RC-50 LOOP STATION

Owner's Manual

Thank you, and congratulations on your choice of the BOSS **RC-50** Loop Station.

Before using this unit, carefully read the sections entitled:

- **USING THE UNIT SAFELY (page 2–3)**
- **IMPORTANT NOTES (page 4–5)**

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, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

■ Printing Conventions in This Manual

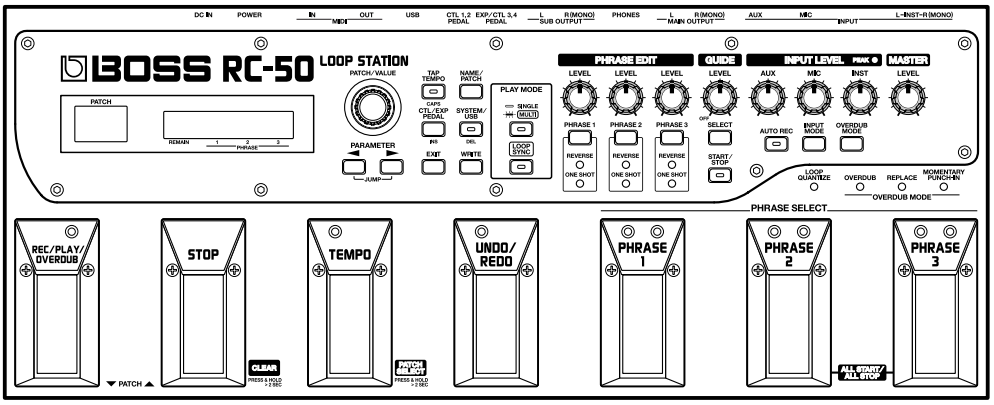
- Text or numerals enclosed in square brackets [ ] indicate buttons.

  [WRITE] WRITE button

  [EXIT] EXIT button

- **EXP pedal** is an abbreviation of "expression pedal."
- Reference such as (p. **) indicate pages in this manual to which you can refer.

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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

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.

- 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" sheet.

- Never use or store the unit in places that are:
  - 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
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.

- 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.

⚠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" sheet 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" sheet.



⚠ 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 or the body of the AC adaptor 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.



- 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.



- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet.



- Keep a USB connector cap you may remove and the included RC-50 in a safe place out of children's reach, so there is no chance of them being swallowed accidentally.



- Always turn the phantom power off when connecting any device other than condenser microphones that require phantom power. You risk causing damage if you mistakenly supply phantom power to dynamic microphones, audio playback devices, or other devices that don't require such power. Be sure to check the specifications of any microphone you intend to use by referring to the manual that came with it.

  (This instrument's phantom power: 48 V DC, 10 mA Max)



IMPORTANT NOTES

In addition to the items listed under "USING THE UNIT SAFELY" on page 2–3, please read and observe the following:

Power Supply

- 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.
- 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.

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 benzine, 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 a 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.

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 loosing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit's memory on a computer.
- Unfortunately, it may be impossible to restore the contents of data that was stored in the unit's memory or computer once it has been lost. BOSS/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.
- 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.

- Use only the specified expression pedal (FV-500H/L, Roland EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.
- Use a cable from Roland to make the connection. If using some other make of connection cable, please note the following precautions.
  - 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.

Handling CDs

- 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

- Unauthorized recording, distribution, sale, lending, public performance, broadcasting, or the like, in whole or in part, of a work (musical composition, video, broadcast, public performance, or the like) whose copyright is held by a third party is prohibited 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.

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Main Features

New performance tool, created especially for performers

This unit allows you to control recording, playback, overdubbing, and the composition of ensembles tasks conventionally performed while recording–but in real time, right there as you perform, while giving you complete flexibility in controlling three phrases simultaneously. It's not merely a recording device, and it's much more than just an effects processor.
No, this is a whole new type of performance tool: the RC-50 "Loop Station."

Create up to 99 patches, with extended phrase recording time of 49 minutes (in mono)

You can save up to 99 patches, each consisting of three phrases, for up to a total of 49 minutes in mono or 24 minutes in stereo. You can record the various parts of a piece separately to the three phrases, which is convenient for recording or training; and since it is even possible to record several complete songs, you can also use the RC-50 as a backing tool for live performances.

Wide variety of stereo inputs

The RC-50 provides three kinds of stereo input jacks, including inputs for musical instruments, an input connector for phantom-powered microphones, and a stereo input for CD players and other such external devices. Whatever the use, guitar phrases, vocals and loops, recording and playback, the RC-50 can handle your needs.
You can also adjust the panning (localization) of phrases in playback. Only the RC-50 lets you create such richly expressive ensemble sounds.
Moreover, the RC-50 comes equipped with a SUB OUT jack, which lets you output your choice of phrases or guide sounds. Helping you get the most out of your PA in live performances, the RC-50 also provides incredibly flexible recording possibilities.

Center Cancel/Flat Amp Simulate functions

The RC-50 includes a "Center Cancel" function, which allows you to record from sources such as CDs and create "minus one" data, which mutes only the sounds localized at the center of the sound field. You also get a "Flat Amp Simulate" function, which adjusts the tone of audio recorded from an external device or microphone so you can play back these sounds through a guitar amp.

Undo and Redo while recording and overdubbing

Recording and want to do it over again? An overdub didn't turn out right? No problem, since the RC-50 lets you "undo" processes you have just executed and return the data to its previous state. You can also "redo" undone recording and overdubbing steps if you decide you want to restore the result. All of this means you can enjoy performances with complete, unhindered freedom.

Tempo Control provides realtime control of playback speed, enabling synchronization with other devices

You can control the playback speed of phrases using either tap tempo or with an externally connected expression pedal, in real time as the phrases are played back. Additionally, you can synchronize phrases, even those that have been recorded at differing tempos, enabling you to play them all back at the same tempo.
Connecting a recorder or other MIDI device to the RC-50's MIDI connector even allows you to synchronize with other external MIDI devices. All this gives you a level of communication with other devices and precise tempo control previously impossible with conventional loop effects.

Rhythm Guide plays a wide variety of patterns with incredibly high-quality sound

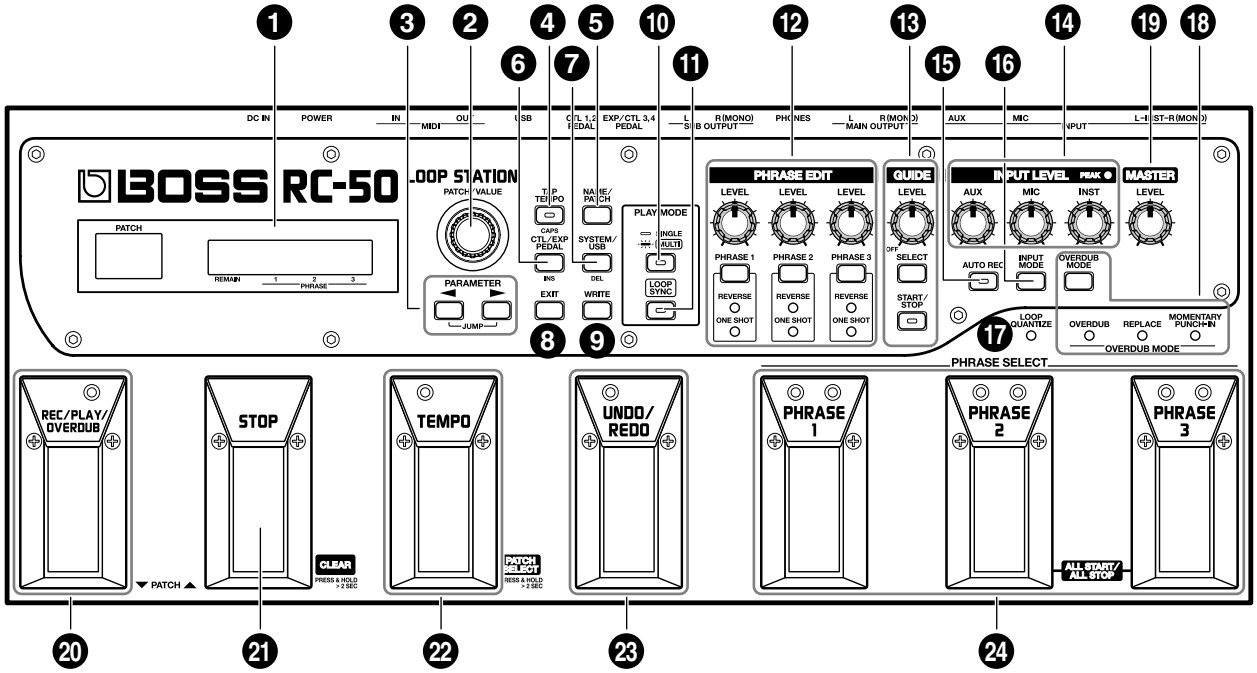
The RC-50 offers a Rhythm Guide feature, which in addition to providing a convenient guide during recording, also functions as a rhythm sound module with fantastic sound. Rivaling even dedicated drum machines, this feature allows you to select from a variety of beats and a wide range of patterns.

Connect to computers via USB

Connecting the RC-50 to a computer enables you to import (read) and export (write) phrases as stereo .wav files.
You can load and use .wav files that have been precisely edited using your computer, and use your computer for the convenient management of phrases recorded with the RC-50.

Names of Things and What They Do

Front Panel



1. Display

Displays a variety of information about the RC-50. The left display indicates the patch number.

cf.
"What is a Patch?" (p. 28)

2. PATCH/VALUE Dial

Used for switching patches and changing the values of settings.

3. PARAMETER Button

Press these to select parameters.

* *Jump to major parameters by holding down [►] and pressing [◄] (direction: start → end) or by holding down [◄] and pressing [►] (direction: end → start). When there are not many parameters, a jump to the final (or beginning) parameter results.*

4. TAP TEMPO Button

Press this button to change patch tempos. You can adjust the tempo by tapping the button several times; the tempo is set to match the one you tap out using the button.

TIP

You can also use the TEMPO pedal instead of this button to change tempos.

* *In the Patch Name screen, this button is also pressed to switch the letter at the cursor position between uppercase and lowercase.*

cf.
"Setting the Patch Tempo" (p. 45)

5. NAME/PATCH Button

Use this button when naming patches and changing patch settings.

6. CTL/EXP PEDAL Button

Press this to set the functions for the RC-50's pedals and external pedals.

cf.
"Pedal Settings" (p. 70)

* *In the Patch Name screen, pressing this button inserts a blank space at the cursor position.*

7. SYSTEM/USB Button

This button is pressed to change system settings and when using the RC-50 while connected to a computer.

* *In the Patch Name screen, pressing this button deletes the character at the cursor position and shifts all characters after it to the left.*

8. EXIT Button

Use this button to cancel an operation.

9. WRITE Button

Use this button in storing and deleting settings.

10. PLAY MODE Button

Press this to switch the mode used by the RC-50.

cf.
"About Play Modes" (p. 28)

11. LOOP SYNC On/Off Button

Press this when changing the Loop Sync settings.

cf.
"Playing Back Phrases with All Lengths and Beginnings Aligned: Loop Sync" (p. 28)
"Setting Loop Sync" (p. 47)

12. PHRASE EDIT

LEVEL Knobs

These adjust the volume level of Phrases 1, 2, and 3.

PHRASE 1/2/3 Buttons

Press these to change the phrase settings.

cf.
"Creating Phrases" (p. 51)

REVERSE Indicators 1/2/3

Light to indicate that a phrase (Phrase 1, 2, or 3) is in reverse playback.

cf.
"Playing Back in the Opposite Direction (Reverse)" (p. 52)

ONE SHOT Indicators 1/2/3

Light to indicate that a phrase (Phrase 1, 2, or 3) is to be played back only once (One Shot), and are unlit when phrases are played repeatedly (Loop).

cf.
"Having Phrases Play Only Once (One Shot)" (p. 52)

13. GUIDE

LEVEL Knob

This adjusts the volume level of the guide sound. No guide sound is played when the knob is turned completely to the left (counterclockwise).

cf.
"Adjusting the Volume of the Guide Sound (Guide Level)" (p. 39)

SELECT Button

Press this to select the guide sound.

cf.
"Selecting the Guide Sound (Guide Pattern)" (p. 39)

START/STOP Button

Pressed to manually start and stop the guide sound.

cf.
"Starting and Stopping the Guide" (p. 39)

14. INPUT LEVEL

AUX Level Knob

This adjusts the level of the input from the AUX jack.

MIC Level Knob

This adjusts the level of the input from the MIC connector.

INST Level Knob

This adjusts the level of the input from the INST jacks.

PEAK Indicator

This lights when the input level exceeds the standard level.

15. AUTO REC On/Off Button

This switches Auto Recording on and off.

cf.
"Simultaneously Starting Recording When Sounds Are Input (Auto Recording)" (p. 47)

16. INPUT MODE Button

Press this when setting the Center Cancel and Flat Amp Simulate functions.

cf.
"Recording While Muting the Sounds Localized at the Center (AUX Center Cancel)" (p. 48)

cf.
"Recording with the Tone Adjusted for Use with Guitar Amps (AUX & MIC Flat Amp Simulate)" (p. 48)

17. LOOP QUANTIZE Indicator

This lights when Loop Quantize is active.

cf.
"Loop Quantize" (p. 42)

18. OVERDUB MODE

OVERDUB MODE Button

Press this to select the overdubbing mode.

cf.
"Setting the Overdubbing Method (Overdubbing Mode)" (p. 47)

OVERDUB MODE Indicators

The indicator for the currently selected overdubbing mode lights up.

19. MASTER LEVEL Knob

This adjusts the volume of the output from the MAIN OUTPUT jacks and PHONES jack.

* *You cannot adjust the output volume of the SUB OUTPUT jacks.*

20. REC/PLAY/OVERDUB Pedal

- This switches between recording, playback, and overdubbing for the currently selected phrase. With each press of the pedal, the next function in the sequence is selected, as shown below.

When the phrase has not been recorded	Recording → Playback → Overdubbing → Playback → ...
When using a recorded phrase	Playback → Overdubbing → Playback → ...

cf.
"About Recording, Playback, and Overdubbing" (p. 30)

- You can press the pedal after recording to immediately start overdubbing.

cf.
"Overdubbing Immediately After Recording (REC Pedal Action)" (p. 69)

- Pressing this pedal in Patch select mode switches the RC-50 to the next lower patch number.

cf.
"Switching Patches with the Pedals (Patch Select Mode)" (p. 33)

REC/PLAY/OVERDUB Indicator

This indicates the status of the phrase selected with the PHRASE 1/2/3 pedals (the current phrase).

Currently recording	Red
Playing back	Green
Overdubbing	Orange

MEMO
The indicator also indicates a number of other conditions. For more details, refer to "Correspondence Between the Indicators and Operational Status" (p. 89)

21. STOP Pedal

- This stops recording, playback, and overdubbing for the currently selected phrase.

cf.
"About Recording, Playback, and Overdubbing" (p. 30)

- Pressing this pedal in Patch Select mode switches the RC-50 to the next higher patch number.

cf.
"Switching Patches with the Pedals (Patch Select Mode)" (p. 33)

- When the pedal is held down for at least two seconds, the recording of the currently selected phrase is erased.

22. TEMPO Pedal

Press this to change the patch tempo. You can adjust the tempo by tapping the pedal several times; the tempo is set to the interval between each tap.

TIP
You can also use the TAP TEMPO button instead of this pedal to change tempos.

cf.
"Setting the Patch Tempo" (p. 45)

- Holding down this pedal for at least two seconds switches the RC-50 to Patch Select mode. Pressing the pedal again switches the patch and returns the Play screen to the display.

cf.
"Switching Patches with the Pedals (Patch Select Mode)" (p. 33)

TEMPO Indicator

This flashes in time with the tempo.

23. UNDO/REDO Pedal

- Pressing this once allows you to restore (undo) the recorded or overdubbed phrase to its state prior to the recording or overdub.
- Pressing the pedal again after an undo has been carried out allows you to switch the phrase back to the way it was after the record/overdub (redo).
- In Patch Select mode, pressing the pedal returns the Play screen to the display without switching the patch.

