

The Self Timer function lets you specify a time delay that will be inserted after you press the [REC Button] until recording actually begins.

■ Setting the self timer

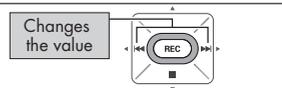
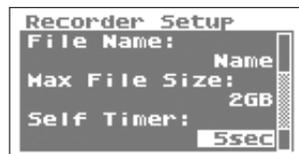
1. Select "Recorder Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Recorder Setup," then press the [REC Button].



2. Select "Self Timer," and specify the time.

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to Self Timer, and use the [PREV Button ◀] and [NEXT Button ▶] to specify the time delay until recording will begin.



Setting	OFF
	2 sec
	5 sec
	10 sec

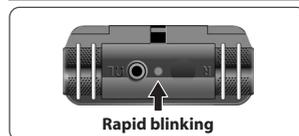
■ Recording with the Self Timer

3. Return to the <Main Screen>, and record using the procedure described on p. 34 of the owner's manual.

When you press the [REC Button] from recording-standby mode, the self timer will start, and recording will begin when the time you specified in step 2 has elapsed. While the self timer is operating, the screen will show a count, and the REC indicator and REMOTE indicator will blink faster.

MEMO

If you press the [REC Button] or [PLAY Button] while the count is displayed, recording will begin immediately regardless of the time you specified.

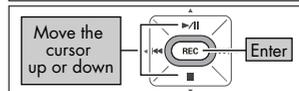


Setting the song playback mode (Play Mode)

Here's how to set the playback method for songs. In addition to playing songs back in order from the beginning, one song can be repeated or songs can automatically be reordered for playback.

1. Select "Player Setup" from the <Menu Screen>.

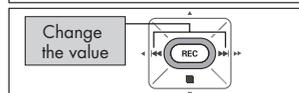
Use the [PLAY Button ▲] and [STOP Button ▼] to select "Player Setup," then press the [REC Button].



2. Set the playback mode.

Use the [PREV button ◀] and [NEXT button ▶] to change the setting for Play Mode.

Setting	SINGLE (play one song)
	SEQUENTIAL (play in order)
	SHUFFLE (shuffle play)



cf. ▶

- "Repeating a song" (p. 58)
- "Shuffle play" (p. 60)
- "Playing back in order" (p. 62)

MEMO

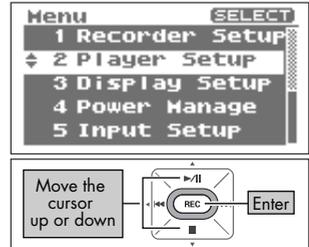
When finished with the settings, press the [MENU button] to return to previous screens.

Setting whether to use repeat playback or not (Repeat)

When set to repeat playback, the song is repeated according to the playback mode (p. 92) setting.

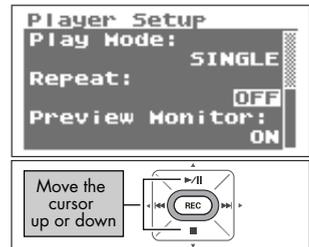
1. Select "Player Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Player Setup," then press the [REC Button].



2. Select "Repeat."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Repeat line.



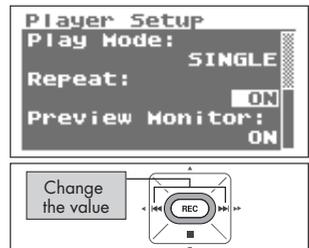
3. Set repeat playback.

Use the [PREV button ◀] and [NEXT button ▶] to change the Repeat value.

Setting	OFF (no repeat)
	ON (repeat)

MEMO

When finished with the settings, press the [MENU button] to return to previous screens.

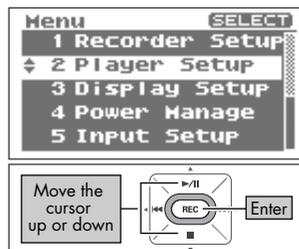


Playing sound from the preview monitor (Preview Monitor)

Whether sound is played from the R-09HR's monitor speaker during playback can be set.

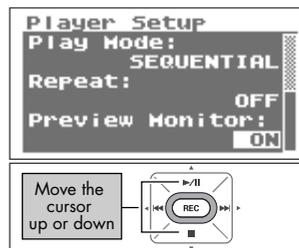
1. Select "Player Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Player Setup," then press the [REC Button].



2. Select "Preview Monitor."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Preview Monitor line.



3. Set Preview Monitor to on or off.

Use the [PREV button ◀] and [NEXT button ▶] to change the Preview Monitor value.

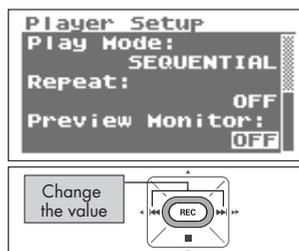
Setting	OFF
	ON

NOTE

When headphones or external speakers are connected to the [Headphone Jack], no sound is played from the R-09HR's monitor speaker even if Preview Monitor is set to "ON."

MEMO

When finished with the settings, press the [MENU button] to return to the previous screens, in order.

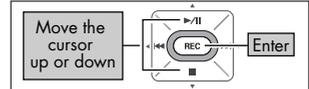
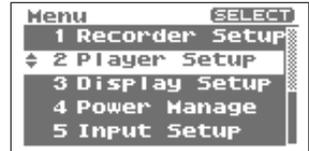


Changing the playback speed (Speed)

Sets the playback speed when the [SPEED Button] is pressed to change the playback speed.

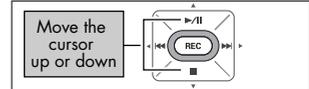
1. Select "Player Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Player Setup," then press the [REC Button].



2. Select "Speed."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Speed line.



3. Set the playback speed to use after the change.

Use the [PREV button ◀] and [NEXT button ▶] to change the Speed value.

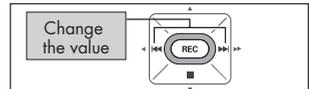
Setting	50, 60, 70, 80, 90, 110, 120, 130, 140, 150 (%)

MEMO

When finished with the settings, press the [MENU button] to return to the previous screens, in order.

NOTE

Playback speed cannot be changed when playing a song with a sampling frequency of 88.2 kHz or 96 kHz.

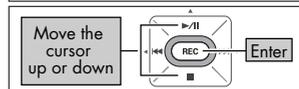


Setting the reverb type (Rev Type)

Selects the reverb type.

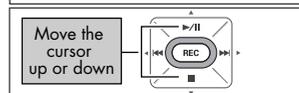
1. Select "Player Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Player Setup," then press the [REC Button].



2. Select "Rev Type."

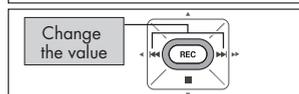
Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Rev Type line.



3. Set the reverb type.

Use the [PREV button ◀] and [NEXT button ▶] to change the Rev Type value.

Type	Effect
HALL1	This reverb effect simulates the reverberation in a concert hall. A mild reverberation with a long, spreading sound is obtained. Hall 2 has shorter reverberation than Hall 1.
HALL2	
ROOM	This reverb effect simulates the reverberation in a room. A short, bright reverberation that simulates a live stage is obtained.
PLATE	This reverb effect simulates plate reverberation (a reverberation unit using vibrations from metal plates). A metallic-sounding reverberation with an extended high range is obtained.



MEMO

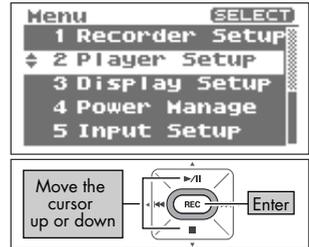
- When finished with the settings, press the [MENU button] to return to the previous screens, in order.
- The reverb type can also be switched in the main screen. Press the [REVERB Button] for a number of seconds in the main screen to display the reverb on/off screen. While this screen is displayed, change the reverb type by pressing the [PREV button ◀] or [NEXT button ▶].
- Reverb cannot be applied when playing a song with a sampling frequency of 88.2 kHz or 96 kHz.

Setting the reverb depth (Rev Depth)

Sets the depth for the reverb when applying reverb to playback.

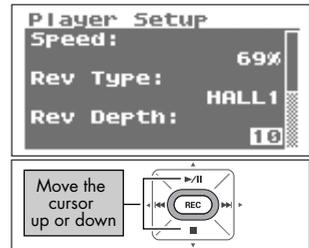
1. Select "Player Setup" from the [Menu Screen].

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Player Setup," and then press the [REC Button].



2. Select "Rev Depth."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Rev Depth line.



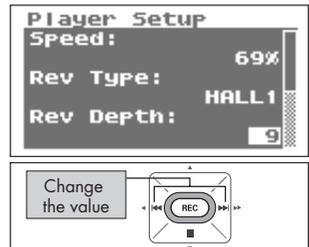
3. Set the reverb depth.

Use the [PREV Button ◀] and [NEXT Button ▶] to change the Rev Depth value. Larger values have deeper reverb.

Setting	1-10

MEMO

- When finished with the settings, press the [MENU button] to return to the previous screens, in order.
- Reverb cannot be applied when playing a song with a sampling frequency of 88.2 kHz or 96 kHz.



Adjusting the display brightness (Brightness)

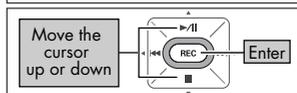
Here's how to adjust the brightness of the R-09HR's display.

MEMO

Power consumption is reduced when the display's brightness is decreased.

1. Select "Display Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Display Setup," then press the [REC Button].



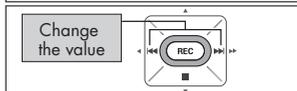
2. Set the brightness using "Brightness."

Use the [PREV button ◀] and [NEXT button ▶] to adjust the brightness by changing the Brightness value.

Setting	1 (dark)–5–10 (bright)

MEMO

When finished with the settings, press the [MENU button] to return to previous screens, in order.