UNDO/REDO Indicator

Lights when a redo is available as an option.

24. PHRASE 1/2/3 Pedals

- Press these to select the phrase (Phrase 1, 2, or 3) to be recorded or played back.
- Holding down a PHRASE pedal for at least two seconds in Multi mode while the phrase is stopped switches on Simul-Start for that phrase.
  A phrase with Simul-Start set to ON will start playing back simultaneously the instant the REC/PLAY/OVERDUB pedal is pressed only if the phrase already material recorded to it.
  Holding down the pedal again for at least two seconds switches the Simul-Start setting to OFF again.
- In Multi mode, simultaneously pressing the PHRASE 2 pedal and PHRASE 3 pedal plays back or stops all of the phrases.

PHRASE 1/2/3 Indicators

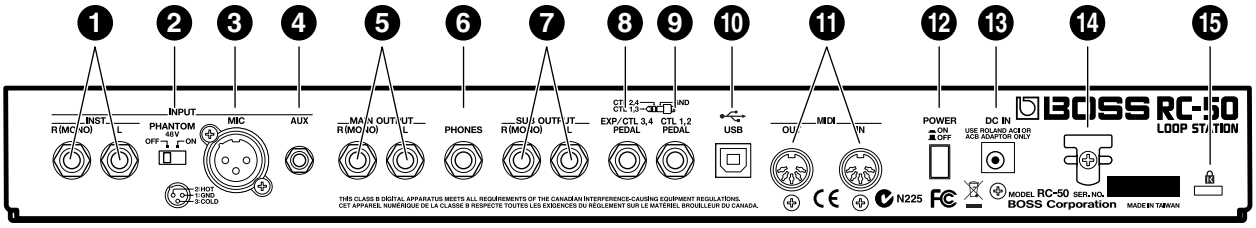
The left (orange) indicator indicates the currently selected phrase. The indicator flashes when that phrase is on hold as the next phrase to be played. The right indicator indicates the status of the currently selected phrase.

Currently recording	Red
Playing back	Green
Overdubbing	Orange

The indicator flashes when the phrase is the next phrase to be played or when the phrase is in recording standby (or playback standby).
The indicator flashes rapidly when Auto Recording (p. 47) is set to ON.

MEMO
The indicator also indicates a number of other conditions. For more details, refer to "Correspondence Between the Indicators and Operational Status" (p. 89)

Rear Panel



1. INPUT R (MONO)/L Jacks

Connect a guitar, synthesizer, or other such instrument here.

2. PHANTOM (Phantom Power) ON/OFF Switch

This switches the phantom power supplied to the MIC connector on and off.

NOTE

Be sure to switch the phantom power off unless there is a condenser microphone requiring phantom power connected to the MIC connector. Supplying phantom power to dynamic microphones, audio playback equipment, and other such devices may damage your equipment. For more on mic specifications, read the owner's manual for the mic you are using.
(RC-50 phantom power: 48 V DC, 10 mA Max)

3. MIC Connector

Connect a microphone here. The RC-50 provides 48-volt phantom power, allowing you to connect and use phantom powered condenser mics. You can also use the Flat Amp Simulator with input from this connector when recording.

4. AUX Jack

A cable can be connected between here and the headphone jack on a CD or MD player or other such device.
During recording, you can use the Center Cancel and Flat Amp Simulator functions with input from this connector.

5. MAIN OUTPUT R (MONO)/L Jacks

Connect a guitar amp, monitor speakers, or other such device here.

6. PHONES Jack

Connect stereo headphones here.
The sounds output from this jack are the same as those output from the MAIN OUTPUT jacks.

7. SUB OUTPUT R (MONO)/L Jacks

Connect an amp, mixer, or other such device here. You can assign the input sounds, guide sound, and sounds of the three phrases either to the MAIN OUTPUT or the SUB OUTPUT jacks.

NOTE

The SUB OUTPUT jacks have no level knob. If you want to adjust the volume level from these jacks, adjust the patch level (p. 49).

8. EXP/CTL 3,4 PEDAL Jack

You can connect an optional expression pedal (such as the EV-5) or foot switch (FS-6 or other) here. You can select the function, for example switching patches, assigned to the connected pedal or foot switch.

cf. "Pedal Settings" (p. 70)

9. CTL 1,2 PEDAL Jack

Connect a foot switch (FS-6 or other) here. You can select the function, for example switching patches, assigned to the connected switch.

cf. "Pedal Settings" (p. 70)

10. USB Connector

You can connect a computer here using a USB cable and exchange data between the RC-50 and the computer.

cf. "Chapter 9 Connecting to Computers" (p. 79)

11. MIDI IN/OUT Connectors

Connect external MIDI devices here to transmit and receive MIDI data.

cf. "Chapter 8 Using MIDI" (p. 73)

NOTE

When connecting the USB cable, remove the cover attached to the USB connector. Leave the cover attached when not using the USB connector.

12. POWER Switch

This turns the RC-50's power on and off.

13. DC IN (AC Adaptor) Jack

Connect the included adaptor (ACI or ACB series) here.

14. Cord Hook

Loop the AC adaptor cord around here to prevent the AC adaptor from being unplugged by accident.

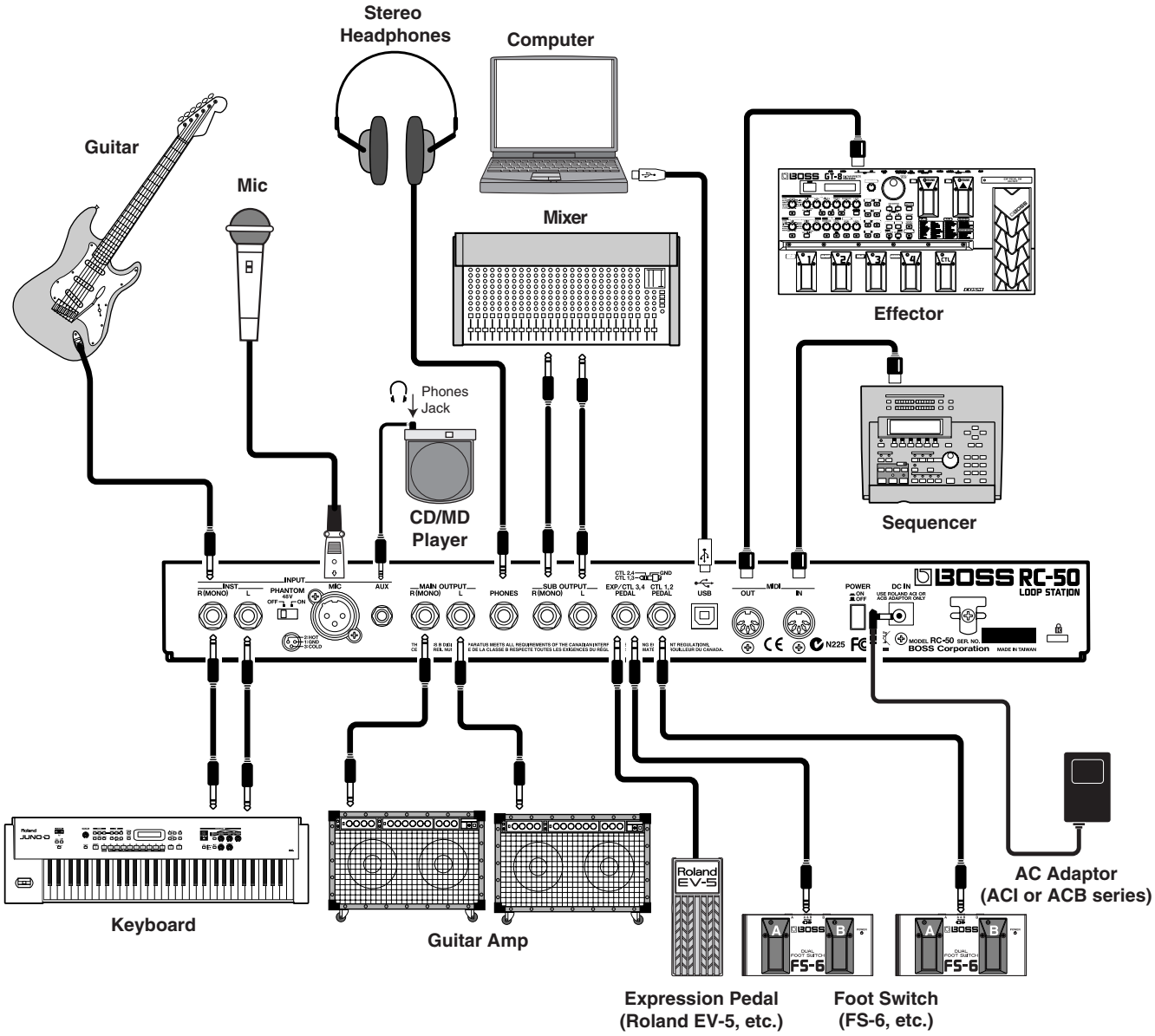
15. Security Slot ( )

http://www.kensington.com/

Chapter 1

Startup Guide

Making the Connections

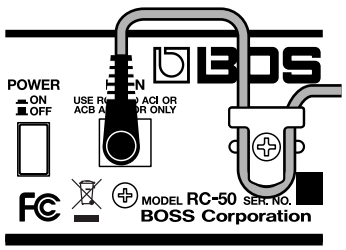


* *To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.*

* *Raise the amp volume only after turning on the power to all connected devices.*

* *Use only the specified EXP pedal (Roland EV-5; sold separately). By connecting any other EXP pedals, you risk causing malfunction and/or damage to the unit.*

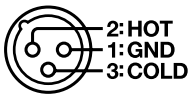
- To prevent the inadvertent disruption of power to your unit (should the plug be pulled out accidentally), and to avoid applying undue stress to the AC adaptor jack, anchor the power cord using the cord hook, as shown in the illustration.



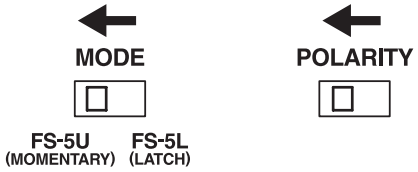
- Howling could be produced depending on the location of microphones relative to speakers. This can be remedied by:

  1. Changing the orientation of the microphone(s).
  2. Relocating microphone(s) at a greater distance from speakers.
  3. Lowering volume levels.

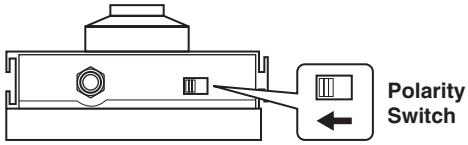
- If you are going to output in mono, connect the cable only to the OUTPUT R (MONO) jack.
- This instrument is equipped with balanced (XLR) type jacks. Wiring diagrams for these jacks are shown below. Make connections after first checking the wiring diagrams of other equipment you intend to connect.



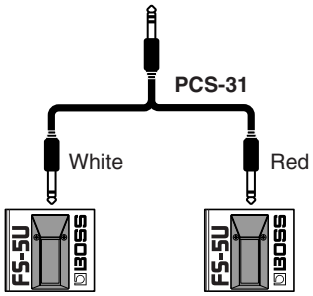
- If connecting an EXP pedal to the EXP/CTL 3,4 PEDAL jack, set the minimum volume to the MIN position.
- If connecting an FS-6 foot switch (optional; sold separately) to the CTL 1,2 PEDAL jack or the EXP/CTL 3,4 PEDAL jack, set the MODE switch and POLARITY switch as shown below.



- If connecting an FS-5U foot switch (optional; sold separately) to the CTL 1,2 PEDAL jack or the EXP/CTL 3,4 PEDAL jack, set the POLARITY switch as shown below.



- Using the PCS-31 special connection cable (from Roland; sold separately) enables you to connect two FS-5U switches.



- When using an EXP pedal connected to the EXP/CTL 3,4 PEDAL jack, make the settings described in “Pedal Settings” (p. 70).
- When using a foot switch connected to the CTL 1,2 or EXP/CTL 3,4 jacks, make the settings described in “Pedal Settings” (p. 70).



For detailed instructions on using the RC-50 with a computer connected to the USB connector, refer to “Chapter 9 Connecting to Computers” (p. 79).

Turning on the Power

Once the connections have been completed (p. 16), 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.

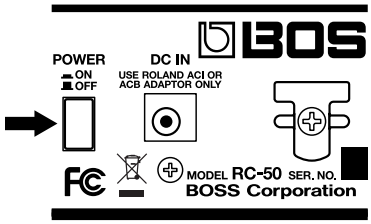
1

Confirm the following before turning on the power.

- Are all external devices properly connected?
- Is the volume turned down completely on the RC-50 and on amps and other connected equipment?

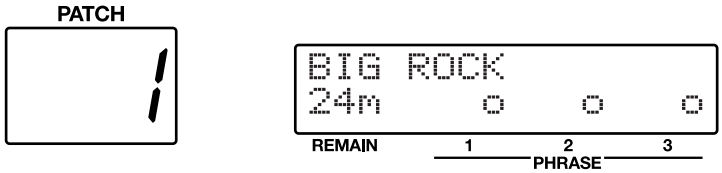
2

Press the POWER switch on the RC-50's rear panel to turn on the power.



The display switches to the following, and after several seconds the RC-50 is ready for regular performance.

The screen appearing at this point is called the Play screen.



* *The patch selected at the time the power was last turned off is selected.*

* *This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.*

3

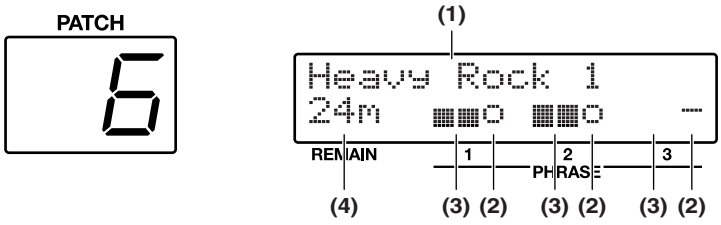
Turn on the equipment in the following order:

External effects processors → guitar amps (speakers).

Play Screen

The following information is shown in the Play screen:

(Example)



(1) Patch name (16 characters)

(2) Recording status of each phrase
o : Recorded
– : Not yet recorded

(3) Level meters indicating current volume level (L/R) of each phrase.

(4) Available recording time remaining (in minutes)

NOTE

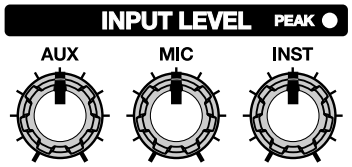
Keep the power on until the Play screen is displayed.

☞ For more information on phrases and patches, refer to "About Phrases and Patches" (p. 28).

Adjusting the Input Levels

Using the INPUT LEVEL knobs, adjust the input levels so they are appropriate for the connected instruments.

Adjust the AUX, MIC, or INST knobs depending on the jack to which an instrument has been connected.



1

Input to the RC-50 at the maximum levels expected during the performance.

2

Adjust the knob until the PEAK indicator just flickers.

The PEAK indicator lights 6 dB below the level at which the sound starts to distort.

* *Setting input levels too high will prevent you from getting the full effect of the sound.*

Adjusting the Output Levels

Use this procedure to adjust the output levels.

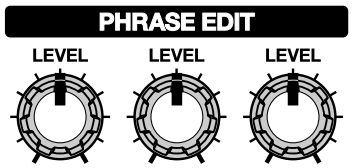
1

Adjust the output level from the MAIN OUTPUT jacks with the MASTER LEVEL knob.



2

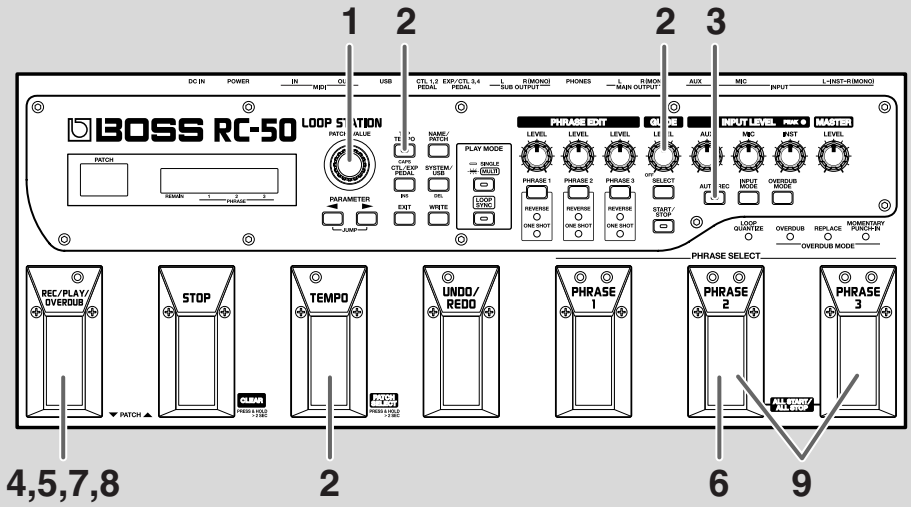
Set the PHRASE 1/2/3 LEVEL knobs to the center position.



Recording

Now try recording an instrumental performance with the RC-50.

The example here describes the procedure for selecting and recording Patch 6.

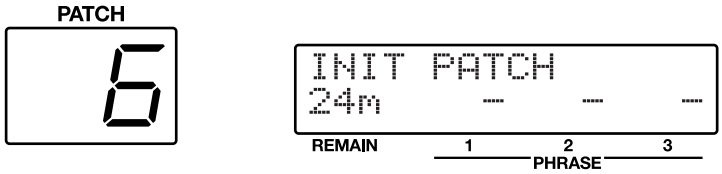


1

In the Play screen, rotate the PATCH/VALUE dial until "6" appears in the left display.

"INIT PATCH" appears in the right display.

* *As Patches 6–99 are all programmed at the factory with the INIT PATCH (Phrases 1–3 unrecorded), you could alternatively choose any patch from 7–99).*



If all of the phrases are blank, this is indicated by "- - -" in the lower part of the display.

For each phrase, "o" indicates that data has been recorded to that phrase, while "–" indicates the phrase is blank.

The INIT PATCH is already set to Multi mode (p. 28).

2

Set the GUIDE LEVEL knob to an appropriate position (other than OFF), then press the TEMPO pedal or [TAP TEMPO] at a constant rhythm.

The tempo is set to the interval between taps of the button or pedal.

This procedure enables you to record while listening to a rhythm performance (called the "Guide") synchronized to a tempo that's been set beforehand.

You can adjust the volume of the Guide by turning the GUIDE LEVEL knob.

* *Turn the GUIDE LEVEL knob to OFF when you want to record without using the guide.*

For details about the guide, see "Performing While Listening to the Rhythm Sound—About the Guide" (p. 39).

3

To have recording start automatically at the same time the performance begins, make sure the [AUTO REC] indicator is lit.

This means that Auto Recording (p. 47) is on.

NOTE

Do not turn off the power while recording is in progress. This may result in loss of recorded material.

4

Press the REC/PLAY/OVERDUB pedal to start recording.

The REC/PLAY/OVERDUB pedal's indicator and the indicator on the PHRASE pedal for the phrase being recorded light in red.

If Auto Recording is on, the REC/PLAY/OVERDUB pedal's indicator flashes rapidly in red, and recording starts simultaneously with the beginning of the performance.

☞ For detailed information about Auto Recording, refer to "Simultaneously Starting Recording When Sounds Are Input (Auto Recording)" (p. 47).

5

Press the REC/PLAY/OVERDUB pedal again to stop recording.

Recording stops, and playback of the recorded sounds begins.

* *To stop recording without playing back the sounds, immediately press the STOP pedal.*

Sounds recorded in this manner are called "phrases."

On the RC-50, you can use three phrases simultaneously.

Continue by recording Phrase 2.

6

Press the PHRASE 2 pedal to select Phrase 2.

The PHRASE 2 pedal's left indicator lights up, while the right indicator flashes in red.

7

Press the REC/PLAY/OVERDUB pedal to start recording.

Pressing the pedal as Phrase 1 is being played back simultaneously starts recording of Phrase 2.

The available recording time for Phrase 2 is the same as that of Phrase 1.

After playback of Phrase 1 returns to the very beginning and the process continues with recording of Phrase 2, the PHRASE 2 pedal's right indicator changes from red to orange, and the recording is layered on top of the previously recorded material.

☞ You can also record each individual phrase with a different length.
"Playing Back Phrases with All Lengths and Beginnings Aligned: Loop Sync" (p. 28)

8

Press the REC/PLAY/OVERDUB pedal again to stop recording.

Phrase 1 and Phrase 2 are played back simultaneously.

Using the same process, you can record Phrase 3 by pressing the PHRASE 3 pedal and then pressing the REC/PLAY/OVERDUB pedal.

9

If you press both the PHRASE 2 and PHRASE 3 pedals simultaneously, all playback stops.

* *Pressing the STOP pedal stops playback of only the currently selected phrase.*

The mode in which you can record a new phrase as you listen to the playback of a previously recorded phrase or play back three phrases simultaneously is call "Multi mode."

In addition, with the RC-50 you can store up to 99 sets containing the three phrases and settings for how they are to be performed.

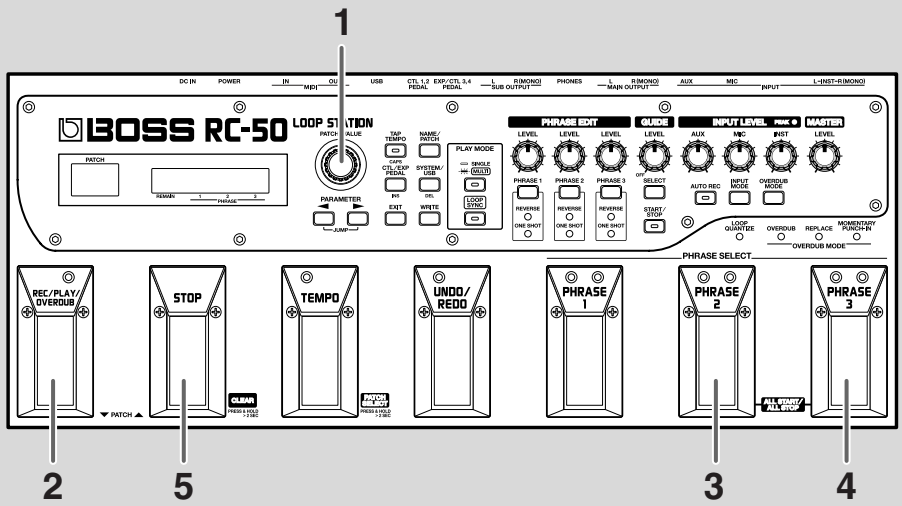
Each one of these sets is called a "patch."

You can check the number of the currently selected patch in the left display, and confirm the patch name in the right display.

For each phrase, the "o" mark indicates a recorded phrase, while the "–" mark indicates the phrase is blank.

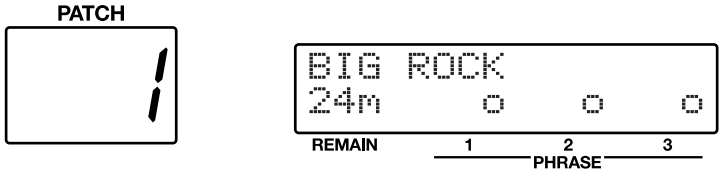
☞ If you want to save a recorded phrase, use the procedure described in "Saving by Patch Numbers (Patch Write)" (p. 54).

Playback



1

In the Play screen, rotate the PATCH/VALUE dial to select Patch 1, "BIG ROCK."



2

Press the REC/PLAY/OVERDUB pedal.

Phrase 1 is played back.

3

Press the PHRASE 2 pedal.

Phrase 1 stops playing, and the playback of Phrase 2 begins.

4

Press the PHRASE 3 pedal.

Phrase 2 stops playing, and the playback of Phrase 3 begins.

5

Press the STOP pedal.

Phrase 3 stops playing.

In this manner, the RC-50 allows you to play back phrases as you switch from one to the next.

This mode is referred to as "Single mode."

NOTE

Do not turn off the power during playback. This may result in loss of recorded material.

The RC-50 is shipped from the factory with demo patches saved to patch numbers 1–5.

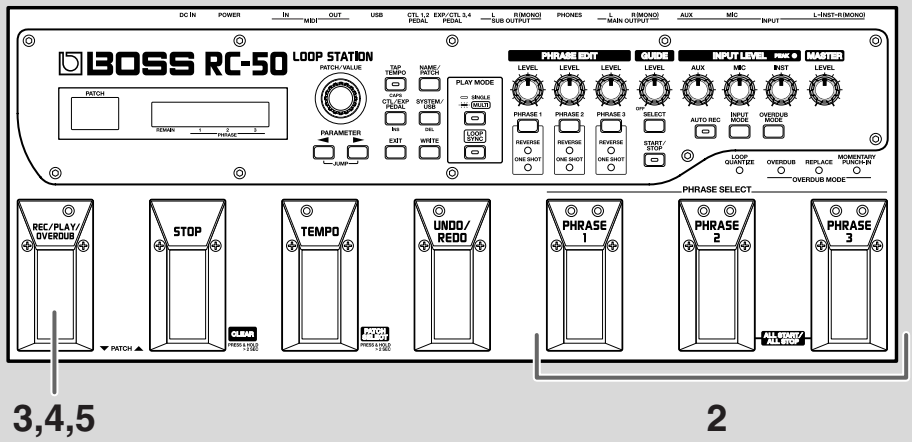
No.	Patch Name	Mode	Phrase	
1	BIG ROCK	Single	1	Chord E Loop
			2	Chord A Loop
			3	Chord B Loop
2	FUNKY BLUES	Single	1	Blues Progression 12-Measure Pattern A
			2	Blues Progression 12-Measure Pattern B
			3	Ending
3	SHUFFLE GROOVE	Single	1	Chord A Loop
			2	Chord D Loop
			3	Chord E → D Repeating Loop
4	ROCK BALLAD	Multi	1	16-Measure Loop
			2	Blank
			3	Blank
5	COOL GROOVE	Multi	1	Drum Loop
			2	Bass Loop
			3	Blank

These patches are protected with a feature (Preset Protect) that prevents accidental deletion or erasure of data.
To erase the demo patches and save patches you have created to patch numbers 1–5, switch Preset Protect to OFF.

☞ “Protecting Patch Numbers 1–5 (Preset Protect)” (p. 69)

Layering Further Material (Overdubbing)

With the RC-50, you can also layer further recordings (overdub) onto previously recorded phrases.



1

Prepared a prerecorded phrase.

Record the phrases using the procedures described in "Recording" (p. 20), or have ready a patch selected in "Playback" (p. 22).

2

Press the PHRASE pedal for the phrase you want to overdub.

3

Press the REC/PLAY/OVERDUB pedal to play back the phrase.

4

Press the REC/PLAY/OVERDUB pedal once again when you reach the point at which you want to start overdubbing.

The performance from that point on will continue to be overdubbed until the next time you press the REC/PLAY/OVERDUB pedal.

5

To finish overdubbing and return to playback mode, press the REC/PLAY/OVERDUB pedal once again.

The new performance is overdubbed onto the originally recorded performance.

The next section contains a description of the procedure to eliminate (undo) the results of the overdubbing.

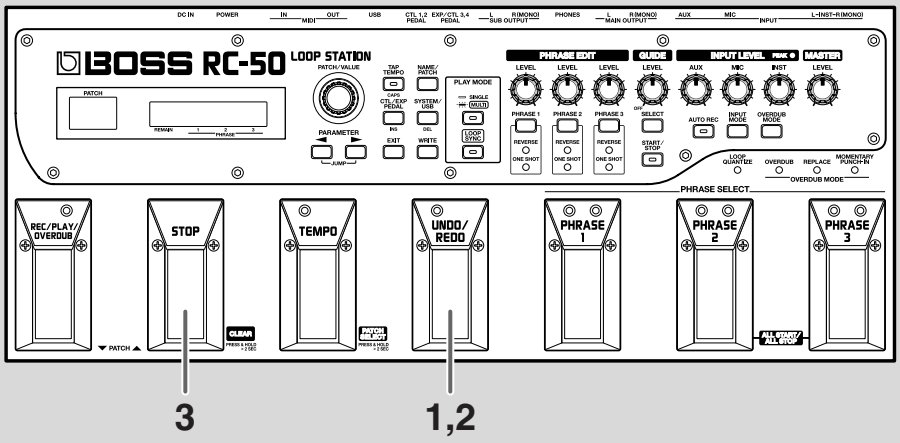
NOTE

Do not turn off the power while overdubbing is in progress. This may result in loss of recorded material.

Eliminating the Results of Overdubbing (Undo)

There may be times during recording/overdubbing when you make a mistake while performing or otherwise want to do the overdub over again. In such situations, you can use Undo to restore the recording to the state it was in before recording/overdubbing took place.

Try using the Undo function on the phrase you overdubbed in "Layering Further Material (Overdubbing)."



1

Press the UNDO/REDO pedal.

The performance played in the overdub disappears, and the phrase returns to the previous state prior to overdubbing.

You can also use the following procedure to return the phrase to the state after overdubbing (redo).

2

Press the UNDO/REDO pedal (redo).

The results of the overdubbing, playback of which had stopped with the undo, are restored, with the phrase again returned to its state following the overdubbing.

3

To end the performance, press the STOP pedal.

In this manner, even if you make a mistake during overdubbing, you can scrap the results and do it over again, yet still recover the material if you have discarded it by mistake.

NOTE

Do not turn off the power while undo/redo is in progress. This may result in loss of recorded material.

Turning Off the Power

1

Before turning off the power, confirm the following.

- Is the volume turned down completely on the RC-50 and on amps and other connected equipment?

2

Turn off the power on any effects processor, guitar amp (speakers), or other device connected to the RC-50.

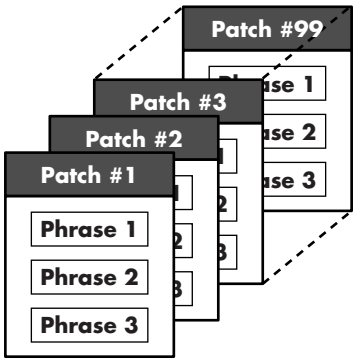
3

Turn off the power to the RC-50.

Chapter 2

Basic Setup of the RC-50

About Phrases and Patches



What is a Phrase?

A performance using Instruments or other input that is recorded and saved with the RC-50 is called a "phrase."
Phrases contain recorded audio that is stored together with other information, such as the method used for playing back and recording.

What is a Patch?

With the RC-50, you can switch among three phrases while playing them back, or even play the three of them simultaneously.
The RC-50 stores up to 99 different sets of settings that determine how these three phrases are performed.
Each such set of settings is called a "patch."

Selecting Patches

To select a patch, turn the PATCH/VALUE dial in the Play screen.

MEMO

- Switching patches during recording, playback, or overdubbing begins recording or playback of the patch to which you have switched.
- Patches can be switched with the RC-50's pedals.
  → "Switching Patches with the Pedals (Patch Select Mode)" (p. 33)
- Patches can be switched with external pedals.
  → "Setting the Functions for the RC-50's Pedals and External Foot Switches (TEMPO/UNDO/CTL1/CTL2/CTL3/CTL4 Pedal Function)" (p. 70)

About the Current Phrase

In order to record a phrase, you need to select the particular phrase you want to work with.
This selected phrase is called the "current phrase."
All recording tasks performed with the REC/PLAY/OVERDUB pedal affect the current phrase.
In addition, the REC/PLAY/OVERDUB pedal indicator shows the status recording, playing back, or overdubbing for the current phrase.

Selecting the Current Phrase (PHRASE 1/2/3 Pedals)

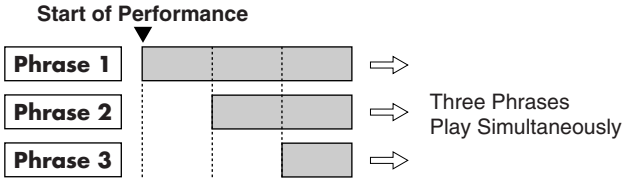
To select a phrase as the current phrase, press the PHRASE pedal for the desired phrase (Phrase 1, 2 or 3).
The left (orange) indicator on the PHRASE pedal for the selected phrase will light.