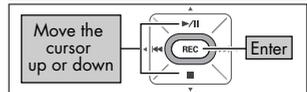


Setting peak hold for the level meter (Peak Hold)

This feature sets peak hold for the Level Meter. When peak hold is ON, the largest value for the input signal is held and displayed for a set time.

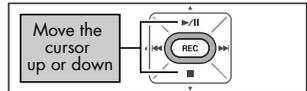
1. Select "Display Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Display Setup," then press the [REC Button].



2. Select "Peak Hold."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Peak Hold line.



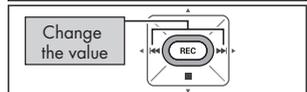
3. Set Peak Hold.

Use the [PREV button ◀] and [NEXT button ▶] to change the Peak Hold value.

Setting	OFF (no Peak Hold)
	ON (use Peak Hold)

MEMO

When finished with the settings, press the [MENU button] to return to previous screens, in order.

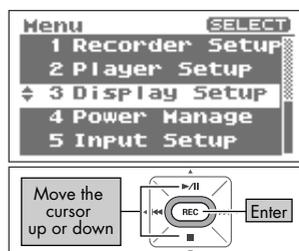


Setting the time until the screen is darkened when no operations are performed for a set period of time (Display Timer)

To reduce power consumption, this feature automatically turns off the display when no operations are performed within a set period of time.

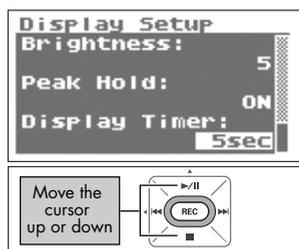
1. Select "Display Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Display Setup," then press the [REC Button].



2. Select "Display Timer."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Display Timer line.



3. Set the time.

Use the [PREV button ◀] and [NEXT button ▶] to change the Display Time value, and set the time until the screen goes dark.

Set to "OFF" to keep the screen bright no matter how much time passes.

(units: seconds)

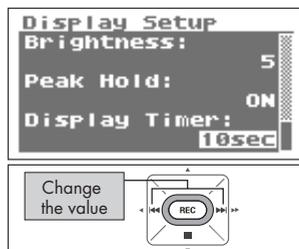
Setting	OFF
	2
	5
	10
	20

cf.

"Power saving feature" (p. 22)

MEMO

When finished with the settings, press the [MENU button] to return to previous screens, in order.

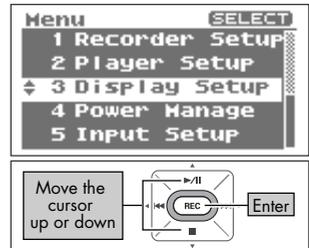


Turning off indicators when the display goes dark (Rec/Peak LED)

The [REC Indicator], [PEAK Indicator], and [Remote Indicator] can be linked to the Display Timer settings. When the display goes dark, the [REC Indicator] and [PEAK Indicator] also turn off.

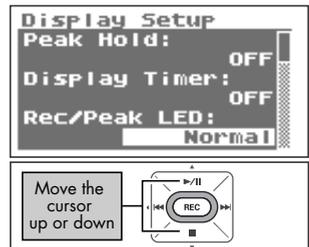
1. Select "Display Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Display Setup," then press the [REC Button].



2. Select "Rec/Peak LED."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Rec/Peak LED line.



3. Specify whether the indicators are to be on or off.

Use the [PREV button ◀] and [NEXT button ▶] to change the Rec/Peak LED value.

(units: seconds)

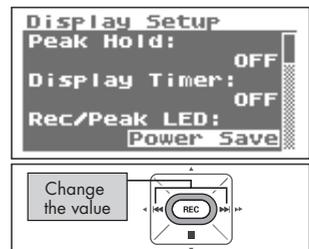
Setting	Normal (Indicators light normally)
	Power Save (Indicators turned off)

cf. ➔

"Power saving feature" (p. 22)

MEMO

When finished with the settings, press the [MENU button] to return to previous screens, in order.



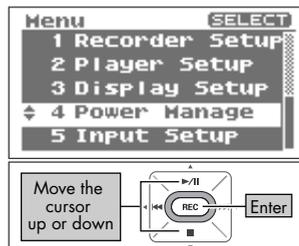
Setting the time until the power turns off when no operations are performed for a set amount of time (Auto Power Off)

This feature automatically turns off power when no operations are performed for a set amount of time to reduce power consumption.

During recording and playback or while connected via USB, the power does not turn off even if no operations are performed within the set period of time.

1. Select "Power Manage" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Power Manage," then press the [REC Button].



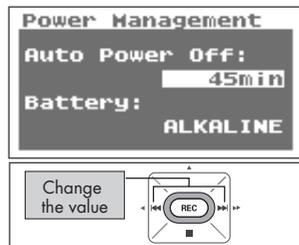
2. Set the time with "Auto Power Off."

Use the [PREV button ◀] and [NEXT button ▶] to change the Auto Power Off value, which specifies the time until the power turns off.

Set to "OFF" to keep power on.

(Unit: minutes)

Setting	OFF
	3
	5
	10
	15
	30
	45
	60



cf. ➔

"Power saving feature" (p. 22)

MEMO

When finished with the settings, press the [MENU button] to return to previous screens, in order.

Setting the battery type (Battery)

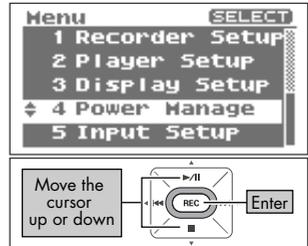
When using batteries with the R-09HR, set Battery according to the type of battery being used.

NOTE

If the wrong type is set, the remaining battery power will not be shown correctly.

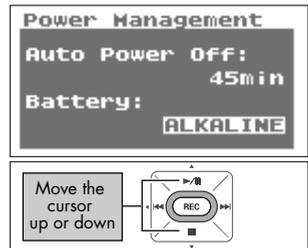
1. Select "Power Manage" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Power Manage," then press the [REC Button].



2. Select "Battery."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Battery line.



3. Set the battery type.

Use the [PREV button ◀] and [NEXT button ▶] to set the battery type by changing the setting for Battery.

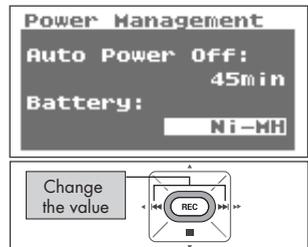
Setting	ALKALINE
	Ni-MH (nickel metal hydride)

cf. ▶

- "Cautions when using batteries with the R-09HR" (p. 22)
- "Power saving feature" (p. 22)
- "Remaining battery power indication" (p. 22)

MEMO

When finished with the settings, press the [MENU button] to return to previous screens, in order.

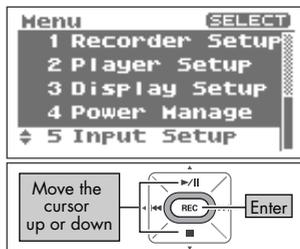


Setting whether to monitor sound while recording (Rec Monitor Sw)

Sets whether to monitor the input sound through headphones while recording.

1. Select "Input Setup" from the <Menu Screen>.

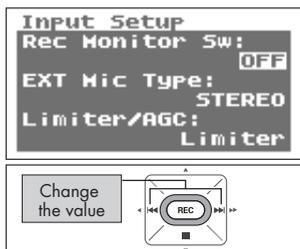
Use the [PLAY Button ▲] and [STOP Button ▼] to select "Input Setup," then press the [REC Button].



2. Set monitoring with the "Rec Monitor Sw."

Use the [PREV button ◀] and [NEXT button ▶] to set whether to monitor the input sound through the headphones during recording by changing the setting for Rec Monitor Sw.

Setting	OFF (no monitoring)
	ON (monitoring)



MEMO

When finished with the settings, press the [MENU button] to return to previous screens, in order.

NOTE

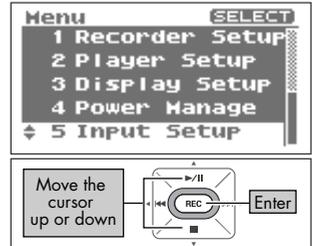
If you monitor the sound through headphones while recording, there will be a 6 ms delay compared to the actual sound, but this is not a malfunction.

Setting the external microphone type (EXT Mic Type)

This is set when an external microphone is used. Stereo or monaural can be selected to match the type of microphone being used.

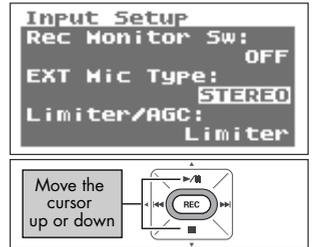
1. Select "Input Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Input Setup," then press the [REC Button].



2. Select "EXT Mic Type."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the EXT Mic Type line.



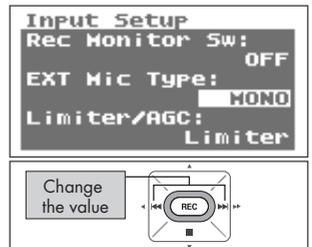
3. Set the external microphone type.

Use the [PREV button ◀] and [NEXT button ▶] to change the EXT Mic Type value.

Setting	MONO
	STEREO

MEMO

When finished with the settings, press the [MENU button] to return to the previous screens, in order.



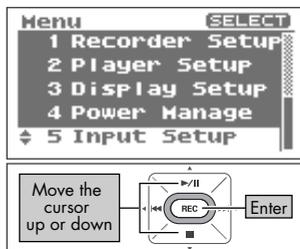
Setting the LIMITER/AGC switch function (Limiter/AGC)

Sets whether LIMITER or AGC (Auto Gain Control) is turned on/off with the LIMITER/AGC switch on the back.

The limiter is a feature that controls distortion by compressing input levels to an appropriate level when the input sound is too loud.
AGC (Auto Gain Control) keeps the overall sound level even during recording by increasing levels when input sound is low and attenuating them when input is high.
Set to AGC to record voices of people both near and far at the same volume, such as during meetings.

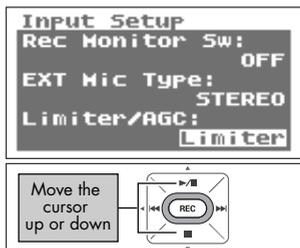
1. Select "Input Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Input Setup," then press the [REC Button].



2. Select "Limiter/AGC."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Limiter/AGC line.



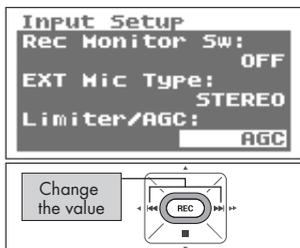
3. Set the [LIMITER/AGC switch] function.

Use the [PREV button ◀] and [NEXT button ▶] to change the Limiter/AGC value.

Setting	Limiter
	AGC (Auto Gain Control)

MEMO

When finished with the settings, press the [MENU button] to return to the previous screens, in order.

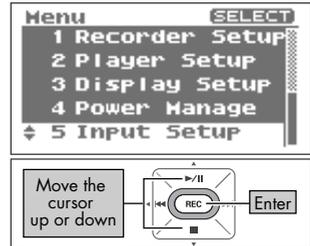


Setting the low cut frequency (Low Cut Freq)

This sets the frequency to apply Low Cut when the [Low Cut Switch] is on.

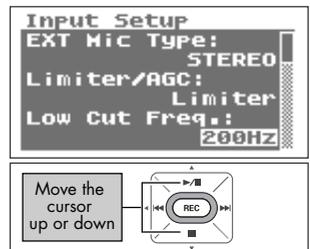
1. Select "Input Setup" from the [Menu Screen].

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Input Setup," and then press the [REC Button].



2. Select "Low Cut Freq."

Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to the Low Cut Freq line.



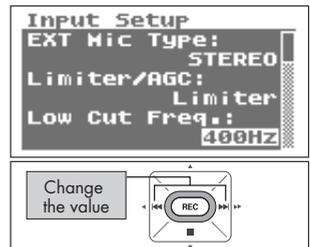
3. Set the Low Cut Freq frequency.

Use the [PREV Button ◀] and [NEXT Button ▶] to change the Low Cut value.

Setting	100 Hz
	200Hz
	400Hz

MEMO

When finished with the settings, press the [MENU button] to return to the previous screens, in order.

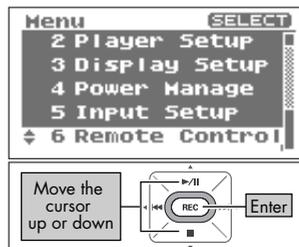


Setting whether to accept remote control operations (Remote Control)

Sets whether the R-09HR will receive the infrared data when the remote control is used.

1. Select "Remote Control" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Remote Control," then press the [REC] Button.



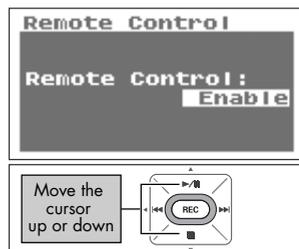
2. Set remote control reception to on or off.

Use the [PREV button ◀] and [NEXT button ▶] to change the File Name value.

Setting	Disable
	Enable

MEMO

When finished with the settings, press the [MENU button] to return to the previous screens, in order.



Setting the date and time (Date & Time)

Set the internal clock.

The time and date set here is used as data for the recorded songs.

cf.

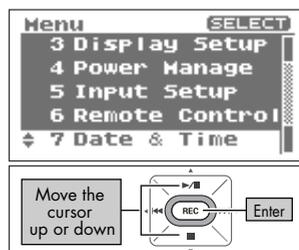
"Displaying song or folder information (Information)" (p. 74)

NOTE

When the power is on, the internal clock draws power from the AC adaptor or the batteries. When the power is off, the internal clock will run temporarily on the power stored in the unit, but if the power is off for several days, the internal clock settings return to the original settings (initial status). When power is turned on in initial status, the message "Clock Initialized" is shown. If "Clock Initialized" is shown, please reset the date and time.

1. Select "Date & Time" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Date & Time," then press the [REC Button].



2. Edit the time and date.

1. Move the cursor.

Use the [PREV button ◀] and [NEXT button ▶] to move the cursor to the right or left.



2. Edit the date and time.

Move the cursor to the character to change, use the [PLAY Button ▲] and [STOP Button ▼] to change the date and time, then press the [REC Button] to enter the changes.

MEMO

- To cancel, press the [MENU Button] before pressing the [REC Button].
- When finished with the settings, press the [MENU button] to return to previous screens.



NOTE

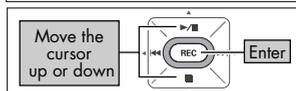
Do not turn off power while editing.

Displaying SD memory card information (Information)

The memory card usage and protect setting can be checked.

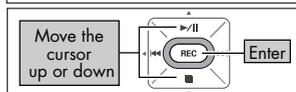
1. Select "SD Card" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "SD Card," then press the [REC Button].



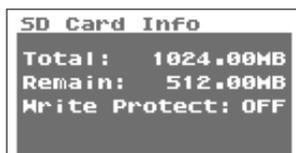
2. Select "Information."

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Information," then press the [REC Button].



The information is displayed.

Displayed information	
	Total (total capacity)
	Remain (free space)
	Write Protect (protect on/off)



MEMO

When finished with the settings, press the [MENU button] to return to previous screens, in order.

Formatting SD memory cards (Format)

cf.

See "Formatting" (p. 27) for information about formatting memory cards.

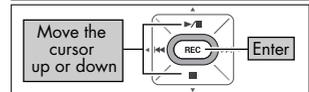
Using the metronome (Metronome)

Using the metronome by itself

You can listen to the metronome via the preview monitor or through headphones while you practice your instrument.

1. Select "Metronome" from the <Menu Screen>.

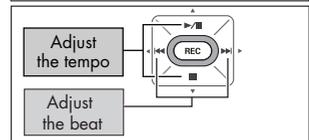
Use the [PLAY Button ▲] and [STOP Button ▼] to select "Metronome," then press the [REC Button].



2. Adjust the Beat and Tempo.

Use the [PREV Button ◀] and [NEXT Button ▶] to specify the Beat (the number of beats in each measure), and use the [PLAY Button ▲] and [STOP Button ▼] to adjust the tempo.

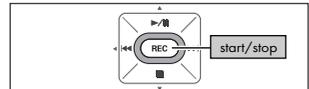
	Range	Factory setting
Tempo	30–250	120
Beat	0–8	4



3. Sound the metronome.

Press the [REC Button] to start the metronome. Press it again to stop.

Use the [Volume Buttons (+) (-)] to adjust the metronome's volume. If headphones are connected, no sound will be output from the preview monitor.

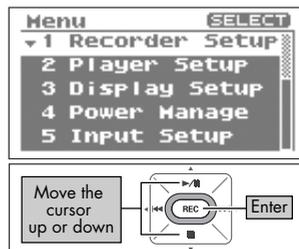


Sounding the metronome during recording

You can listen to the metronome through headphones when in recording-standby mode and during recording. The metronome will not be sounded from the preview monitor during recording.

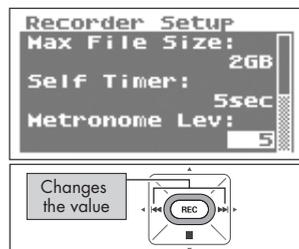
1. Select "Recorder Setup" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Recorder Setup," then press the [REC Button].



2. Select "Metronome Lev," and adjust the volume.

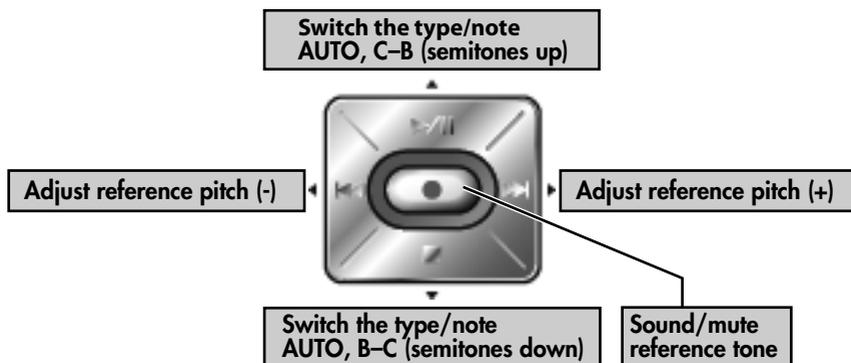
Use the [PLAY Button ▲] and [STOP Button ▼] to move the cursor to Metronome Lev, and use the [PREV Button ◀] and [NEXT Button ▶] to adjust the volume of the metronome as heard through the headphones during recording. Specify OFF if you don't want to use the metronome.



Using the tuner

Two types of tuners, each having a different type of display, are provided: a tuner that's convenient for tuning an instrument, and a graphic tuner that's useful for vocal or brass instrument practice. Both tuners let you choose either Auto, which automatically displays the note name, or Manual, which lets you specify the note name beforehand. The reference pitch can be adjusted in the range of A = 435–445 Hz.

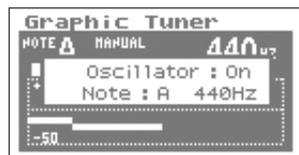
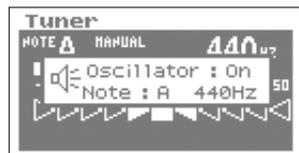
Basic operation for the tuner or graphic tuner



Use the [PLAY Button ▲] and [STOP Button ▼] to specify the name of the desired note, or AUTO. With the factory settings, this is set to AUTO.

Use the [PREV Button ◀] and [NEXT Button ▶] to specify the reference pitch that you want to use for tuning. With the factory settings, this is set to A = 440 Hz.

If you press the [REC Button], a reference tone of the pitch you specified will be sounded from the preview monitor or in your headphones. If you've selected AUTO, the "A" note will sound. Press the [REC Button] once again to mute the reference tone.

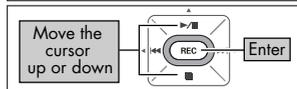


Tuner

This tuner provides a convenient way to tune your instrument.