About Play Modes

The RC-50 features two types of Play modes, "Multi mode" and "Single mode," which can used for different purposes. The Play mode used can be set individually for each patch.

Playing Multiple Phrases Simultaneously: Multi Mode

Multi mode allows you to play three phrases at the same time.
You can, for example, save the performances of the bass, drum, and guitar parts each as separate phrases, and by saving the performance of a single song as one patch, you can then play back the parts simultaneously and stop or mute any desired part during the song as it is playing.

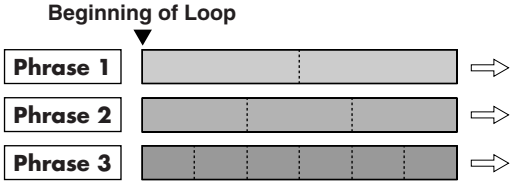


In Multi mode, when recording of one phrase starts, playback of the other phrases starts at the same time (Simul-Start: p. 50, All Start: p. 61); you can also have all of the phrases stop at the same time (All Stop: p. 61).

Playing Back Phrases with All Lengths and Beginnings Aligned: Loop Sync

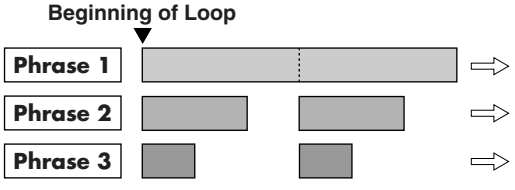
Although you can record performances of differing lengths to each of the phrases, in Multi mode, you can have multiple phrases play back repeatedly over the same length of time.
This is called "Loop Sync."
Playback repeats with measure beginnings aligned at all times, allowing you, for example, to record various parts (such as drums and bass) to separate phrases, then perform them as an ensemble.

When Loop Sync is Off



The loop repeats with the length of each phrase unchanged

When Loop Sync is On

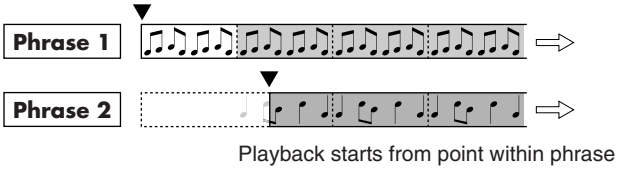


The loop repeats with each phrase aligned according to the length of the longest phrase

Note about the start of playback of a phrase while another phrase is playing

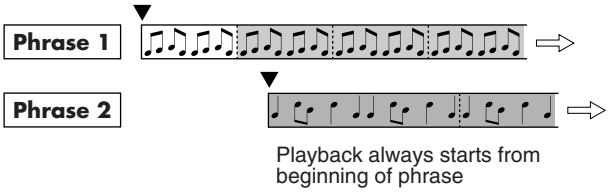
When Loop Sync is On

Phrase beginnings are always in sync. Thus, if while a phrase is already playing you start playback of another phrase, the other phrase starts from the "current point in the phrase within the loop."



When Loop Sync is Off

Playback always starts from the beginning of the phrase.



About the Loop Time

When Loop Sync is enabled, the length of the repeated playback (the loop time) is the "playback time of the phrase with the longest playback time of those recorded phrases playing when Tempo Sync is on." In other words, the loop time is the same as the playback time of the longest of a group of phrases when played at the same tempo.

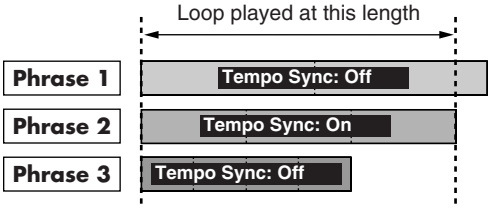
Tempo Sync

Tempo Sync is a function that plays back all patches at a common performance tempo (the patch tempo). Even when you have phrases that were recorded at different tempos, when Tempo Sync is set to ON, the phrases are played at the same tempo. For more detailed information, refer to "About Tempo Sync" (p. 36).

When One or More Recorded Phrases Have Tempo Sync Switched Off

If you are using a recorded phrase that exceeds the loop time described above with Tempo Sync switched off, then at the end of the loop, the phrase starts playing back from the beginning without the remaining portion of that phrase being played.

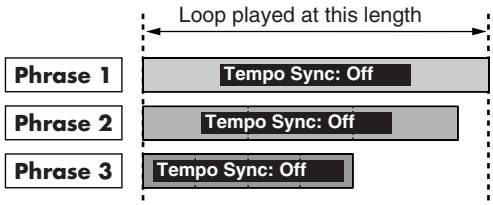
You can play back effect sounds and other material the speed of which, because of the song's tempo, you don't want to change, regardless of the length of the effect sound.



When There Are No Recorded Phrases With Tempo Sync Switched On

The loop length is the "length of the phrase with the longest playback time among the recorded phrases being played."

You can use this in situations such as when repeating playback simultaneously of phrases in which the tempo is not a factor.



NOTE

Even if procedures such as Clear or Undo (p. 32) are used while a performance is in progress to erase the "phrase with the longest playback time," the loop length remains unchanged until all of the phrases have stopped playing.

When the Phrase is Set to ONE SHOT (p. 52)

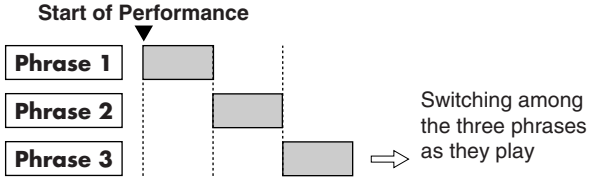
ONE SHOT phrases cannot be used with loop playback. These phrases are played back only when the REC/PLAY/OVERDUB pedal is pressed.

Switching Phrases as They Are Played: Single Mode

In Single mode, you can switch among the three phrases as you play back the material.

For example, you can record three phrases with Melody A, Melody B, and the bridge, then play these as a single song by switching them in sequence.

You can set the RC-50 so that when phrases are switched during playback, you can switch to the next phrase the instant you press the PHRASE pedal or after the phrase currently playing is done (Phrase Change Mode: p. 49).



Switching the Play Mode

Each time you press the PLAY MODE button, it alternately switches the Play mode to Single or Multi mode.

The indicator lights when Multi mode is active; the indicator is off in Single mode.

NOTE

You cannot switch Play modes while playback, recording, or overdubbing is in progress.

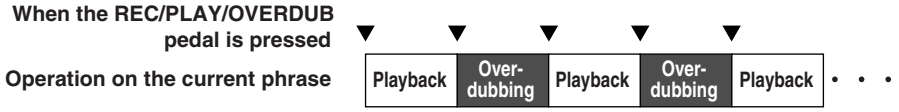
About Recording, Playback, and Overdubbing

On the RC-50, you will primarily use the three basic operations of recording, playback, and overdubbing (layered recording) for performances. When you press the REC/PLAY/OVERDUB pedal in the Play screen, the RC-50 switches among the following basic operations depending on the status of the current phrase.

When the Current Phrase is Blank



When material is recorded to the current phrase



MEMO

You can also start overdubbing immediately after recording. For more details, refer to "Overdubbing Immediately After Recording (REC Pedal Action)" (p. 69).

* *Pressing the REC/PLAY/OVERDUB pedal during playback of a phrase set to ONE SHOT (p. 52) starts playback of the phrase without starting overdubbing.*

Recording

If the current phrase is blank, you can record to the phrase by pressing the REC/PLAY/OVERDUB pedal in the Play screen.

Number of Phrases That Can Be Recorded Simultaneously

The only phrase that can be recorded to is the current phrase. If you record to a phrase other than the current phrase, the current phrase is switched and recording is conducted on the next phrase.

NOTE

You cannot simultaneously record to multiple phrases.

About Tempos During Recording

Recording is carried out at the tempo in effect immediately preceding the recording.

NOTE

Changing the tempo while recording is in progress may cause sounds to play in unintended ways.

To Confirm That the RC-50 is Currently Recording

When the RC-50 is recording, the REC/PLAY/OVERDUB pedal indicator and the red indicator on the PHRASE pedal corresponding to the current phrase are lit.

To Confirm Whether or Not A Phrase Contains a Recording

Phrases with material recorded to them are indicated by a "o" mark in the respective phrase's field in the display.
When a phrase is blank, this is indicated by a "–" mark.

To Confirm the Available Recording Time

While recording is in progress, the remaining time available for recording is indicated in the display in minutes. When less than one minute remains, the time is then indicated in seconds.

NOTE

Recording stops automatically when the remaining recording time runs out.

About Recording Time

The RC-50's Recording mode (p. 48) can be switched to record in stereo or mono. When all of the RC-50's patches are blank, the total recording time available is as shown below.

Recording Mode	Recording Time
STEREO	Approx. 24 minutes
MONO	Approx. 49 minutes

NOTE

- The times listed above take into account the amount of memory needed for the actual recording combined with the memory required for the RC-50's operations (e.g., Undo/Redo).
- The minimum length of time required for a phrase is approximately 1.5 seconds. If the phrase you've record is shorter than that, the length of the phrase will be adjusted automatically, and then recording will stop.

To Switch Recording-Related Operations

You can make the following settings with the RC-50 to switch among the different types of recording tasks (settings are common to both Single mode and Multi mode).

- **Simultaneously starting recording when sounds are input**
  → "Auto Recording" (p. 47)
- **Switching between stereo and mono**
  → "Recording Mode" (p. 48)
- **Recording while muting the sounds localized at the center**
  → "AUX Center Cancel" (p. 48)
- **Recording with the tone adjusted for use with guitar amps**
  → "AUX & MIC Flat Amp Simulate (p. 48)

The following operations are also possible in Multi Mode.

- **Starting playback of a different phrase at the same time recording of the current phrase starts**
  → "Playing Multiple Phrases Simultaneously (Simul-Start)" (p. 50)
- **Starting playback of all phrases at the same time recording of the current phrase starts**
  → "All Start/All Stop" (p. 61)

Playback

If the current phrase has material recorded to it, pressing the REC/PLAY/OVERDUB pedal in the Play screen starts playback of the phrase.

Number of Phrases That Can Be Played Back Simultaneously

In Multi mode, you can play back all three phrases simultaneously. In Single mode, only the current phrase is played back.

To Confirm That the RC-50 is Currently Playing Back

During playback, the green indicator on each PHRASE pedal lights. In addition, the green indicator on the REC/PLAY/OVERDUB pedal lights when the current phrase is being played back.

To Switch Playback-Related Operations

You can make the following settings with the RC-50 to switch among the different types of playback tasks (settings are common to both Single mode and Multi mode).

- **Playing back while fading in**
  → "Start Mode" (p. 52)
- **Adjusting the fade-in speed**
  → "Fade-Out Time/Fade-In Time" (p. 49)
- **Adjusting the phrase panning**
  → "Pan" (p. 53)
- **Having phrases play only once**
  → "One Shot" (p. 52)
- **Playing back in the opposite direction**
  → "Reverse" (p. 52)
- **Synchronizing playback of the phrase to the patch tempo**
  → "Tempo Sync" (p. 53)
- **Switching the output for the phrase sounds**
  → "Output Select" (p. 53)

The following operations are also possible in Multi Mode.

- **Simultaneously starting playback of desired phrases**
  → "Playing Multiple Phrases Simultaneously (Simul-Start)" (p. 50)
- **Starting and stopping playback of all phrases simultaneously**
  → "All Start/All Stop" (p. 61)

Overdubbing

If the current phrase has material recorded to it, you can layer additional recordings onto the phrase as it plays back by pressing the REC/PLAY/OVERDUB pedal while playback is in progress. This is called "overdubbing."

Repeatedly overdubbing over the length of the phrase allows you to create dense, thicker phrases each time you layer a newly recorded phrase.

NOTE

You cannot overdub when the phrase is set to ONE SHOT (p. 52).

Number of Phrases That Can Be Overdubbed Simultaneously

Only the current phrase can be overdubbed. If you overdub on a phrase other than the current phrase, the current phrase is switched and overdubbing is conducted on the next phrase.

NOTE

You cannot simultaneously overdub to multiple phrases.

About Tempos During Overdubbing

Overdubbing is carried out at the tempo in effect immediately preceding the overdubbing.

NOTE

Changing the tempo while overdubbing is in progress may cause sounds to play in unintended ways.

To Confirm That the RC-50 is Currently Overdubbing

During overdubbing, the REC/PLAY/OVERDUB pedal indicator and the orange indicator on the PHRASE pedal corresponding to the current phrase are lit.

Phrase Length That Can Be Overdubbed

The phrase length that you can overdub is the same as the length of whatever phrase you are overdubbing.

NOTE

When Loop Sync is on while the RC-50 is in Multi mode, overdubbing of a length equivalent to that of the phrase having the longest playback time among those already recorded can be carried out.

To Switch Overdubbing-Related Operations

You can make the following settings with the RC-50 to switch among the different types of overdubbing tasks (settings are common to both Single mode and Multi mode).

- **Recording while muting the sounds localized at the center**
  → "AUX Center Cancel" (p. 48)
- **Recording with the tone adjusted for use with guitar amps**
  → "AUX & MIC Flat Amp Simulator" (p. 48)

In addition, pressing [OVERDUB MODE] enables the Overdubbing mode setting, allowing you to switch the overdubbing method. The Overdubbing mode setting provides the three following overdubbing methods from which to choose.

OVERDUB	Sounds are layered onto prerecorded phrases. This is the method normally used.
REPLACE	Previously recorded phrases are erased as they are overwritten by newly recorded phrases. Overwriting takes places while the previously recorded phrases are played back, providing a kind of delay effect like that from an effects processor.
MOMENTARY PUNCH-IN	Previously recorded phrases are erased as they are overwritten by newly recorded phrases. This differs from REPLACE in that overwriting takes place only while the REC/PLAY/OVERDUB pedal is held down.

cf.

For more detailed instructions on switching the Overdubbing mode, refer to "Setting the Overdubbing Method (Overdubbing Mode)" (p. 47).

Undo/Redo

There may be times when you make a mistake in recording or overdubbing and would like to undo the step you just took. In such situations, you can eliminate the results of the immediately preceding recording or overdubbing. This is called "undo."
You can also recover results you have undone and return the data to its state with that recording or overdubbing step done over again. This is called "redo."

Types of Operations You Can Undo/Redo

Undo and Redo affect the immediately preceding recording or overdubbing step.

Number of Undos/Redos

Undo can be used only to undo the single immediately preceding recording or overdubbing step taken.
Redo only reverses the immediately preceding undo.

To Confirm Whether or Not You Can Undo or Redo

You can undo immediately after recording or overdubbing or after a redo.
After an undo, the red UNDO/REDO indicator lights, indicating that a redo is possible.

NOTE

- With some recordings, changed patch tempos (p. 38) and original tempos (p. 36) cannot be restored after carrying out Undo and Redo.
  → "How is the Original Tempo Determined at the Time of Recording?" (p. 36)
- If any phrase is cleared after an undo, you will no longer be able to perform a redo.
- You cannot undo or redo steps after saving the patch.

Stopping

Pressing the STOP pedal during recording, playback, or overdubbing stops the respective operation.
During overdubbing, the REC/PLAY/OVERDUB pedal indicator and the orange indicator on the PHRASE pedal corresponding to the current phrase are lit.

To Switch Stop-Related Operations

You can make the following settings with the RC-50 to switch among the different types of tasks related to stopping operations (settings are common to both Single mode and Multi mode).

- **Stopping with a fade-out or at the very end of the phrase**
  → "Stop Mode" (p. 53)
- **Adjusting the fade-out speed**
  → "Fade-Out Time/Fade-In Time" (p. 49)

The following operations are also possible in Multi Mode.

- **Simultaneously stopping all phrases**
  → "All Start/All Stop" (p. 61)

Erasing (Clear)

After pressing a PHRASE pedal to select a phrase, if you then hold down the STOP pedal for two seconds or longer, the recording of the phrase selected as the current phrase is erased (cleared).
Although you can use Undo to undo the results of the immediately preceding recording or overdubbing, if you wish to erase the finalized recording of a phrase, which you cannot accomplish with Undo, then execute Clear to erase the phrase.