1. Select "Tuner" from the <Menu Screen>.

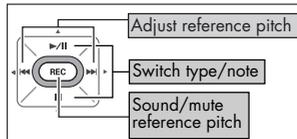
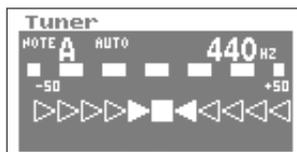
Use the [PLAY Button ▲] and [STOP Button ▼] to select "Tuner," then press the [REC Button].



2. Specify the desired type/note and reference pitch.

If desired, use the [PLAY Button ▲] and [STOP Button ▼] to specify the tuner type/note, and use the [PREV Button ◀] and [NEXT Button ▶] to adjust the reference pitch.

	Range	Factory setting
Type/Note	AUTO / C, C#, D, D#, E, F, F#, G, G#, A, A#, B	AUTO
Reference pitch	435 Hz–445 Hz	440 Hz



3. Facing the microphone, play the note that you want to tune.

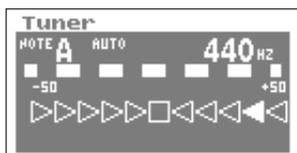
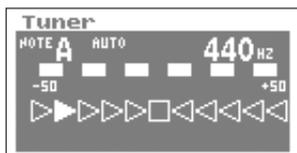
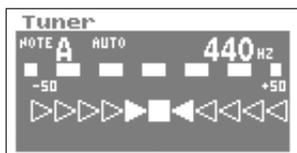
Tune your instrument so that the center indicator is illuminated in the lower part of the display. When the pitch is correct, the dashed line above will stop moving.

If the pitch is below the specified note, the left side will light and the dashed line will flow from right to left.

If the pitch is above the specified note, the right side will light and the dashed line will flow from left to right.

MEMO

When using the tuner or graphic tuner, the input level is fixed for the internal microphone, external microphone, and line input, and cannot be adjusted.

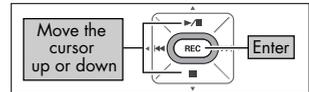


Graphic Tuner

This tuner graphically shows the pitch change in real time. It is a convenient way for you to practice singing or playing a wind instrument with a stable pitch.

1. Select "Graphic Tuner" from the <Menu Screen>.

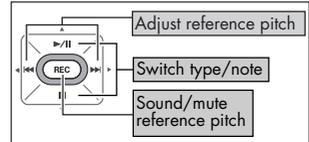
Use the [PLAY Button ▲] and [STOP Button ▼] to select "Graphic Tuner," then press the [REC Button].



2. Specify the desired type/note and reference pitch.

If desired, use the [PLAY Button ▲] and [STOP Button ▼] to specify the tuner type/note, and use the [PREV Button ◀] and [NEXT Button ▶] to adjust the reference pitch.

	Range	Factory setting
Type/Note	AUTO / C, C#, D, D#, E, F, F#, G, G#, A, A#, B	AUTO
Reference pitch	435 Hz–445 Hz	440 Hz



3. Facing the microphone, play the note that you want to tune.

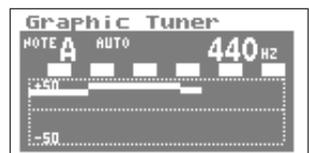
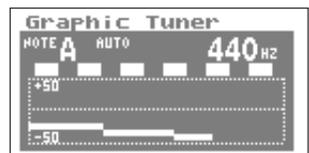
Adjust the pitch so that the graph value comes to the center (± 0) of the vertical axis. When the pitch is correct, the dashed line above will stop moving.

If the pitch is below the specified note, a position below the center line will light, and the dashed line will flow from right to left.

If the pitch is above the specified note, a position above the center line will light, and the dashed line will flow from left to right.

MEMO

When using the tuner or graphic tuner, the input level is fixed for the internal microphone, external microphone, and line input, and cannot be adjusted.

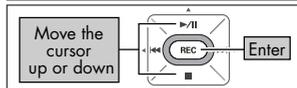


Initializing the R-09HR (Factory Reset)

You can restore all the settings that the R-09HR originally had when it left the factory by carrying out the procedure below. This operation does not delete songs on the memory card.

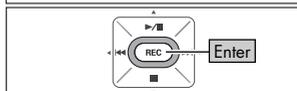
1. Select "Factory Reset" from the <Menu Screen>.

Use the [PLAY Button ▲] and [STOP Button ▼] to select "Factory Reset," then press the [REC Button].



2. Press the [REC Button] to initialize.

A confirmation screen is shown. Press the [REC Button] to initialize.



3. Select "Yes."

A confirmation screen is shown.

Use the [PREV button ◀] and [NEXT button ▶] to select "Yes," then press the [REC Button].

cf.

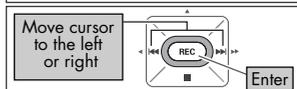
See the table on p. 85 for initial settings.

MEMO

When not performing initialization, press the [MENU Button].

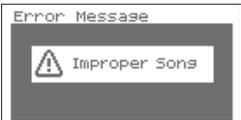
NOTE

Do not turn off power during initialization.



Message list

This section describes the main messages shown on the display.

Message	Problem
 <p>Error Message ⚠ Clock Initialized</p>	Clock Initialized The internal clock was initialized because no power was available.
 <p>Error Message ⚠ Battery Low</p>	Battery Low The remaining power of the internal battery is low. The battery must be replaced. The AC adaptor may also be used.
 <p>Error Message ⚠ Improper Song</p>	Improper Song The song is in a file format that cannot be used with the R-09HR.
 <p>Error Message ⚠ Already Exists</p>	Already Exists There is a song or folder of the same name. Create the song or folder using a different name.
 <p>Error Message ⚠ Song Protected</p>	Song Protected The song is protected. Turn Write protect OFF and then try again.
 <p>Error Message ⚠ Name Too Long</p>	Name Too Long The name is too long.
 <p>Error Message ⚠ File System Err</p>	File System Err The memory card has not been formatted. Format the memory card on the R-09HR.
 <p>Error Message ⚠ SD Unformatted</p>	SD Unformatted The memory card is not formatted or cannot be recognized. Format the memory card on the R-09HR.

Message	Problem
 <p>The image shows a dark rectangular display with a white border. At the top, it says "Error Message". Below that is a white triangle with a black exclamation mark, followed by the text "SD Card Full".</p>	<p>SD Card Full The memory card does not have sufficient space available. Copy the song to the PC and check the memory card capacity.</p>
 <p>The image shows a dark rectangular display with a white border. At the top, it says "Error Message". Below that is a white triangle with a black exclamation mark, followed by the text "SD Card Slow".</p>	<p>SD Card Slow The write to the memory card was too slow. Use a memory card that was tested for the R-09HR. The performance of the memory card may have decreased because of improper song organization on the memory card, which was caused by repeated saving and deleting. In this case, re-format the memory card.</p>
 <p>The image shows a dark rectangular display with a white border. At the top, it says "Error Message". Below that is a white triangle with a black exclamation mark, followed by the text "SD Card Locked".</p>	<p>SD Card Locked The memory card is locked. Remove the memory card and unlock it.</p>
 <p>The image shows a dark rectangular display with a white border. At the top, it says "Error Message". Below that is a white triangle with a black exclamation mark, followed by the text "SD Card Error".</p>	<p>SD Card Error An error occurred while accessing the memory card. The memory card may be corrupted.</p>
 <p>The image shows a dark rectangular display with a white border. At the top, it says "Error Message". Below that is a white triangle with a black exclamation mark, followed by the text "No Card".</p>	<p>No Card No memory card has been inserted. Insert a memory card into the R-09HR.</p>
 <p>The image shows a dark rectangular display with a white border. At the top, it says "Error Message". Below that is a speech bubble icon with three dots, followed by the text "HOLD is ON".</p>	<p>HOLD is ON The hold switch is ON. This message is shown when an operation is attempted while the hold switch is turned on.</p>
 <p>The image shows a dark rectangular display with a white border. At the top, it says "Error Message". Below that is a speech bubble icon with three dots, followed by the text "Now Recording".</p>	<p>Now Recording Recording is currently in progress. This message is displayed when an operation is attempted during recording. Cancel the recording to perform an operation.</p>
 <p>The image shows a dark rectangular display with a white border. At the top, it says "Error Message". Below that is a speech bubble icon with three dots, followed by the text "Now Playing".</p>	<p>Now Playing Playback is currently in progress. This message is displayed when an operation is attempted during playback. Cancel playback to perform an operation.</p>
 <p>The image shows a dark rectangular display with a white border. At the top, it says "Error Message". Below that is a speech bubble icon with three dots, followed by the text "AGC is ON".</p>	<p>AGC is ON The Auto Gain Control switch is ON. This message is shown when an operation of the Input Level button is attempted while the Auto Gain Control switch is turned on.</p>

Troubleshooting

This section provides tips on solving problems that may occur.

Problems during recording

The recording only plays on the L channel (left)

- If using an external microphone, check whether the microphone is set to stereo or monaural. If the microphone is a monaural one, only the L channel (left) is recorded. To record both channels using a monaural microphone, set the microphone type to "MONO."

cf. ➤ "Setting the external microphone type (EXT Mic Type)" (p. 105)

Recording won't start

- Check the amount of space available on the memory card. Recording is impossible if there is less than 16 KB available. Recording standby cannot be entered either.

cf. ➤ "Estimated recording times" (p. 36)

Can't use the microphone

- When using the [Internal MIC], do not connect anything to the other input jacks. If a microphone, cable, or device is connected to the [MIC Input Jack] or [LINE IN Jack], the [Internal MIC] cannot be used.

cf. ➤ "MIC INPUT jack" (p. 11), "LINE IN jack" (p. 11),
"Using the internal microphones" (p. 37)

- When using an external microphone, please do not connect anything to the [LINE IN Jack]. If a microphone, cable, or other device is connected to the [Line In Jack], then the input from the [MIC Input Jack] is ignored.

cf. ➤ "MIC INPUT jack" (p. 11), "LINE IN jack" (p. 11),
"Using external microphones" (p. 41)

- When using an external microphone, make sure to choose the settings appropriate for the microphone being used.

cf. ➤ "Set the type of microphone being used." (p. 43)

- Is a phantom powered microphone connected?
The R-09HR does not support phantom powered microphones.