MEMO

Using an external foot switch, you can clear phrases with just one press of the pedal, or clear Phrases 1, 2, and 3 individually.
→ "Setting the Functions for the RC-50's Pedals and External Foot Switches (TEMPO/UNDO/CTL1/CTL2/CTL3/CTL4 Pedal Function)" (p. 70)

NOTE

- You cannot clear phrases while recording or overdubbing is in progress.
- Executing Clear while playing back a phrase immediately stops and erases the phrase.

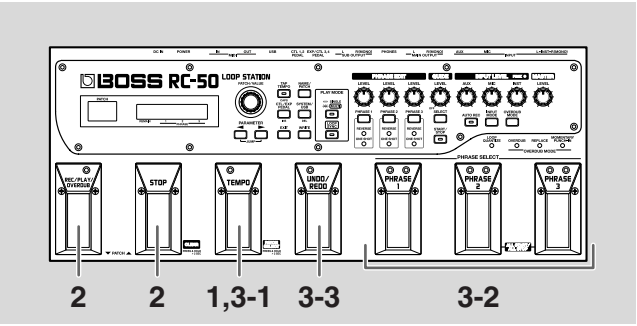
Switching Patches with the Pedals (Patch Select Mode)

You can switch patches not only by rotating the PATCH/VALUE dial in the Play screen, but also with the RC-50's pedals.
The mode in which you can switch patches with the RC-50's pedals is called "Patch Select mode."

NOTE

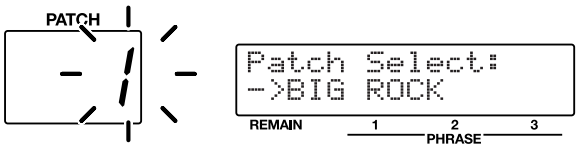
You cannot stop current operations (recording, playback, and overdubbing) in Patch Select mode.

Switching Patches in Patch Select Mode



1. In the Play screen, hold down the TEMPO pedal for at least two seconds.

The patch number flashes in the left display, indicating that the RC-50 has switched to Patch Select mode.



2. Press the STOP pedal or REC/PLAY/OVERDUB pedal to switch the patch number up or down.

The left (orange) indicators on the pedals flash, indicating the current phrase of the patches to which you switch.

3. Select one of the following operations.

3-1. After selecting as Patch number, press the TEMPO pedal one time to switch patches.

While performing:

When Phrase Change mode (p. 49) is set to IMMEDIATE, the Play screen returns to the display, and the RC-50 immediately switches to the next patch.

When Phrase Change mode is set to LOOP END, the Play screen returns to the display, and the patch is put on hold, programmed to wait for switching.

The [TAP TEMPO] indicator flashes in time with the patch tempo of the patch to which you are switching.

When playback of the current phrase is finished, the RC-50 switches to the patch programmed to play next.

While stopped:

The Play screen returns to the display, and the RC-50 immediately switches to the next patch.

3-2. To change the current phrase in the next patch, press a PHRASE pedal one time.

While performing:

When Phrase Change mode (p. 49) is set to IMMEDIATE, the Play screen returns to the display, and the RC-50 immediately switches to the next patch.

Simultaneously, the phrase assigned to the pressed PHRASE pedal becomes the current phrase.

When Phrase Change mode is set to LOOP END, the Play screen returns to the display, and the patch is placed on hold for switching.

The [TAP TEMPO] indicator flashes in time with the patch tempo of the patch to which you are switching.

When playback of the current phrase is finished, the RC-50 switches to the patch programmed to play next.

Simultaneously, the phrase assigned to the pressed PHRASE pedal becomes the current phrase.

While stopped:

The Play screen returns to the display, and the RC-50 immediately switches to the next patch.

Simultaneously, the phrase assigned to the pressed PHRASE pedal becomes the current phrase.

3-3. To cancel Patch Select and return to the Play screen, press the UNDO/REDO pedal once.

The RC-50 quits Patch Select mode and the Play screen returns to the display.

Chapter 3

About Tempos and the Guide

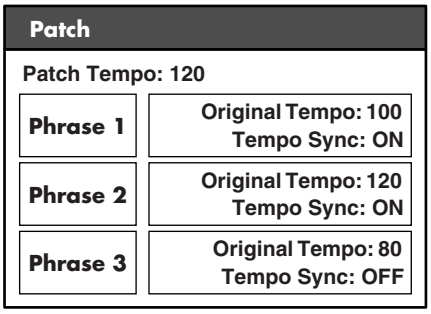
About Tempos

This section provides information about tempos when using the RC-50.

About Tempos and the Phrase Playback Speed

When you perform on the RC-50, the playback speed is determined according to one of two tempo types, the original tempos that are saved with each of the three separate phrases, and the patch tempos saved with patches.

Examples of Original and Patch Tempos



About Tempo Sync

The RC-50's performances are played using the patch tempo, but you can choose whether to use the patch tempo or an original tempo to play back each phrase. This is called "Tempo Sync."

When Tempo Sync is switched on, the playback speed is increased or decreased to match the tempo to the patch tempo.

When Tempo Sync is off, the phrase's playback speed does not change.

For example, in the example above, each phrase is played back at the following tempos.

Phrase	Performance Tempo	Playback Speed
1	120	The playback speed is increased to synchronize with the patch tempo.
2	120	The original tempo and patch tempo are the same, so the phrase's playback speed is unchanged.
3	80	Tempo Sync is switched off, so the phrase's playback speed is unchanged.

In this way, switching Tempo sync allows you to perform at the same tempo used for playback, even if the tempos for each phrase when recorded (the original tempo) are different.

NOTE

When the original tempo and the patch tempo are greatly different, the tone quality of the phrase might decrease by using Tempo Sync.

Original Tempo

The tempo used when a phrase is recorded is saved to the phrase. This is called the "original tempo."

How is the Original Tempo Determined at the Time of Recording?

The original tempo is set automatically when a phrase is recorded. This setting is made depending on the RC-50's status as shown below.

Single Mode

When the guide is on (when Guide Level is not set to OFF):

The original tempo of the newly recorded phrase is set to the same tempo as the patch tempo.

At this time, the Loop Quantize indicator lights.

When the guide is set to OFF:

The original tempo of the newly recorded phrase is automatically calculated from the recorded phrase's length (at this time, the Loop Quantize indicator is off).

In addition, when Tempo Sync is set to ON in the recorded phrase, the patch tempo is also automatically set to the same value as the phrase's tempo.

When the tempo is calculated automatically from the length of the phrase, calculation of the tempo is premised on recording measures with 1, 2, 4, 8, 16 (or other power of two) guide beats.

The initial status is with a beat (time signature) of 4/4.

When recording phrases using a different beat, set the time signature prior to recording (p. 39).

NOTE

The tempo that exceeds maximum tempo (250 bpm) of RC-50 cannot be automatically calculated.

MEMO

When Synchronized Performance (p. 77) is used to synchronize the RC-50 to an external MIDI device's tempo, the phrase's original tempo is set to the patch tempo, just as when the guide is switched on.

At this time, the Loop Quantize indicator lights.

→ "Setting Tempo Synchronization with MIDI (MIDI Sync)" (p. 50)

Multi Mode

When Loop Sync is set to OFF:

As in Single Mode, determination of the original tempo changes according to whether the guide is on or off.

If, however, in addition to the phrase you are about to record, a recorded phrase meeting both of the conditions below is being played back, the original tempo is set to the same tempo as that of the phrase being played back (the patch tempo).

- Tempo Sync is ON
- One Shot (p. 52) is set to LOOP

At this time, the Loop Quantize indicator lights.

Patch Tempo: 120

Phrase 1	**Original Tempo: 84 Tempo Sync: ON**
Phrase 2	**Original Tempo: 147 Tempo Sync: OFF**
Newly Recorded Phrase	**Original Tempo: 120 Tempo Sync: OFF**

When Loop Sync is set to ON:

As in Single Mode, determination of the original tempo changes according to whether the guide is on or off.

If, however, in addition to the phrase you are about to record, there is a recorded phrase with One Shot set to LOOP, the original tempo is set to the same tempo as the recorded phrase's original tempo.

At this time, the Loop Quantize indicator lights.

Patch Tempo: 120

Phrase 1	**Original Tempo: 84 Tempo Sync: ON**
Phrase 2	**Original Tempo: 147 Tempo Sync: OFF**
Newly Recorded Phrase	**Original Tempo: 120 Tempo Sync: OFF** ← Same setting as patch tempo

MEMO

When the RC-50 is connected to an external MIDI device with a MIDI cable and set so that it runs synchronized to the external MIDI device's tempo, the patch tempo is switched to the tempo of the external MIDI device.

cf.

"Setting Tempo Synchronization with MIDI (MIDI Sync)" (p. 50)

All of the phrases play back at the same tempo

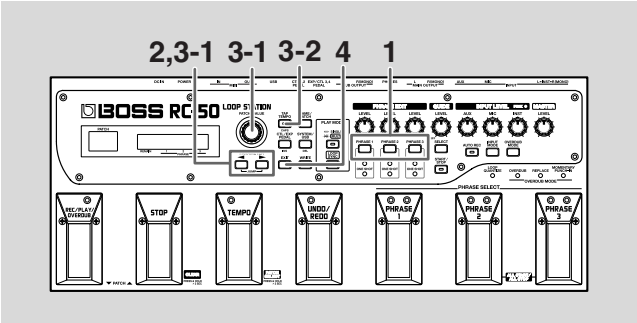
Even if each phrase has been recorded at a different tempo, by changing the phrases' playback speed to synchronize them to the patch tempo.

cf.

"Synchronizing Playback of the Phrase to the Patch Tempo (Tempo Sync)" (p. 53)

Confirming and Setting the Original Tempo

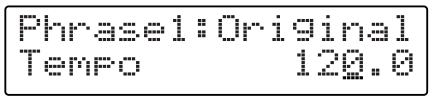
You can confirm and set the original tempo with the following procedure.



1. Press [PHRASE] to select the phrase whose original tempo you want to confirm or set.

2. Press PARAMETER [◄] [►] until Original Tempo is displayed.

The phrase's original tempo is indicated.



3. When changing the original tempo, use the following procedure.

3-1. Press PARAMETER [◄] [►] to move the cursor to the digit you want to change, then rotate the PATCH/VALUE dial to adjust the original tempo.

Available Settings: 40.0–250.0

3-2. Press [TAP TEMPO] several times.

The tempo is set to the interval between taps of the button.

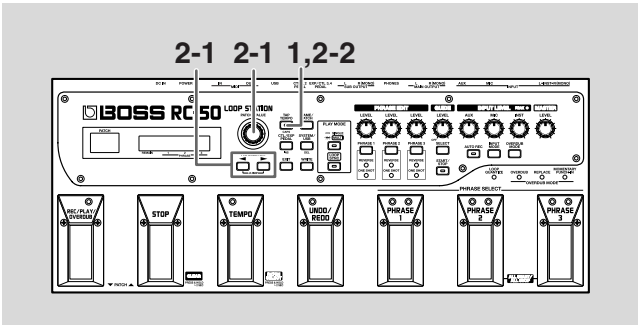
4. When you have finished confirming or setting the value, press [EXIT] to return to the Play screen.

Patch Tempo

From this point, the tempo used when recording a phrase or playing a patch will be referred to as the "patch tempo."
Moreover, the patch tempo is also used as the guide (p. 39) tempo.

Confirming and Setting the Patch Tempo

You can confirm and set the patch tempo with the following procedure.



1. Press [TAP TEMPO] to display "Patch:Tempo."
The tempo is indicated.



2. When changing the patch tempo, use the following procedure.

2-1. Press PARAMETER [◄] [►] to move the cursor to the digit you want to change, then rotate the PATCH/VALUE dial to adjust the patch tempo.
Available Settings: 40.0–250.0

2-2. Press [TAP TEMPO] several times.
The tempo is set to the interval between taps of the button.

To Set the Patch Tempo using the TEMPO Pedal

When you press the [TEMPO] pedal several times, the tempo is then set to the interval between taps of the pedal.

NOTE

- You cannot adjust the tempo with the TEMPO pedal if the pedal's function has been changed.
  → "Setting the Functions for the RC-50's Pedals and External Foot Switches (TEMPO/UNDO/CTL1/CTL2/CTL3/CTL4 Pedal Function)" (p. 70)
- When Synchronized Performance is used to synchronize the RC-50 to an external MIDI device's tempo, you cannot change the patch tempo with the PATCH/VALUE dial, [TAP TEMPO], or the TEMPO pedal.

Performing While Listening to the Rhythm Sound—About the Guide

When recording phrases with the RC-50, it can convenient to use the guide, which can be used like a metronome.

The guide features numerous pre-programmed rhythm sounds with drums and percussion in a variety of time signatures, so you can use it not just as a metronome but also as a simple rhythm machine to provide backing rhythm.

Additionally, by setting the tempo and guide beat before recording and then recording in time with the guide, you can record looped phrases at the correct length (Loop Quantize; p. 42).

The following provides a description of guide settings.

MEMO

Guide settings are saved to each patch individually.

Starting and Stopping the Guide

The guide sound starts automatically when you begin recording or playback of a phrase.

The guide automatically stops when recording, playback, or overdubbing of all phrases (1–3) is finished.

You can also press [GUIDE START/STOP] to manually start the guide when recording or playback is stopped, or stop the guide when the performance is in progress.

MEMO

If there is no need to start automatically, set the Guide Level (next section) to OFF.

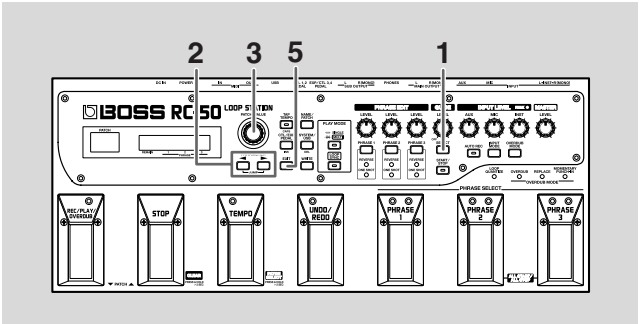
Adjusting the Volume of the Guide Sound (Guide Level)

You can adjust the volume level of the guide sound with the GUIDE LEVEL knob.

No guide sound is played when the GUIDE LEVEL knob is turned completely to the left (set to OFF).

Setting the Guide

Use the following procedure to change the guide settings.



1. **Press [GUIDE SELECT] to display the guide settings screen.**

2. **Press PARAMETER [◄] [►] to display the parameter you want to set.**

   (Example)

   ```
   Guide:Pattern
       Simple Beat 1
   ```

3. **Rotate the PATCH/VALUE dial to change the value of the setting.**

4. **Repeat Steps 2–3 as needed.**

5. **When finished making the settings, press [EXIT] to return to the Play screen.**

Selecting the Guide Sound (Guide Pattern)

You can select the guide's performance pattern from a choice of rock drums, Latin percussion, and other patterns.

```
Guide:Pattern
    Simple Beat 1
```

cf.

"Guide Pattern List" (p. 41)

Selecting the Beat (Time Signature) for the Guide Sound (Beat)

This selects the guide sound beat.

```
Guide:Beat
                4/4
```

Available Settings:

2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 5/8, 6/8, 7/8, 8/8, 9/8, 10/8, 11/8, 12/8, 13/8, 14/8, 15/8

NOTE

You cannot change a phrase's beat after the phrase is recorded. Be sure to set this before recording.

Playing a Count-In When Recording (Recording Count-In)

You can have recording start after a count-in sound is played.



Available Settings	Description
OFF	No count-in is played.
1MEAS	Recording starts after a one-measure count-in is played.

NOTE

No count-in sound plays when recording is started with a MIDI Start message received from an external MIDI device.

Playing a Count-In for Playback (Playback Count-In)

You can have Playback start after a count-in sound is played.



Available Settings	Description
OFF	No count-in is played.
1MEAS	Playback starts after a one-measure count-in is played.