The recording is distorted

- Sound becomes distorted if the input level is too high. Set the input level to an appropriate value.

cf. ➤ "Adjusting recording levels" (p. 45)

Recorded files cannot be played back.

- If an adaptor is mistakenly unplugged or a card is removed during recording, files can get damaged, making it impossible to play them back. The file repair feature can be used to repair such files.

cf. ➤ “Repair files (Repair)” (p. 82)

Can't record

- Recording is not possible if there is insufficient remaining time. The remaining recording time is shown in the display in recording-standby mode. There is no remaining time if 00:00:00 is shown. Check the amount of free space on the memory card.

cf. ➤ “Estimated recording times” (p. 36)

- Recording is not possible if the memory card is not inserted properly. The display shows “No Card” when the memory card is not recognized. Turn off power and re-insert the memory card.

cf. ➤ “Inserting” (p. 25)

- If the memory card is not formatted, the memory card is not recognized, and the display shows “SD unformatted.” Format the memory card.

cf. ➤ “Formatting” (p. 27)

- Recording is not possible if the write protect (LOCK) feature is turned on. Unlock the write protect feature.

cf. ➤ “SD Memory Card” (p. 28)

- Recording cannot be performed correctly if the input level set with the [INPUT LEVEL buttons] is too low. Set a proper input level.

cf. ➤ “Adjusting recording levels” (p. 45)

- When using an external microphone, connect it properly to the [MIC Input Jack]. Also check the [EXTERNAL MICROPHONE TYPE Switch] settings.

cf. ➤ “MIC GAIN switch” (p. 13)

- Memory cards must be formatted on the R-09HR to operate properly. Memory cards formatted on a PC may have the wrong format type. In these cases, the recording may stop immediately after starting, or a proper recording may not be possible.

cf. ➤ “Formatting” (p. 27)

A stereo song is created although a monaural microphone was used for recording.

- The R-09HR records in stereo. Even if a monaural microphone is connected and the [EXTERNAL MICROPHONE TYPE Switch] is set to “MONO,” a stereo song with the same sound recorded on both the L and R tracks is created.

The volume of the device connected to the LINE IN Jack is low

- Does the cable you are using have resistance? Please use a connecting cable that has no resistance.

Problems during playback

There's no sound

- The sound may not be heard if the output volume is too low. Increase the output volume gradually.
 - cf.** ➤ "(+) and (-) VOLUME buttons" (p. 12)
- Check if the headphones or speakers are connected properly.
 - cf.** ➤ "Connecting headphones and speakers" (p. 54)

Can't play songs

- Check if the song name is correct. Songs beginning with a "." (period) cannot be used on the R-09HR.
- The R-09HR can only play songs with the .MP3 or .WAV extensions. Also, corrupted songs cannot be played.
 - cf.** ➤ "Song types that can be played" (p. 66)
"Changing the name (Rename)" (p. 76)
"Message list" (p. 117)

The wrong song is played

- The song playback mode may be in shuffle play (SHUFFLE). In this mode, the R-09HR randomly selects the next song to be played. Change the setting to normal play (SEQUENTIAL).
 - cf.** ➤ "Setting the song playback mode (Play Mode)" (p. 92)
"Shuffle play" (p. 60)

There's no sound from the preview monitor

- Could Preview Monitor be set to "OFF?"

Miscellaneous problems

The power won't turn on

- Check if the AC adaptor is properly connected.
If using batteries, make sure the batteries are inserted correctly in the correct orientation. The batteries may also be low, so have new batteries on hand.

cf. ➤ "Turning power on/off" (p. 20)

- If the R-09HR still does not turn on even though there is no problem with the AC adaptor or batteries, the unit may be damaged.

The PC won't recognize the R-09HR even after connection

- The PC will not recognize the R-09HR if there is no memory card inserted. Check if a memory card is inserted if the R-09HR does not appear on the PC desktop.

cf. ➤ "Inserting" (p. 25)

Pressing and holding down the [MENU Button] does not show the <Menu Screen>.

- While playing, recording, or in recording standby, pressing the [MENU Button] does not make the <Menu Screen> appear.
First, stop playback or recording, then press the [MENU Button].

The display darkens

- When running on battery power, the display may darken when there are no operations, depending on the Display Timer settings.

cf. ➤ "Setting the time until the screen is darkened when no operations are performed for a set period of time (Display Timer)" (p. 100)

The power turns off suddenly

- If no operations are performed for a set period of time, the power may automatically turn off according to the Auto Power Off settings.

cf. ➤ "Setting the time until the power turns off when no operations are performed for a set amount of time (Auto Power Off)" (p. 102)

- When using batteries, the power will turn off if the batteries are low. Replace with new batteries.

The Remote Control cannot be used

- Is Remote Control set to "Disable?"
- Is the remote control battery inserted properly?

Malfunction

- Malfunctions can be avoided by setting the Remote Control to "Disable."

The settings disappear

- If all the settings in the <Menu Screen> are restored to factory defaults, the R-09HR may have been accidentally reset to factory defaults. Please reconfigure the settings.

cf. ➤ "Initializing the R-09HR (Factory Reset)" (p. 116)

The R-09HR is connected to the PC with a USB cable, but the PC doesn't recognize it

- The PC will not recognize the R-09HR if the connection is made while the <Menu Screen> is showing or during playback or recording. First, disconnect the USB cable connecting the R-09HR to the PC, and then try again.

cf. ➤ "Connecting to the PC" (p. 67)

Displaying the song name is slow when selecting a song

- This problem may be caused by a corrupted song, illegal song format, unsupported MP3 format, a song that is too large, or a song with an .MP3 or .WAV extension that is taking time to verify on the R-09HR as playable. These conditions cause the display to be sluggish when selecting a song.

cf. ➤ "Song types that can be played" (p. 66)

Feedback occurs when monitoring with headphones

- If open air headphones are used to monitor recording, feedback may occur if the headphones are too close to the R-09HR. The R-09HR's internal microphones are capable of picking up even the faintest of sounds, so do not move too close to the R-09HR.

The internal clock resets

- When the power is on, the internal clock draws power from the AC adaptor or the batteries. When the power is off, the internal clock will run temporarily on the power stored in the main unit. However, if the power is off for several days, the internal clock settings return to the original settings (initial status). When power is turned on in initial status, the message "Clock Initialized" is shown. If "Clock Initialized" is shown, please reset the date and time.

cf. ➤ "Setting the date and time (Date & Time)" (p. 109)

Index

Symbols

- (+) and (-) INPUT LEVEL buttons 11, 14
- (+) and (-) VOLUME buttons 12, 14

A

- AB REPEAT/SPLIT button 8
- AC adaptor 20
- AC ADAPTOR jack 12
- AGC 106, 118
- Already Exists 117
- Auto Power Off 85, 102

B

- Battery 21, 23, 85, 103
 - Batteries that can be used 21
 - Battery compartment 12
 - Battery Low 117
 - Remote Control 23
 - Setting the battery type 103
- Beat 86
- Bit 35
- Bottom cover 13
- bps 35
- Breath noise 13
- Brightness 85, 98

C

- Clipping status 46
- Clock 29, 117
- Clock Initialized 117
- Combine 81
- Condenser microphone 11, 43
- Copy 72, 79

D

- Date
 - Setting 29, 109
- Date & Time 86, 109
- Delete 33, 72, 75
- Disconnecting 70
- Display 8
 - Adjusting the Brightness 98

- Display Setup 85
- Display Timer 85

- Display Setup 98–101
- Display Timer 100
- Divide 80
- Dynamic microphone 11, 43

E

- EXT Mic Type 85, 105
- External Microphone 41

F

- Factory Reset 86, 116
- File Name 85, 89
- File Size 90
- File System Err 117
- FINDER button 8
- Finder screen 16, 72
 - Combine 81
 - Copy 72, 79
 - Delete 72, 75
 - Divide 80
 - Information 72, 74
 - Make Folder 72, 83
 - Move 72, 77
 - Rename 72, 76
 - Repair 72, 82
 - Select 72–73

Folder

- Copy 79
 - Delete 75
 - Information 74
 - Make Folder 83
 - Move 77
 - Rename 76
 - Select 73
- Format 27, 86
 - Forward 9, 55

G

- Graphic Tuner 86, 115

- H**
- HALL1, HALL2 **8, 65**
 - HEADPHONE jack **12**
 - HIGH **13**
 - HOLD is ON **118**
 - HOLD switch **12**
- I**
- Icon **17**
 - Improper Song **117**
 - Indicator **101**
 - Information
 - Folder **72, 74**
 - SD Card **86, 110**
 - Song **72, 74**
 - Initializing the R-09 (Factory Reset) **116**
 - Input Setup **85, 104–107**
 - Internal Microphone **8, 37**
- L**
- Limiter/AGC **85, 106**
 - LIMITER/AGC switch **13**
 - LINE IN jack **11**
 - Lithium Battery **23**
 - LOW **13**
 - Low Cut Freq **85, 107**
 - LOW CUT switch **13**
- M**
- Main screen **16**
 - Make Folder **72, 83**
 - Max File Size **85, 90**
 - Media Player **35**
 - Memory card **13, 25, 28, 86, 118**
 - Displaying SD memory card information **110**
 - Formatting SD memory cards **110**
 - Memory card slot **13**
 - Structure **78**
 - Write protect feature (LOCK) **28**
 - MENU button **8**
 - Menu screen **16, 87**
 - Date & Time **86**
 - Display Setup **85**
 - Displaying the Menu screen **87**
 - Factory Reset **86**
 - Input Setup **85**
 - Player Setup **85**
 - Power Manage **85**
 - Recorder Setup **85**
 - Remote Control **86**
 - SD Card **86**
 - Message **117**
 - Metronome **86, 111**
 - Metronome Lev **85**
 - Microphone
 - Condenser microphone **11, 43**
 - Dynamic microphone **11, 43**
 - External microphone **11, 41**
 - Internal MIC **8, 37**
 - MIC GAIN switch **13**
 - MIC INPUT jack **11**
 - Microphone sensitivity **13**
 - Monaural microphone **11**
 - Stereo microphone **11**
 - Monaural **11**
 - Move **72, 77**
 - MP3 **35**
- N**
- Name Too Long **117**
 - NEXT button **9, 15**
 - No Card **118**
 - NO NAME **69**
 - NOTE **86**
 - Now Playing **118**
 - Now Recording **118**
- P**
- PAUSE **9**
 - PC
 - Connecting to the PC **67**
 - Disconnecting the PC **70**
 - Peak Hold **85, 99**
 - PEAK indicator **8, 46**
 - PLATE **8, 65**
 - Play Mode **92**
 - Playback
 - Connecting headphones and speakers **54**
 - PLAY **9**

- Play Mode **85, 92**
 PLAY/PAUSE button **9**
 Playing back **32, 52**
 Repeat A-B **56**
 SEQUENTIAL **62**
 Setting the Repeat **93**
 Setting the song playback mode **92**
 SHUFFLE **60**
 SINGLE **58**
 Song types that can be played **66**
 Player Setup **85, 92–97**
 PLUG-IN POWER switch **11, 13**
 Power
 AC ADAPTOR jack **12, 20**
 Power Manage **85**
 Power saving feature **22**
 POWER switch **12, 20**
 Turning power on/off **20**
 Power Manage **102–103**
 PREV button **9, 14**
 Preview Monitor **12, 85, 94**
 Protect **74**
- R**
- REC **10**
 REC button **10, 15**
 REC indicator **10**
 Rec Mode **85, 88**
 Rec Monitor Sw **85, 104**
 REC PAUSE **10**
 Rec/Peak LED **85, 101**
 Recorder Setup **85, 87–90**
 Recording **31, 34**
 Adjusting recording levels **45**
 Estimated recording times **36**
 Recording from cassettes or CDs **48**
 Recording instruments and voice **37**
 Recording mode **35**
 Recording-standby **10**
 Self Timer **91**
 Setting the Rec Monitor Sw **104**
 Setting the Recording Mode **88**
 Setting the Sample Rate **87**
 Using external microphones **41**
 Reference Pitch **86**
 Remote Control **23–24, 86, 108**
 Remote indicator **12**
 Removable disk **68**
 Rename **72, 76**
 Repair **72, 82**
 Repeat **85, 93**
 Repeat A-B **56**
 Repeated playback **56**
 SEQUENTIAL **62**
 SHUFFLE **60**
 SINGLE **58**
 Rev Depth **85, 97**
 Rev Type **85, 96**
 Reverb **8**
 HALL1, HALL2 **8, 65**
 PLATE **8, 65**
 ROOM **8, 65**
 REVERB button **8**
 Rewind **9, 55**
 ROOM **8, 65**
- S**
- Sample Rate (Sampling frequency) **34, 85, 87**
 Setting the Sample Rate **87**
 Screen **16**
 Finder screen **16, 72**
 Main screen **16**
 Menu screen **16, 87**
 USB screen **16, 67**
 SD Card **13, 86, 110**
 SD Card Error **118**
 SD Card Full **118**
 SD Card Locked **118**
 SD Card Slow **118**
 SD Unformatted **117**
 Select **72–73**
 Self Timer **85, 91**
 SEQUENTIAL **62**
 Settings **85**
 SHUFFLE **60**
 SINGLE **58**
 Size (file) **90**
 Song

Copy	79
Delete	75
Information	74
Move	77
Protect	74
Rename	76
Repair	82
Select	73
Song Protected	117
Speed	64, 85, 95
SPEED button	8
Split	51
SPLIT button	15
Stereo	11
STOP button	10, 15

T

Tempo	86
Time	
Setting	29, 109
Troubleshooting	119
Tuner	86, 114

U

USB 2.0 (HI-SPEED USB)	13
USB cable	67
USB screen	16, 67
USB terminal	13

V

VBR	66
-----------	----

W

WAV	35
-----------	----

Specifications

WAV/MP3 RECORDER: R-09HR

Recorder Part

● Tracks

2 (stereo)

● Signal Processing

AD/DA conversion: 24 bits, 44.1/48 kHz

● Data Type

<For Recording> * Stereo only

Format	MP3 (MPEG-1 audio layer 3)
Sampling Rate	44.1/48 kHz
Bit Rates	64/96/128/160/192/224/320 kbps

Format	WAV
Sampling Rate	44.1/48/88.2/96 kHz
Bit Depth	16/24 bits

<For Playback>

Format	MP3 (MPEG-1 audio layer 3)
Sampling Rate	32/44.1/48 kHz
Bit Rates	32–320 kbps or VBR (Variable Bit Rate)

Format	WAV
Sampling Rate	32/44.1/48/88.2/96 kHz
Bit Depth	16/24 bits

● Memory Card

Recording Time

unit: minutes

Settings	Size of Memory Card				
	512MB	1GB	2GB	4GB	8GB
WAV (24 bits/96 kHz)	13	27	55	110	220
WAV (24 bits/88.2 kHz)	15	30	60	120	240
WAV (24 bits/48 kHz)	27	54	110	220	440
WAV (24 bits/44.1 kHz)	29	59	120	240	480
WAV (16 bits/96 kHz)	20	40	80	160	320
WAV (16 bits/88.2 kHz)	22	44	88	176	352
WAV (16 bits/48 kHz)	40	81	166	332	664
WAV (16 bits/44.1 kHz)	44	88	180	360	720
MP3 320 kbps	196	392	797	1540	3080
MP3 128 kbps	490	980	1993	3990	7980

* Each recording time is approximate. The times may change depending on the card specifications.

* In case that there are plural files, the sum of recording time would be shorter than above.

Input/Output

● Audio Inputs

Internal Stereo Microphone
 Mic input
 (Stereo miniature phone type, plug-in powered mic)
 Line input (Stereo miniature phone type)
 * The Internal/External MIC and the LINE IN can't be used at the same time; only the LINE IN is effective.

● Audio Outputs

Phones (Stereo miniature phone type)

● Nominal Input Level (Variable)

Mic Input: -33 dBu (Default input level)
 Line Input: 2 dBu (Default input level)

● Input Impedance

Mic input: 30 k ohms
 Line input: 15 k ohms

● Output Level

20 mW (In case 16 ohms load)

● Recommended Load Impedance

16 ohms or greater

● Frequency Response

20 Hz–40 kHz (± 2 dB)

● USB Interface

Mini-B type
 * support USB 2.0/1.1 mass storage device class

Effects

(Playback only. Excludes playback in 88.2 kHz or 96 kHz.)

● Playback Reverb

4 types (Hall 1, Hall 2, Room, Plate)

● Speed Change

Playback speed change: 50–150% of playback speed

Others

● Display

128 x 64 dot graphic display

● Power Supply

AC Adaptor, Alkaline dry battery LR6 (AA) type x 2,
 or Nickel-metal hydride battery (HR15/51) x 2

● Current Draw

370 mA

● Dimensions

62.0 (W) x 112.9 (D) x 27.0 (H) mm
 2-1/2 (W) x 4-1/2 (D) x 1-1/6 (H) inches

● Weight

174 g / 7 oz
 * including batteries and memory card.

● Accessories

Owner's Manual
 Remote Control
 AC Adaptor
 SD Memory Card
 USB cable (Mini-B type)
 Dedicated Cover
 CD-ROM (Cakewalk "pyro Audio Creator LE")

* 0 dBu = 0.775 V rms

* Expected AA alkaline battery life under continuous use:
 Continuous playback: approximately 5.5 hours
 (When using headphones)
 Continuous recording: approximately 4.5 hours
 (When using internal microphone)

The battery life indicated above is approximate.
 Battery life will vary depending on the environment in which you are using the R-09HR and your method of use.

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

MEMO

Information

When you need repair service, call your nearest Roland Service Center or authorized Roland distributor in your country as shown below.

AFRICA

EGYPT

Al Fanny Trading Office
9, EBN Hagar Al Askalany Street,
ARD El Golf, Heliopolis,
Cairo 11341, EGYPT
TEL: (02) 417-11828

REUNION

MARCEL FO-VAM Sarl
25 Rue Jules Hermann
Chaudron - BP79 97 491
Ste Clotilde Cedex,
REUNION ISLAND
TEL: (0262) 218-429

SOUTH AFRICA

T.O.M.S. Sound & Music (Pty) Ltd.
2 ASTRON ROAD DENVER
JOHANNESBURG 21 295,
SOUTH AFRICA
TEL: (011) 417 3400

Paul Bernher(Pty) Ltd.

Royal Cape Park, Unit 24
Londorthery Road, 1700
Cape Town, SOUTH AFRICA
TEL: (021) 799 4900

ASIA

CHINA

Roland Shanghai Electronics Co., Ltd.
No.1500 Pingliang Road
Shanghai 200900, CHINA
TEL: (021) 2585-0800

Roland Shanghai Electronics Co., Ltd. (BEIJING OFFICE)

10F, No.18 3 Section Anhuaxili
Chaoyang District Beijing
100011, CHINA
TEL: (010) 6526-5050

HONG KONG

Tom Lee Music
11/F Silvercord Tower 1
30 Canton Rd
Tsimshatsui, Kowloon,
HONG KONG
TEL: 825-2737-7888

Parsons Music Ltd.