NOTE

- No count-in sound plays when the playback is started with a MIDI Start message received from an external MIDI device.
- No count-in sound plays when the playback is started with the RC-50 or an external foot switch with the CC# function set to "PHRASE 1/2/3 PLY/STP" or "PHRASE 1/2/3 PLAY."

Adjusting the Volume of the Guide Sound (Guide Level)

* *You can also change this value with the GUIDE LEVEL knob.*



Available Settings: OFF, 2–200

Switching the Output for the Guide Sound (Guide Output Select)

You can switch the jacks to which the guide sound is output.



Available Settings	Description
MAIN	Output from the MAIN OUTPUT and PHONES jacks.
SUB	Output from the SUB OUTPUT jacks. The sound is not output from the MAIN OUTPUT and PHONES jacks.
MAIN+SUB	Output from the MAIN and SUB OUTPUT jacks and the PHONES jack.

MEMO

You can select the method used to set the guide sound output; either with the output set as shown above in each individual patch, or with the system settings, whereby the same output destination is selected for all patches.

→ "Using the Same Audio Outputs for All Patches (Input/Phrase 1, 2, 3/Guide Output Select)" (p. 69)

Guide Pattern List

Beat	Pattern
2/4	Simple Beat 1–4
	Shuffle 1–2
	Hi-Hat 1–2
	Kick & Hi-Hat 1–5
	Rim & Hi-Hat 1–4
	Conga & Hi-Hat 1–3
3/4	Simple Beat 1–8
	Groove Beat 1–2
	Shuffle
	Hi-Hat
	Kick & Hi-Hat 1–3
	Rim & Hi-Hat 1–4
	Conga & Hi-Hat 1–2
4/4	Simple Beat 1–5
	Downbeat Snare
	Rock 1–5
	Latin Rock 1–2
	Groove Beat 1–5
	Shuffle 1–6
	1/2 Shuffle 1–2
	16th Shuffle 1–2
	Shuffle Reggae
	Pop 1–3
	Funk 1–3
	Fusion 1–3
	Swing
	Bossa 1–3
	Samba 1–3
	Clave 1–2
	909 Beat
	909 Clap
	R&B 1–2
	Hi-Hat
	Kick & Hi-Hat 1–2
	Conga & Hi-Hat
	Conga & Maracas
5/4	Simple Beat 1–4
	Groove Beat 1–3
	Swing 1–2
	Hi-Hat 1–4
	Kick & Hi-Hat 1–4
	Rim & Hi-Hat
	Conga & Hi-Hat 1–2

Beat	Pattern
6/4	Simple Beat 1–7
	Groove Beat 1–2
	Shuffle
	Swing 1–2
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–2
	Kick & Hi-Hat
	Conga & Maracas
7/4	Simple Beat 1–7
	Groove Beat 1–2
	Shuffle
	Swing 1–2
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–2
	Kick & Hi-Hat
	Conga & Maracas
5/8	Simple Beat 1–10
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–3
	Kick & Hi-Hat
	Rim & Hi-Hat
	Conga & Maracas
6/8	Simple Beat 1–10
	Swing 1–2
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–2
	Kick & Hi-Hat
	Conga & Maracas
7/8	Simple Beat 1–9
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–2
	Kick & Hi-Hat 1–2
	Rim & Hi-Hat
	Conga & Maracas

Beat	Pattern
8/8	Simple Beat 1–6
	Groove Beat 1–3
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–2
	Kick & Hi-Hat 1–2
	Rim & Hi-Hat
	Conga & Maracas
9/8	Simple Beat 1–6
	Groove Beat 1–3
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–2
	Kick & Hi-Hat 1–2
	Rim & Hi-Hat
	Conga & Maracas
10/8	Simple Beat 1–6
	Groove Beat 1–3
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–2
	Kick & Hi-Hat 1–2
	Rim & Hi-Hat
	Conga & Maracas
11/8	Simple Beat 1–6
	Groove Beat 1–3
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–2
	Kick & Hi-Hat 1–2
	Rim & Hi-Hat
	Conga & Maracas
12/8	Simple Beat 1–6
	Groove Beat 1–3
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–2
	Kick & Hi-Hat 1–2
	Rim & Hi-Hat
	Conga & Maracas

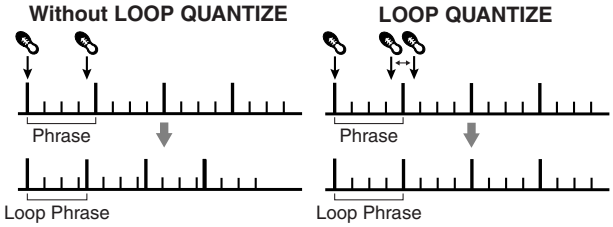
Beat	Pattern
13/8	Simple Beat 1–6
	Groove Beat 1–3
	Bossa Feel
	Samba Feel 1–2
	Hi-Hat 1–2
	Kick & Hi-Hat 1–2
	Rim & Hi-Hat
	Conga & Maracas
14/8	Simple Beat 1–6
	Groove Beat 1–3
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–2
	Kick & Hi-Hat 1–2
	Rim & Hi-Hat
	Conga & Maracas
15/8	Simple Beat 1–6
	Groove Beat 1–3
	Bossa Feel
	Samba Feel 1–2
	909 Beat
	909 Clap
	Hi-Hat 1–2
	Kick & Hi-Hat 1–2
	Rim & Hi-Hat
	Conga & Maracas

Loop Quantize

The function that enables you to adjust the length of the phrase you are going to record automatically is called "Loop Quantize."

The timing at which you stop recording a phrase is very important in order to create a looped phrase of the correct length. In the past, the ability to stop recording at the right moment required much practice using the pedals to get it right.

When Loop Quantize is in effect (when the LOOP QUANTIZE indicator is lit), then even if there are any minor discrepancies in the timing of the end of a recording, the phrase length is automatically corrected based on the patch tempo and guide beat, enabling you to create phrases that loop properly and have the correct measure length.

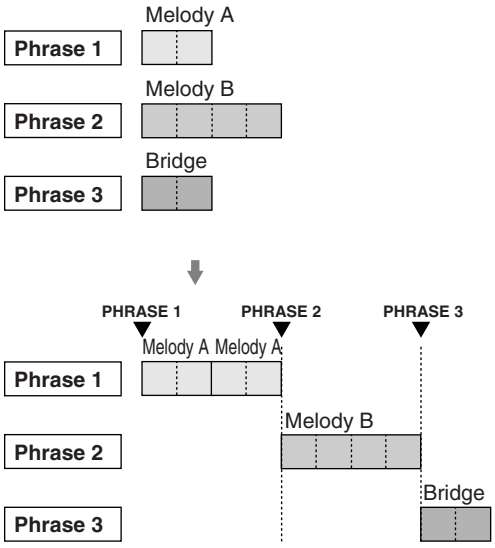


In addition, when using Multi mode with Loop Sync on, if Loop Quantize is in effect (if the LOOP QUANTIZE indicator is lit), recording automatically stops when the phrase reaches the same length as the previously recorded phrase, allowing you to record three phrases, all of exactly the same length.

Example of Recording Using Loop Quantize

Using Single mode, the three phrases Melody A, Melody B, and the bridge are recorded at the tempo set beforehand.

In this situation, if Loop Quantize is in effect, it enables you to record with measure lengths completely correct, even if each recorded phrase contains a different number of measures, so after recording, phrases play back smoothly in time with the tempo when you play back loop phrases or switch phrases during playback.



To Use Loop Quantize

Single Mode

Switching the guide on or off determines whether or not Loop Quantize can be used.

When the guide is on (when GUIDE LEVEL is set to anything other than OFF):

You can use Loop Quantize.

The phrase length is automatically corrected in accordance with the patch tempo.

At this time, the LOOP QUANTIZE indicator lights.

When the guide is off:

You cannot use Loop Quantize.

The phrase length is determined according to the timing at which you end the recording (with playback or by stopping).

At this time, the LOOP QUANTIZE indicator is off.

MEMO

When Synchronized Performance (p. 77) is used to synchronize the RC-50 to an external MIDI device's tempo, Loop Quantize is enabled for use, just as when the guide is switched on.

At this time, the LOOP QUANTIZE indicator lights.

NOTE

You cannot set the tempo for phrases that are looped over an interval shorter than the minimum recording time (approximately 1.5 seconds).

Multi Mode

When Loop Sync is set to OFF:

As in Single Mode, whether or not Loop Quantize is enable for use changes according to whether the guide is on or off.

If, however, in addition to the phrase you are about to record, a recorded phrase meeting both of the conditions below is being played back, the phrase length is automatically adjusted in accordance with the patch tempo.

- Tempo Sync is ON
- One Shot (p. 52) is set to LOOP

At this time, the LOOP QUANTIZE indicator lights.

When Loop Sync is set to ON:

As in Single Mode, whether or not Loop Quantize is enabled for use changes depending on whether the guide is on or off.

If, however, in addition to the phrase you are about to record, there is a recorded phrase with One Shot (p. 52) set to LOOP, the phrase is recorded with the length automatically set to the same duration as the loop time when Loop Sync (p. 28) is on.

At this time, the LOOP QUANTIZE indicator lights.

Chapter 4

Creating Patches

This section describes how to create patches with the RC-50.

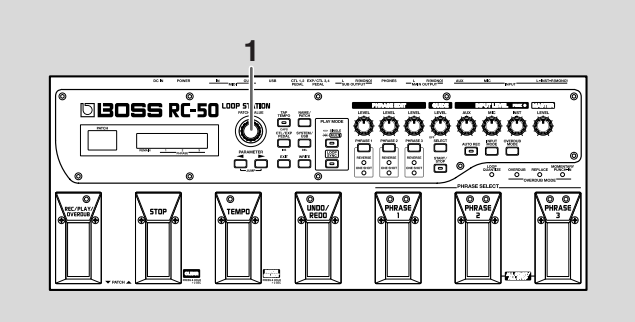
Before creating any patches, be sure that you have carefully read “Chapter 2 Basic Setup of the RC-50” (p. 27) and checked the information required for creating patches beforehand.

Preparations for Creating Patches

Before recording the phrases, you must first prepare the patches.

Selecting Patches

When creating a new patch by processing an existing patch or by selecting an INIT PATCH containing no data, start by selecting a patch to edit first.



1. In the Play screen, rotate the PATCH/VALUE dial to switch to a patch.

As you rotate the dial to the right (clockwise), the patch numbers change up to Patch Number 99, then start over from Patch Number 1 when you continue to turn the dial.

When the dial is rotated to the left (counterclockwise), the patch numbers change down to Patch Number 1, then start over from Patch Number 99 when you continue to turn the dial.

MEMO

- You can set the upper and lower limits at which the patches are switched. For more detailed information, refer to "Limiting the Patches That Can Be Switched (Patch Extent)" (p. 68).
- You can switch patches with the RC-50's pedals instead of using the PATCH/VALUE dial. For more details, refer to "Switching Patches with the Pedals (Patch Select Mode)" (p. 33).
- You can switch patches using a foot switch connected to the CTL 1,2 PEDAL or EXP/CTL 3,4 PEDAL jacks.
  For more details, refer to "Setting the Functions for the RC-50's Pedals and External Foot Switches (TEMPO/UNDO/CTL1/CTL2/CTL3/CTL4 Pedal Function)" (p. 70).

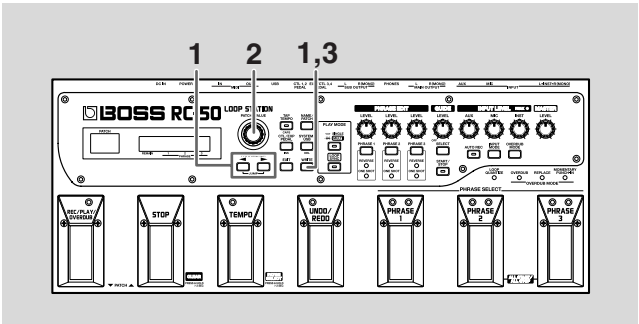
If Patches Are Not Switching

On the RC-50, patches can only be switched from the Play screen. Press [EXIT] to return to the Play screen.

Initializing Patches to Their Basic Settings (Patch Initialize)

Patch Initialize allows you to initialize the settings of an existing patch and restore its basic settings.
When creating an entirely new patch, executing Patch Initialize can help you prevent any unintended or mistaken settings from being used.

cf.
"Patch Parameters" (p. 97)



1. Press [WRITE], then press PARAMETER [◄] [►] until "Initialize" is displayed.



2. Rotate the PATCH/VALUE dial to select the patch you want to initialize.

If the currently selected patch is the one you want to initialize, go directly to the next step.

* *You cannot initialize patch numbers 1–5 when Preset Protect (p. 69) is set to ON.*

* *To cancel the initialization, press [EXIT]. The Play screen returns to the display.*

3. Press [WRITE].

The RC-50 switches to the initialized patch, and the Play screen returns to the display.

* *All data contained in the patch is lost once the initialization is executed.*

NOTE

Do not turn off the power while the message "Initializing..." is displayed. This may result in loss of recorded material.

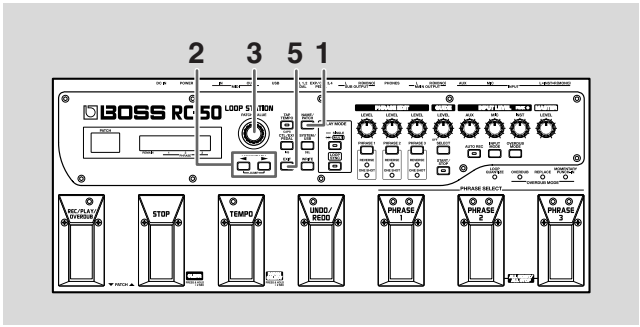
Naming Patches

You can give names to patches (patch names) using up to 16 characters.

You can assign whatever names you like, such as names suggesting the sound created or the name of the song in which it is to be used.

NOTE

You can not give names to individual phrases.



1. Press [NAME/PATCH].

The Patch Name screen appears.



2. Press PARAMETER [◄] [►] to move the cursor to the characters you want to edit.

3. Use the PATCH/VALUE dial to change the character.

The following functions are available while the characters are being changed.

Button	Function
CAPS (TAP TEMPO)	Inserts a blank space at the cursor position.
INS (CTL/EXP PEDAL)	Alternately switches the letter at the cursor position between uppercase and lowercase.
DEL (SYSTEM/USB)	Deletes the character at the cursor position and shifts all characters after it to the left.

4. Repeat Steps 2 and 3 to make any additional edits to patch names.

5. Press [EXIT] to return to the Play screen.

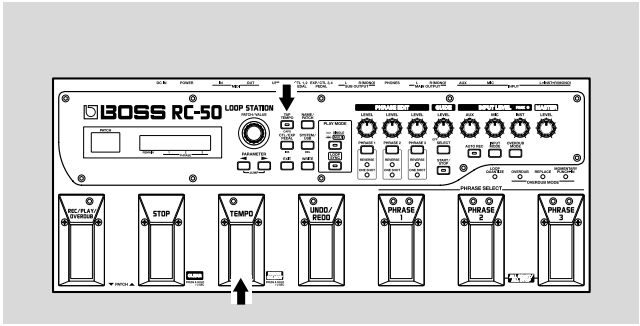
6. If you want to store the patch name, continue by following the instructions in "Saving by Patch Numbers (Patch Write)" (p. 54).

Setting Up the Patch Tempo, Beat, and Guide

When recording phrases, if you are going perform to a previously set patch tempo or play along to the guide using a metronome or other rhythm sound, you will need to set up the patch tempo and guide. In addition, be sure to set the beat before you start recording.

Setting the Patch Tempo

You can set the patch tempo according to the interval between taps of the TEMPO pedal or [TAP TEMPO]. Alternatively, you can set the patch tempo by pressing [TAP TEMPO] and then turning the PATCH/VALUE dial.