8th Floor, Railway Plaza, 39
Chatham Road South, T.S.T.,
Kowloon, HONG KONG
TEL: 2333 1863

INDIA

Rivera Digitec (India) Pvt. Ltd.
411, Nirmam Kendra Mahabakmi
Flats Compound Off. Dr. Edwin
Moses Road, Mumbai-400011,
INDIA
TEL: (022) 2493 9051

INDONESIA

PT Citra Intrama
Jl. Cideng Timur No. 15a-150
Jakarta Pusat,
INDONESIA
TEL: (021) 6324170

KOREA

Cosmos Corporation
1461-9, Seocho-Dong,
Seocho Ku, Seoul, KOREA
TEL: (02) 3486-8855

MALAYSIA

Roland Asia Pacific Sdn. Bhd.
45-1, Block C2, Jalan PJU 1/39,
Dataran Prima, 47301 Petaling
Jaya, Selangor, MALAYSIA
TEL: (03) 7805-3263

VIET NAM

VIET THUNG CORPORATION
386 CACH MANG THANG TAM ST.
DIST.3, HO CHI MINH CITY,
VIET NAM
TEL: (08) 9316540

PHILIPPINES

G.A. Yupangco & Co. Inc.
339 Gil J. Puyat Avenue
Market, Metro Manila 1200,
PHILIPPINES
TEL: (02) 899 9801

MALAYSIA/ SINGAPORE

Roland Asia Pacific Sdn. Bhd.
45-1, Block C2, Jalan PJU 1/39,
Dataran Prima, 47301 Petaling
Jaya, Selangor, MALAYSIA
TEL: (03) 7805-3263

TAIWAN

ROLAND TAIWAN ENTERPRISE CO., LTD.
9F-5F, No. 112 Chung Shan
North Road Sec. 2 Taipei 104,
TAIWAN R.O.C.
TEL: (02) 2561 3339

THAILAND

Thera Music Co., Ltd.
100-100 Soi Veng Nokornkasem,
New Road, Sumpatwong,
Bangkok 10100, THAILAND
TEL: (02) 224-8821

Paul Bernher(Pty) Ltd.

Royal Cape Park, Unit 24
Londorthery Road, 1700
Cape Town, SOUTH AFRICA
TEL: (021) 799 4900

OCEANIA

AUSTRALIA/ NEW ZEALAND

**Roland Corporation
Australia Pty., Ltd.**
38 Campbell Avenue
Dee Why West, NSW 2099,
AUSTRALIA
For Australia
TEL: (02) 9982 8266
For New Zealand
TEL: (09) 3098 715

ARGENTINA

Instrumentos Musicales S.A.
Av. Santa Fe 2055
(1123) Buenos Aires, ARGENTINA
TEL: (011) 4508-2700

CENTRAL/LATIN AMERICA

ARGENTINA

Instrumentos Musicales S.A.
Av. Santa Fe 2055
(1123) Buenos Aires, ARGENTINA
TEL: (011) 4508-2700

BARBADOS

A&B Music Supplies LTD
12 Webster Industrial Park
Wildely, St.Michael, BARBADOS
TEL: (246) 430-1100

BRAZIL

Roland Brasil Ltda.
Rua San Jose, 211
Parque Industrial San Jose
Cotia - Sao Paulo - SP, BRAZIL
TEL: (011) 4615 5666

CHILE

Comercial Fancy II S.A.
Rut.: 96.919.420-1
Natalien Cox #739, 4th Floor
Santiago - Centro, CHILE
TEL: (02) 688-9540

COLOMBIA

Centro Musical Ltda.
Cra 43 B No 25 A 41 Bododega 9
Medellin, COLOMBIA
TEL: (574) 381 2529

COSTA RICA

JUAN Bansbach Instrumentos Musicales
Ave. 1, Calle 11, Apartado 10237,
San Jose, COSTA RICA
TEL: 258-0211

CURACAO

Zeelandia Music Center Inc.
Orionweg 30
Curacao, Netherland Antilles
TEL: (305) 5926866

DOMINICAN REPUBLIC

DOMINICAN REPUBLIC
Calle Proyecto Centro No.3
Ens.La Esperilla
Santo Domingo,
DOMINICAN REPUBLIC
TEL: (809) 683 0305

ECUADOR

Mas Musica
Rumichaca 822 y Zanura
Guayaquil - ECUADOR
TEL: (593-4) 2302364

EL SALVADOR

OMINI MUSIC
75 Avenida Norte y Final Alameda
Juan Pablo II,
Edificio No.4010 San Salvador,
EL SALVADOR
TEL: 262-0788

GUATEMALA

Casa Instrumental
Calzada Roosevelt 34-01, zona 11
Ciudad de Guatemala,
GUATEMALA
TEL: (502) 599-2888

HONDURAS

Almacén Pajaro Azul S.A. de C.V.
BO.Paz Barahona
3 Ave. 11 Calle S.O
San Pedro Sula, HONDURAS
TEL: (504) 553-2029

MARTINIQUE

Musique & Son
97232 Le Lamantin,
MARTINIQUE F.W.I.
TEL: 596 596 426860

Gigamusik SARL

10 Rte De La Folie
97200 Fort De France
MARTINIQUE F.W.I.
TEL: 596 596 715222

MEXICO

Casa Veerkamp, s.a. de c.v.
Av. Toluca No. 323, Col. Olivar
de los Padres 01780 Mexico D.F.,
MEXICO
TEL: (55) 5668-6699

NICARAGUA

Bansbach Instrumentos Musicales Nicaragua
Altamira D'Este Calle Principal
de la Farmacia Sta.Avenida
1 Cuadra al Lago #503
Managua, NICARAGUA
TEL: (505) 277-2557

PANAMA

SUPRO MUNDIAL, S.A.
Boulevard Andrews, Albrook,
Panama City, REP. DE PANAMA
TEL: 315-0101

PARAGUAY

Distribuidora De Instrumentos Musicales
J.E. Oleary ESQ. Manduivra
Asuncion, PARAGUAY
TEL: (595) 21 492147

PERU

Audioton
Distribuciones Musicales SAC
Juan Fanning 530
Miraflores
Lima - PERU
TEL: (511) 4461388

TRINIDAD

AMR Ltd
Ground Floor
Maritime Plaza
Barataria TRINIDAD W.I.
TEL: (868) 638 6385

URUGUAY

Todo Musica S.A.
Francisco Acuna de Figueroa
1771
C.P.: 11.800
Montevideo, URUGUAY
TEL: (02) 924-2335

VENEZUELA

Instrumentos Musicales Allegro C.A.
Avlas industrias edif. Guffar import
#7 zona Industrial de Turumo
Caracas, VENEZUELA
TEL: (212) 244-1122

EUROPE

BELGIUM/FRANCE/ HOLLAND/ LUXEMBOURG

Roland Central Europe N.V.
Houtstraat 3, B-2260, Oevel
(Westerlo) BELGIUM
TEL: (014) 575811

CROATIA ART-CENTAR

Dezgenova 3,
HR - 10000 Zagreb, CROATIA
TEL: (1) 466 8493

CZECH REP. CZECH REPUBLIC DISTRIBUTOR

Slovakia
Voctárova 247/16
180 00 Praha 8, CZECH REP.
TEL: (02) 830 20270

DENMARK

Roland Scandinavia A/S
Siagraravej 7 Postboks 880
DK-2100 Copenhagen,
DENMARK
TEL: 3916 6200

FINLAND

Roland Scandinavia As, Filial Finland
Vanha Nummijärventie 62
01670 Vantaa, FINLAND
TEL: (0) 9 68 24 020

GERMANY/AUSTRIA

Roland Elektronische Musikinstrumente HmbH.
Quitsstrasse 96, 22844 Nordstedt,
GERMANY
TEL: (040) 52 60090

GREECE/CYPRUS

STOLLAS S.A.
Music Sound Light
155, New National Road
Patras 26442, GREECE
TEL: 2610 435400

HUNGARY

Roland East Europe Ltd.
2045 Torokbalint, FSD Park,
building 2, HUNGARY
TEL: (23) 511011

IRELAND

Roland Ireland
G2 Calmount Park, Calmount
Avenue, Dublin 12,
Republic of IRELAND
TEL: (01) 4294444

ITALY

Roland Italy S. p. A.
Viale delle Industrie 8,
20020 Arese, Milano, ITALY
TEL: (02) 937-87900

NORWAY

Roland Scandinavia Avd.
Kontor Norge
Lillemorveien 2 Postboks 95
Lillemor N-0216 Oslo,
NORWAY
TEL: 2273 0074

POLAND

ROLAND POLSKA SP Z O.O.
ul. Kty Grodziskie 16B
03-288 Warszawa, POLAND
TEL: (022) 678 9512

PORTUGAL

Roland Iberia, S.L.
Branch Office Porto
Edificio Tower Plaza
Rotunda Eng. Edgar Cardoso
23, 9°G
4400-676 Vila Nova de Gaia,
PORTUGAL
TEL: (+351) 22 608 00 60

ROMANIA

FRS LINES
Piata Libertatii 1,
535500 Gheorgheni, ROMANIA
TEL: (266) 364 609

RUSSIA

Roland Music LLC
Dorozhnaya ul., 3.korp.6
117 545 Moscow, RUSSIA
TEL: (495) 981-4967

SERBIA

Music AP Ltd.
Sutjeska br. 3 XS - 24413 Palic,
SERBIA
TEL: (024) 539 395

SLOVAKIA

DAN Acoustic s.r.o.
Povazska 18,
SK - 940 01 Nové Zámky,
Slovakia
TEL: (035) 6424 330

SPAIN

Roland Iberia, S.L.
Pasaje Garcia Faria, 23-35
08005 Barcelona, SPAIN
TEL: 93 493 91 31

SWEDEN

Roland Scandinavia A/S
SWEDESH SALES OFFICE
Mårbackagatan 31, 4 r.
SE-123 43 Farsta, SWEDEN
TEL: (0) 8 683 04 30

SWITZERLAND

Roland (Switzerland) AG
Landstrasse 5, Postfach,
CH-4452 Hingen, SWITZERLAND
TEL: (061) 975-9987

UKRAINE

EURHYTHMICS Ltd.
PO.Box 37-2,
Nedecyev Str. 30
UA - 89600 Mukachevo, UKRAINE
TEL: (03131) 414-40

UNITED KINGDOM

Roland (U.K.) Ltd.
Atlantic Close, Swansea
Enterprise Park, WISANSEA SA7
9F), UNITED KINGDOM
TEL: (01792) 702701