* *After setting the patch tempo by pressing [TAP TEMPO], press [EXIT] to return to the Play screen.*

NOTE

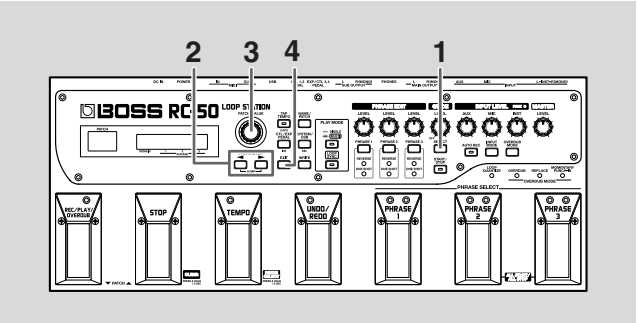
You cannot change the tempo while recording of the phrase is in progress.

MEMO

When you start out recording the very first phrase without setting the tempo or playing the guide sound, the patch tempo is set automatically in accordance with the length of the recording.

Setting the Beat

You can set the guide's beat. The beat can be changed only when all phrases are blank.



1. Press [GUIDE SELECT] to display the guide settings screen.



2. Press PARAMETER [◄] [►] until "Beat" is displayed.



3. Use the PATCH/VALUE dial to select the beat for the guide sound.

Available Settings:

2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 5/8, 6/8, 7/8, 8/8, 9/8, 10/8, 11/8, 12/8, 13/8, 14/8, 15/8

4. When you have finished making the settings, press [EXIT] to return to the Play screen.

NOTE

You cannot change the beat while recording phrases or if any of the phrases have already been recorded.

Playing the Guide

If you are going to be listening to the guide while recording, prepare the guide by playing it with the volume raised. If recording after playing the guide beforehand, press [GUIDE START/STOP] to start the guide.

Making the Patch Settings

These procedures are used to make the settings for the overall patch playback and recording functions.

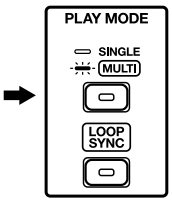
Making the Play Mode Settings

Before creating a patch, you will find it convenient to set the Play mode settings best suited for the way the finished patch will be used ahead of time.

MEMO

For more detailed information about Play mode, refer to "About Play Modes" (p. 28).

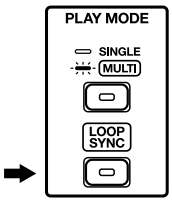
1. Press [PLAY MODE] to switch to the Play Mode screen.
The RC-50 alternately switches to Single mode (indicator off) or Multi mode (indicator lit) each time the button is pressed.



Setting Loop Sync

When the Play mode is set to Multi mode, you can have playback repeat with all phrases synchronized to the longest phrase (Loop Sync On), or have playback repeat according to the length of each individual phrase (Loop Sync Off).

1. Press [LOOP SYNC] to switch Loop Sync on or off.
Loop Sync alternately switches on (indicator lit) or off (indicator off) each time the button is pressed.



MEMO

For more detailed information about Loop Sync, refer to "Playing Back Phrases with All Lengths and Beginnings Aligned: Loop Sync" (p. 28).

Simultaneously Starting Recording When Sounds Are Input (Auto Recording)

You can have recording start simultaneously with the beginning of musical performances (Auto Recording).
This makes it convenient to have the start of recording timed to the input of the audio, for example when you want to synchronize the start of recording to playback from a CD player.

1. Press [AUTO REC] to switch Auto Recording on or off.
Auto Recording alternately switches on (indicator lit) or off (indicator off) each time the button is pressed.



2. Press REC/PLAY/OVERDUB pedal.
The REC/PLAY/OVERDUB pedal's indicator flashes rapidly in red, and the RC-50 switches to recording standby mode.

3. Start the performance with the instrument, CD player, or other device.
Recording starts when any signal at or above the value set for the trigger level (p. 69) is input.

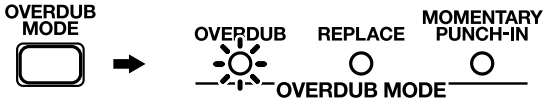
NOTE

When recording is started through reception of a MIDI Start message from an external MIDI device, recording begins immediately, without the RC-50 switching to recording standby.

Setting the Overdubbing Method (Overdubbing Mode)

You can set the overdubbing method (overdubbing modes) from any of three modes.

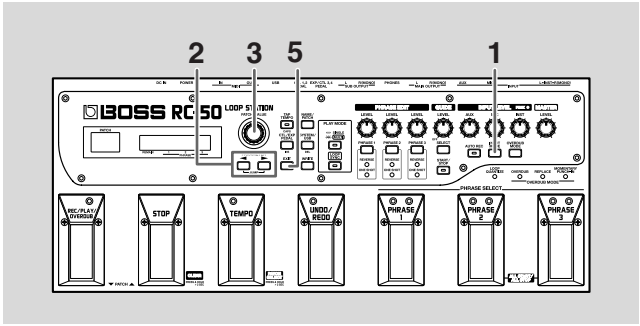
1. Press [OVERDUB MODE] to switch the overdubbing mode.
The overdubbing mode switches each time the button is pressed, and the OVERDUB MODE indicator corresponding to the selected overdubbing mode lights.



Available Settings	Description
OVERDUB	The new performance is layered onto the prerecorded phrases. If overdubbing is repeated, the next performance is layered on top of the previous material, allowing you to create an ensemble in a single phrase.
REPLACE	Phrases with existing recordings are overwritten as new phrases are recorded over them. Overwriting takes places while the previously recorded phrases are played back, allowing you to achieve a kind of delay effect similar to that obtained from an effects processor.
MOMENTARY PUNCH-IN	Previously recorded phrases are erased as they are overwritten by newly recorded phrases. This differs from REPLACE in that overwriting takes place only while the REC/PLAY/OVERDUB pedal is held down. This overwrites only at certain points, which is convenient when you want to edit previously recorded phrases.

Recording-Related Settings

Settings used in recording phrases can made separately for each patch.



1. **Press [INPUT MODE].**

2. **Press PARAMETER [◄] [►] until the parameter you want to set is displayed.**

   (Example)

   ```
   Input:AUX Center
   Cancel        OFF
   ```

3. **Rotate the PATCH/VALUE dial to adjust the parameter.**

4. **Repeat Steps 2–3 as needed.**

5. **When you have finished making the settings, press [EXIT] to return to the Play screen.**

Recording While Muting the Sounds Localized at the Center (AUX Center Cancel)

When recording audio input via the AUX jack, you can eliminate (cancel) the sound localized at the center of the sonic image.
This allows you to record from sources such as CDs and simply and easily create minus one data, in which the vocals, guitar solos, or other sounds that were positioned at the center have been eliminated.

```
Input:AUX Center
Cancel        OFF
```

Available Settings: OFF, ON

Recording with the Tone Adjusted for Use with Guitar Amps (AUX & MIC Flat Amp Simulate)

When recording from the AUX jack or MIC connector, you can adjust the tone so that the phrase can be played back through a guitar amp (Flat Amp Simulate).

```
Input:AUX & MIC
Flat Amp      OFF
```

Available Settings: OFF, ON

MEMO

Flat Amp Simulate

Guitar amps are designed with their frequency response optimized for the sound of the guitar. As a result, when playing phrases recorded from CDs and MDs through a guitar amp, the low- and high-frequency ranges are boosted relative to the midrange. This function adjusts the tone when recording so that it sounds correctly when performances other than those with guitars are played through a guitar amp.

Switching Between Stereo and Mono (Recording Mode)

Before recording, first set the recording mode.

```
Input:Rec Mode
          STEREO
```

MEMO

About the Available Recording Time

You can switch the RC-50's recording mode between Stereo and Mono modes.
When all of the RC-50's patches are blank, the available recording time in each mode is shown below.

Recording Mode	Available Recording Time
STEREO	Approx. 24 minutes
MONO	Approx. 49 minutes

MEMO

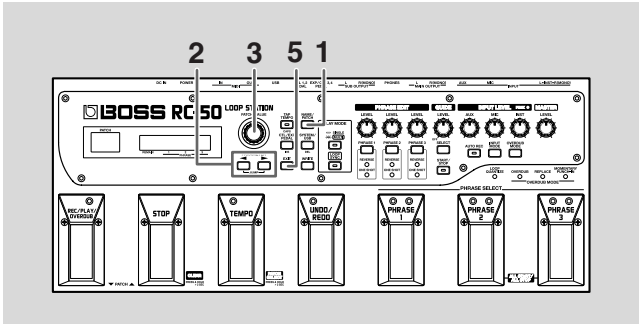
You can record using a different mode for each phrase.
For example, you can conserve memory by normally recording phrases in "MONO," while recording with the "STEREO" setting only for those phrases you want to have in stereo.

NOTE

- The available recording time is calculated by combining the memory needed for the actual recording with the memory required for RC-50 operations (e.g., Undo/Redo), and converting this total to a time value.
- The minimum length of time required for a phrase is approximately 1.5 seconds. If the phrase you've record is shorter than that, the length of the phrase will be adjusted automatically, and then recording will stop.
- In overdubbing, the recording quality set for the phrase being overdubbed is used, regardless of the recording mode setting.
- The sound quality (the recording mode set at the time of recording) of a phrase, once recorded, cannot be changed.

Other Patch Settings

These procedures are for making other patch settings.



1. **Press [NAME/PATCH] twice.**
2. **Press PARAMETER [◄] [►] to display the parameter you want to set.**

   (Example)

   ```
   Patch:Level
                  100
   ```

3. **Rotate the PATCH/VALUE dial to adjust the parameter.**
4. **Repeat Steps 2–3 as needed.**
5. **When finished making the settings, press [EXIT] to return to the Play screen.**

Adjusting the Patch Volume

You can adjust the overall patch volume. This is convenient when you want to connect an external EXP pedal and use the pedal to control the volume or adjust the output volume for both the MAIN OUTPUT and SUB OUTPUT jacks simultaneously.
Normally, this is set to the center with a level of 100.

```
Patch:Level
                  100
```

Available Settings: 0–200

Switching Phrases at the End of the Loop (Phrase Change Mode)

You can select the method used for switching patches in Single mode and Multi mode and switching the current phrase in Single mode (Phrase Change mode).

```
Patch:PhraseChng
          IMMEDIATE
```

Available Settings	Description
IMMEDIATE	When a switch in patches or the current phrase is carried out, recording or playback of the next designated patch or current phrase begins immediately.
LOOP END	When a switch in patches or the current phrase is carried out, recording or playback of the next designated patch or phrase begins once the end of the current phrase (length of the current loop when Loop Sync is on in Multi mode) is reached.

Adjusting the Time Used to Fade In (Fade-In Time)

This adjusts the fade-in time when the phrase is set to fade in upon playback.

```
Patch:Fade In
Time              50
```

Available Settings: 0–100

Adjusting the Time Used to Fade Out (Fade-Out Time)

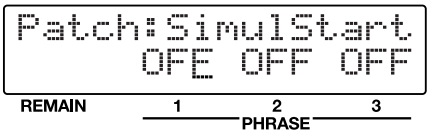
This procedure adjusts the fade out when playback of a phrase is set to fade out before stopping.

```
Patch:Fade Out
Time              50
```

Available Settings: 0–100

Playing Multiple Phrases Simultaneously (Simul-Start)

In Multi mode, there may be instances when you want to start playback of a phrase other than the current phrase along with the current phrase.
By setting Simul-Start, you can always start playback simultaneously with the current phrase.



The Simul-Start On/Off status for the three phrases is indicated in the screen.

After pressing PARAMETER [◄] [►] to select the phrase, rotate the PATCH/VALUE dial to switch the function on or off.

MEMO

- Holding down a PHRASE pedal for at least two seconds in Multi mode while the phrase is stopped switches on Simul-Start for that phrase.
  Holding down the pedal again for at least two seconds switches the Simul-Start setting to OFF again.
- Pressing the REC/PLAY/OVERDUB pedal always starts recording or playback, regardless of whether or not the current phrase has Simul-Start on or off.
  Example:
  When Phrase 1 is the current phrase and Simul-Start is set to ON only for Phrase 2 and Phrase 3, all phrases start playing when the REC/PLAY/OVERDUB pedal is pressed.
- Using the All Start function (p. 61) is a convenient way to have all three phrases play back simultaneously.

Setting the Output for the Sounds Being Input (Input Output Select)

This selects the output connector to be used for the output of sounds arriving at the INPUT connectors (INST/MIC/AUX).



Available Settings	Description
MAIN	The sound is output from the MAIN OUTPUT and PHONES jacks.
SUB	The sound is output from SUB OUTPUT jacks. The sound is not output from the MAIN OUTPUT and PHONES jacks.
MAIN+SUB	The sound is output from the MAIN and SUB OUTPUT jacks and the PHONES jack.

Setting Tempo Synchronization with MIDI (MIDI Sync)

This procedure is used to make the settings for performing at the same tempo as a performance from an external MIDI device (synchronized performance).
For more detailed information about MIDI and synchronization, refer to "What You Can Do with MIDI" (p. 74).



Available Settings	Description
AUTO	Performances are normally played at the patch tempo set with the RC-50, but when the RC-50 is stopped and MIDI start message is received, the performance automatically starts playing at the tempo determined by the MIDI clock data from the external MIDI device.
INTERNAL	Performances are played at the tempo set with the RC-50, with recording, playback, and overdubbing carried out with the RC-50's controls.
REMOTE	Although performances are played at the tempo set with the RC-50, the start of recording, playback, and stopping (only) are controlled with the external MIDI device.

Creating Phrases

Once you have finished preparing the patches, you can create phrases.

Recording a New Phrase

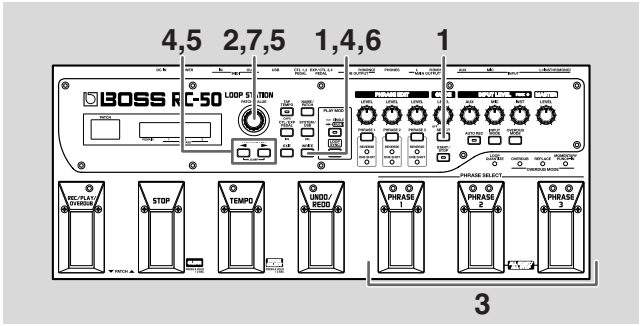
The most basic way to create a phrase is to record a new phrase.For more on the operations involved, refer to "Chapter 5 Using the RC-50 in Multi Mode" (p. 57) or "Chapter 6 Using the RC-50 in Single Mode" (p. 63), depending on the Play mode.

MEMO

For more about recording, refer to "About Recording, Playback, and Overdubbing" (p. 30).

Copying Phrases from Other Patches (Phrase Copy)

If you already have a patch created, you can then take a specific phrase from that patch and copy it to the current patch.
This is a convenient method to use when you need a pattern with the same backing, as it allows you to prepare phrases simply and easily without having to start recording from scratch again.

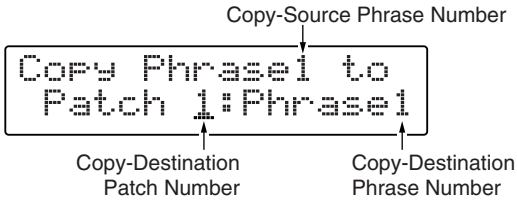


1. **To prevent loss of the content of the current work, press [WRITE] twice to save the current patch.**
   Since you need to confirm the sound of the current source phrase, you must select the copy-source patch once in Phrase Copy.
   Save the patch so the content of the current operation is not lost.

2. **In the Play screen, rotate the PATCH/VALUE dial to select the patch in which the phrase you want to copy is recorded.**

3. **Press the PHRASE pedal for the phrase you want to copy; the phrase is selected.**
   If necessary, press the REC/PLAY/OVERDUB pedal, and confirm the sound as the phrase plays, then press the STOP pedal to stop playback.

4. **Hold down [WRITE] and press PARAMETER [◄] [►] until "Copy Phrase* to" appears in the display.**



5. **Use PARAMETER [◄] [►] to move the cursor to the parameter you want, and rotate the PATCH/VALUE dial to enter the copy-destination patch number and phrase number.**

6. **Press [WRITE].**
   The phrase is copied. When copying is finished, the Play screen returns to the display.

NOTE

Do not turn off the power while the message "Now copying..." is displayed. This may result in loss of recorded material.