MIDDLE EAST

BAHRAIN

Moon Stores
No.123181249 Rumaytha
Building Road 3931,
Manama 339, BAHRAIN
TEL: 17 813 942

IRAN

MOCO INC.
No.41 Nike St., Dr.Shariyati Av.,
Robeyerey Cerah Miradam
Teheran, IRAN
TEL: (021)-2285-4169

ISRAEL

Hahit P. Greenspan & Sons Ltd.
8 Retzif HaYalla Hashnia St.
Tel-Aviv-Yaffo ISRAEL
TEL: (03) 6823666

JORDAN

MUSIC HOUSE CO. LTD.
FREDDY FOR MUSIC
P.O. Box 922864
Amman 11192, JORDAN
TEL: (06) 5692966

KUWAIT

EASA HUSAIN AL-YOUSIFI & SONS CO.
Al-Yousifi Service Center
P.O.Box 126 (Safat) 13002,
KUWAIT
TEL: 00 965 802929

LEBANON

Chahine S.A.L.
George Zeidan St., Chahine Bldg.
Achrafieh, P.O.Box 16-5857
Beirut, LEBANON
TEL: (01) 20-1441

OMAN

TALENTZ CENTRE L.L.C.
Malayan House No.1
117 545 Moscow, RUSSIA
TEL: (495) 981-4967

QATAR

Al Emadi Co. (Badie Studio & Stores)
P.O. Box 62, Doha, QATAR
TEL: 4423-554

SAUDI ARABIA

Adwiah Universal Electronics APL
Behind Pizza Inn
Prince Turkey Street
Adwiah Building,
PO Box 2154,
Alkhalifa 31952,
SAUDI ARABIA
TEL: (03) 8643601

SYRIA

Technical Light & Sound Center
PO BOX 13520 BLDG No.17
ABDUL WAHAB KANAWATST
RABWAH DAMASCUS, SYRIA
TEL: (011) 2233384

TURKEY

YEHUL DIS TICARET A.S.
Galip Dede Cad. No.37
Beylikozlu - Istanbul / TURKEY
TEL: (0212) 249 81 50

U.A.E.

Zak Electronics & Musical Instruments Co. L.L.C.
Zabeel Road, Al Sheeroq Bldg.,
No. 14, Ground Floor, Dubai,
U.A.E.
TEL: (04) 3360715

NORTH AMERICA

CANADA

Roland Canada Ltd.
(Head Office)
5480 Parkwood Way Richmond B.C.
C. - V0V 2M4, CANADA
TEL: (604) 270 6626

Roland Canada Ltd. (Toronto Office)

170 Admiral Boulevard
Mississauga On L5T 2N6,
CANADA
TEL: (905) 362 9707

U. S. A.

Roland Corporation U.S.
5100 S. Eastern Avenue
Los Angeles, CA 90040-2938,
U. S. A.
TEL: (323) 890 3700

For C.A. US (Proposition 65)

WARNING

This product contains chemicals known to cause cancer, birth defects and other reproductive harm, including lead.

For China

有关产品中所含有害物质的说明

本资料就本公司产品中所含的特定有害物质及其安全性予以说明。

本资料适用于 2007 年 3 月 1 日以后本公司所制造的产品。

环保使用期限



此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定期限内，产品中所含的有害物质不致引起环境污染，不会对人身、财产造成严重的不良影响。环保使用期限仅在遵照产品使用说明书，正确使用产品的条件下才有效。不当的使用，将会导致有害物质泄漏的危险。

产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
外壳(壳体)	×	○	○	○	○	○
电子部件(印刷电路板等)	×	○	×	○	○	○
附件(电源线、交流适配器等)	×	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。

因根据现有的技术水平，还没有什么物质能够代替它。

For the USA

DECLARATION OF CONFORMITY Compliance Information Statement

Model Name : R-09HR
Type of Equipment : WAVE/MP3 RECORDER
Responsible Party : Roland Corporation U.S.
Address : 5100 S. Eastern Avenue, Los Angeles, CA 90040-2938
Telephone : (323) 890 3700

For the U.K.

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.
Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

For EU Countries



- UK** This symbol indicates that in EU countries, this product must be collected separately from household waste, as defined in each region. Products bearing this symbol must not be discarded together with household waste.
- DE** Dieses Symbol bedeutet, dass dieses Produkt in EU-Ländern getrennt vom Hausmüll gesammelt werden muss gemäß den regionalen Bestimmungen. Mit diesem Symbol gekennzeichnete Produkte dürfen nicht zusammen mit dem Hausmüll entsorgt werden.
- FR** Ce symbole indique que dans les pays de l'Union européenne, ce produit doit être collecté séparément des ordures ménagères selon les directives en vigueur dans chacun de ces pays. Les produits portant ce symbole ne doivent pas être mis au rebut avec les ordures ménagères.
- IT** Questo simbolo indica che nei paesi della Comunità europea questo prodotto deve essere smaltito separatamente dai normali rifiuti domestici, secondo la legislazione in vigore in ciascun paese. I prodotti che riportano questo simbolo non devono essere smaltiti insieme ai rifiuti domestici. Ai sensi dell'art. 13 del D.Lgs. 25 luglio 2005 n. 151.
- ES** Este símbolo indica que en los países de la Unión Europea este producto debe recogerse aparte de los residuos domésticos, tal como está regulado en cada zona. Los productos con este símbolo no se deben depositar con los residuos domésticos.
- PT** Este símbolo indica que nos países da UE, a recolha deste produto deverá ser feita separadamente do lixo doméstico, de acordo com os regulamentos de cada região. Os produtos que apresentem este símbolo não deverão ser eliminados juntamente com o lixo doméstico.
- NL** Dit symbool geeft aan dat in landen van de EU dit product gescheiden van huishoudelijk afval moet worden aangeboden, zoals bepaald per gemeente of regio. Producten die van dit symbool zijn voorzien, mogen niet samen met huishoudelijk afval worden verwijderd.
- DK** Dette symbol angiver, at i EU-lande skal dette produkt opsamles adskilt fra husholdningsaffald, som defineret i hver enkelt region. Produkter med dette symbol må ikke smides ud sammen med husholdningsaffald.
- NO** Dette symblet indikerer at produktet må behandles som spesialavfall i EU-land, iht. til retningslinjer for den enkelte regionen, og ikke kastes sammen med vanlig husholdningsavfall. Produkter som er merket med dette symblet, må ikke kastes sammen med vanlig husholdningsavfall.
- SE** Symbolen anger att i EU-länder måste den här produkten kasseras separat från hushållsavfall, i enlighet med varje regions bestämmelser. Produkter med den här symbolen får inte kasseras tillsammans med hushållsavfall.
- FI** Tämä merkintä ilmaisee, että tuote on EU-maissa kerättävä erillään kotitalousjätteistä kunkin alueen voimassa olevien määräysten mukaisesti. Tällä merkinnällä varustettuja tuotteita ei saa hävittää kotitalousjätteiden mukana.
- HU** Ez a szimbólum azt jelenti, hogy az Európai Unióban ezt a terméket a háztartási hulladéktól elkülönítve, az adott régióban érvényes szabályozás szerint kell gyűjteni. Az ezzel a szimbólummal ellátott termékeket nem szabad a háztartási hulladék közé dobni.
- PL** Symbol oznacza, że zgodnie z regulacjami w odpowiednim regionie, krajach UE produktu nie należy wyrzucać z odpadami domowymi. Produktów opatrzonych tym symbolem nie można utylizować razem z odpadami domowymi.
- CZ** Tento symbol udává, že v zemích EU musí být tento výrobek sbíráán odděleně od domácího odpadu, jak je určeno pro každý region. Výrobky nesoucí tento symbol se nesmí vyhadzovat spolu s domácím odpadem.
- SK** Tento symbol vyjadruje, že v krajinách EÚ sa musí zber tohto produktu vykonávať oddelene od domového odpadu, podľa nariadení platných v konkrétnej krajine. Produkty s týmto symbolom sa nesmú vyhazovať spolu s domovým odpadom.
- EE** See sümbol näitab, et EL-i maades tuleb see toode olemprügist eraldi koguda, nii nagu on igas piirkonnas määratletud. Selle sümboliga märgitud tooted ei tohi ära visata koos olmeprügiga.
- LT** Šis simbolis rodo, kad ES šalyse šis produktas turi būti surenkamas atskirai nuo buitinių atliekų, kaip nustatyta kiekvienoje regione. Šiuo simboliu paženklinių produktai neturi būti išmetami kartu su buitinėmis atliekomis.
- LV** Šis simbols norāda, ka ES valstīs šo produktu jāievāc atsevišķi no mājsaimniecības atkritumiem, kā noteikts katrā reģionā. Produkts ar šo simbolu nedrīkst izmest kopā ar mājsaimniecības atkritumiem.
- SI** Ta simbol označuje, da je treba proizvod v državah EU zbirati ločeno od gospodinskih odpadkov, tako kot je določeno v vsaki regiji. Proizvoda s tem znakom ni dovoljeno odlagati skupaj z gospodinskimi odpadki.
- GR** Το σύμβολο αυτό υποδηλώνει ότι στις χώρες της Ε.Ε. το συγκεκριμένο προϊόν πρέπει να συλλέγεται χωριστά από τα υπόλοιπα οικιακά απορρίμματα, σύμφωνα με όσα προβλέπονται σε κάθε περιοχή. Τα προϊόντα που φέρουν το συγκεκριμένο σύμβολο δεν πρέπει να απορρίπτονται μαζί με τα οικιακά απορρίμματα.

For EU Countries

Apparatus containing Lithium batteries

ADVARSEL!

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandøren.

ADVARSEL

Eksplosjonsfare ved feilaktig skifte av batteri.
Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten.
Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the manufacturer.
Discard used batteries according to the manufacturer's instructions.

VARNING

Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparatillverkaren.
Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

For EU Countries



This product complies with the requirements of EMC Directive 2004/108/EC.

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Roland