7. **Rotate the PATCH/VALUE dial to select the patch edited before copying.**

NOTE

When the remainder capacity of RC-50 is a little, the Phrase Copy fails occasionally and the message "Memory Full!" appears.
→ "To Confirm the Available Recording Time" (p. 30)

Importing Audio Files from a Computer

You can connect a computer via USB and use imported files (.WAV) as phrases.
For more detailed information on connecting to computers, refer to "Chapter 9 Connecting to Computers" (p. 79).

Adjusting the Phrase Volume

You can set the volume of each of the phrases individually with the PHRASE 1/2/3 LEVEL knobs.
When the knob is at the center position, the volume of the finished phrase when played back is the same as the volume level during recording.

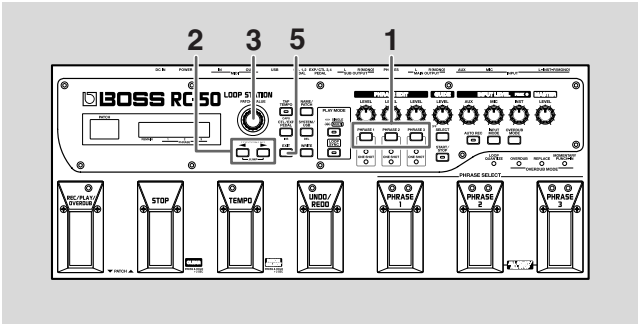
Available Settings: 0–200 (100 with the knob at center position)

MEMO

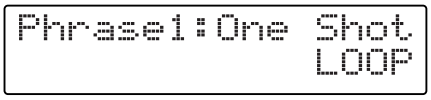
You may find it convenient to use the AUX/MIC/INST level knobs to adjust the volume when recording and the PHRASE LEVEL knobs to adjust the volume balance of each phrase after recording.

Making the Phrase Settings

After recording of the phrases is completed, proceed by setting the phrase playback method and other functions.



1. Press [PHRASE] for the phrase whose settings you want to change, displaying the phrase settings screen.



2. Press PARAMETER [◄] [►] to display the parameter you want to edit.

(Example)



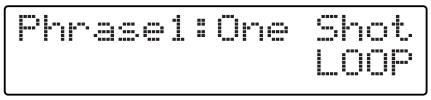
3. Rotate the PATCH/VALUE dial to change the setting.

4. Repeat Steps 2–3 as needed.

5. When you have finished making the settings, press [EXIT] to return to the Play screen.

Having Phrases Play Only Once (One Shot)

You can select whether to have a phrase play only one time after starting (One Shot) or repeat playback (Loop).



Available Settings	Description
LOOP	Playback repeats.
ONE SHOT	Phrase is played back one time only. The ONE SHOT indicator for the set phrase lights.

NOTE

You cannot overdub when the phrase is set to ONE SHOT.

Playing Back in the Opposite Direction (Reverse)

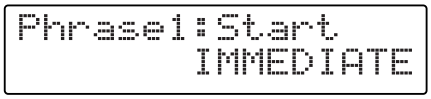
During playback, you can reverse the time front to back to reverse playback.



Available Settings	Description
OFF	Playback is normal.
ON	Playback is reversed. The REVERSE indicator for the set phrase lights.

Playing Back While Fading In (Start Mode)

When playing back phrases, you can select whether to start playback with a fade-in or have playback start immediately.



Available Settings	Description
IMMEDIATE	Playback starts immediately.
FADE IN	Playback starts while fading in.

Selecting the Method Use to Stop Phrases (Stop Mode)

You can select the manner in which playback of phrases stops, either by stopping while fading out, after playing back to the end of the loop, or immediately.



Available Settings	Description
IMMEDIATE	Stops immediately.
FADE OUT	Playback stops while fading out.
LOOP END	Playback stops after playing back to the end of the loop.

MEMO

After pressing the STOP pedal with Stop mode set to FADE OUT or LOOP END, you can have playback stop immediately by pressing the STOP pedal a second time before the playback is actually programmed to stop.

NOTE

If the phrase is stopped when the Stop mode is set to FADE OUT or LOOP END, no further overdubbing can be carried out up to the point at which the phrase stops playing.

Adjusting the Volume of the Phrases (Phrase Level)

* *You can also change this value with the PHRASE LEVEL knob.*



Available Settings: 0–200

Adjusting the Positioning of the Phrase's Sound (Pan)

You can adjust the positioning (panning) of the phrase's sound. Using Pan to spread the phrases out laterally allows you to perform with an expansive, ensemble sound.



Available Settings	Description
L50–L1	Playback is from the left of center. When set to L50, playback comes from the left side only.
CENTER	Playback is from the center.
R1–R50	Playback is from the right of center. When set to R50, playback comes from the right side only.

Synchronizing Playback of the Phrase to the Patch Tempo (Tempo Sync)

You can have playback of phrases recorded at different original tempos be synchronized to the patch tempo.
When playing back effect sounds and other material with tempos differing from the song's tempo, which you want to play back at tempos other than the song's tempo, set Tempo Sync to off.



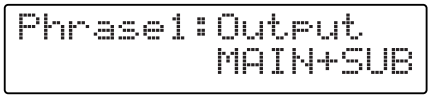
Available Settings: OFF, ON

MEMO

For more detailed information on Tempo sync, refer to "About Tempo Sync" (p. 36).

Switching the Output for the Phrase Sounds (Output Select)

You can switch the jacks used to output the sounds of each of the phrases.



Available Settings	Description
MAIN	The sound is output from the MAIN OUTPUT and PHONES jacks.
SUB	The sound is output from the SUB OUTPUT jacks. The sound is not output from the MAIN OUTPUT and PHONES jacks.
MAIN+SUB	The sound is output from the MAIN and SUB OUTPUT jacks and the PHONES jack.

MEMO

You can save Output Select settings to each patch individually, or have the same settings used by all of the patches.

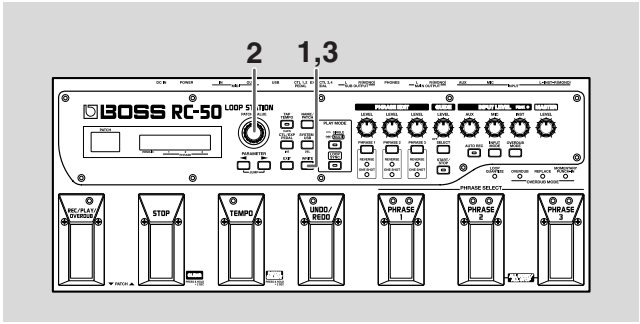
→ "Using the Same Audio Outputs for All Patches (Input/Phrase 1, 2, 3/Guide Output Select)" (p. 69)

Saving Patches

After creating a patch, save the patch to prevent the content you have created from being deleted.

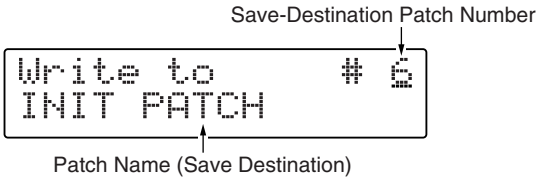
Saving by Patch Numbers (Patch Write)

After selecting the save-destination patch, save the patch in its current form.



1. Press [WRITE].

The Patch Write screen appears; you can now specify the save-destination patch number.



2. Use the PATCH/VALUE dial to select the save-destination patch number.

* *This procedure is not required if the patch number is acceptable as is.*

* *You cannot save to patch numbers 1–5 when Preset Protect (p. 69) is set to ON.*

* *To cancel the Write procedure, press [EXIT]. The Play screen returns to the display.*

3. Press [WRITE].

The patch is saved, and the Play screen returns to the display.

* *All data contained in the patch is lost once Patch Write is executed.*

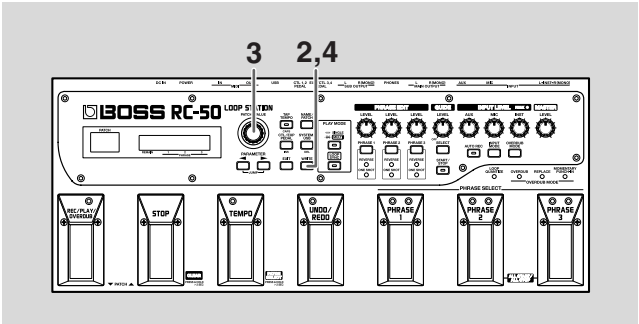
* *If the phrase that have been overdubbed exists and the Tempo Sync (p. 53) is set to ON, the original tempo of the phrase is updated to the patch tempo at saving.*

NOTE

- When the remainder capacity of RC-50 is a little, the Patch Write fails occasionally and the message "Memory Full!" appears.
  → "To Confirm the Available Recording Time" (p. 30)
- Do not turn off the power while the message "Now writing..." is displayed. This may result in loss of recorded material.

Copying Patches (Patch Copy)

You can copy a patch to a different patch.

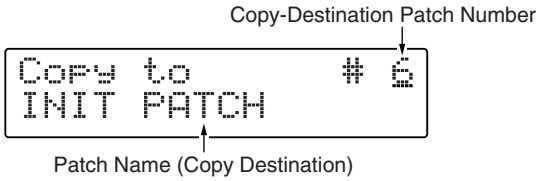


1. Select a copy-source patch.

Select a patch, referring to the information in "Selecting Patches" (p. 44).

2. Press [WRITE].

The Patch Copy screen appears; you can now specify the copy-destination patch number.



3. Use the PATCH/VALUE dial to select the copy-destination patch number.

* *You cannot copy to patch numbers 1–5 when Preset Protect (p. 69) is set to ON.*

* *To cancel the copy, press [EXIT]. The Play screen returns to the display.*

4. Press [WRITE].

The RC-50 switches to the save-destination patch, and the Play screen returns to the display.

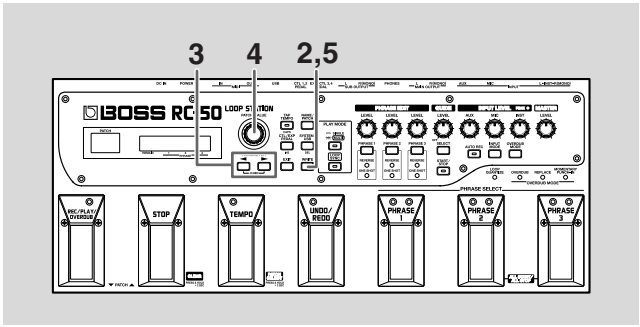
* *All data contained in the copy-destination patch is lost once the copy is executed.*

NOTE

- When the remainder capacity of RC-50 is a little, the Patch Copy fails occasionally and the message "Memory Full!" appears.
  → "To Confirm the Available Recording Time" (p. 30)
- Do not turn off the power while the message "Now copying..." is displayed. This may result in loss of recorded material.

Exchanging Patches (Patch Exchange)

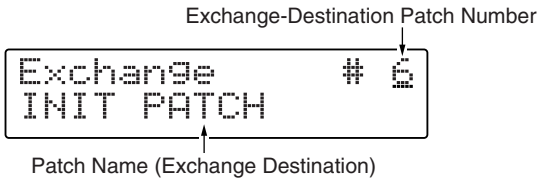
You can exchange patches with one another, rearranging the patches.



1. **Select an exchange-source patch.**
   Select the patch while referring to the information in "Selecting Patches" (p. 44).

2. **Press [WRITE].**

3. **Press PARAMETER [◄] [►] until "Exchange" appears in the display.**
   The Patch Exchange screen appears; you can now specify the exchange-destination patch number.



4. **Use the PATCH/VALUE dial to select the exchange-destination patch number.**

* *You cannot exchange using patch numbers 1–5 when Preset Protect (p. 69) is set to ON.*

5. **Press [WRITE].**
   The patches are exchanged, and the Play screen returns to the display.

* *If the phrase that have been overdubbed exists and the Tempo Sync (p. 53) is set to ON, the original tempo of the phrase is updated to the patch tempo at saving.*

NOTE

Do not turn off the power while the message "Exchanging..." is displayed. This may result in loss of recorded material.

Chapter 5

Using the RC-50 in Multi Mode

This section describes operations when the Play mode (p. 28) is set to Multi mode.

In Multi mode, you can play back three phrases simultaneously or record the current phrase as you listen to the performance of previously recorded phrases.

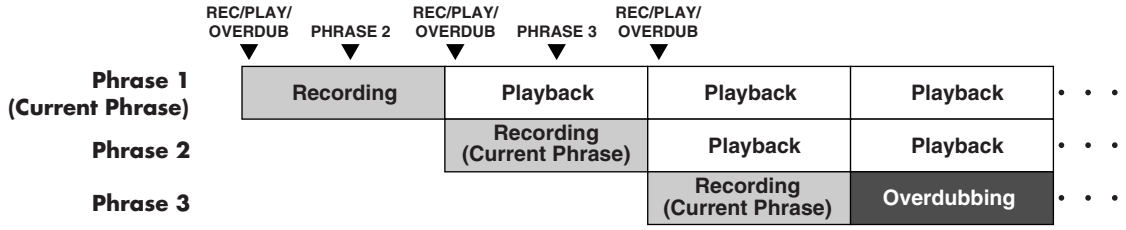
Examples of the Use of Multi Mode

The following describes how Multi mode can be used when Loop Sync is on and when it is switched off.

When Loop Sync is On

When Loop Sync is on, you can obtain simultaneous playback of three phrases, with the phrases played at the same tempo and with the same length.

Example 1) Recording three blank phrases, one after another, to create an ensemble when played in real time



In this manner, using the PHRASE 1, 2, and 3 pedals and REC/PLAY/OVERDUB pedal to switch the current phrase as you proceed with the recording, you can continue recording one phrase after another while playing back the phrase or phrases recorded thus far.

Although repeatedly overdubbing using a single phrase so as to make Phrase 2 and Phrase 3 the same length as Phrase 1 produces a similar effect, the ability to stop any selected phrase and realize other forms of control of the phrases enables a greater degree of performance expression.

NOTE

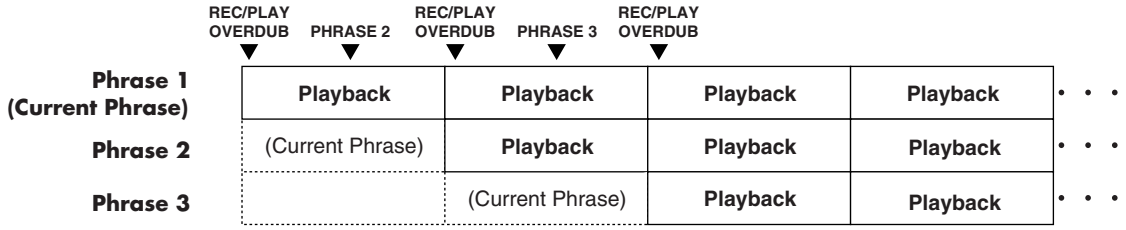
You cannot overdub with a phrase that is set to ONE SHOT. In addition, such phrases cannot be played back using loop playback.

MEMO

The recorded length varies according to the Tempo Sync settings.

For more detailed information, refer to “Playing Back Phrases with All Lengths and Beginnings Aligned: Loop Sync” (p. 28).

Example 2) Playing back phrases as an ensemble, beginning playback of recorded phrases one after another

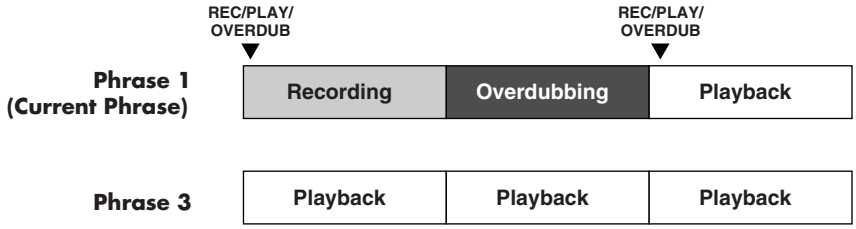


Regardless of the timing at which the REC/PLAY/OVERDUB pedal is pressed, phrases start playing according to their location within the overall playback.

MEMO

When the ONE SHOT function is used for a phrase, playback starts from the beginning of the phrases when the REC/PLAY/OVERDUB pedal is pressed.

Example 3) Recording to a blank phrase in time with previously recorded Phrase 3

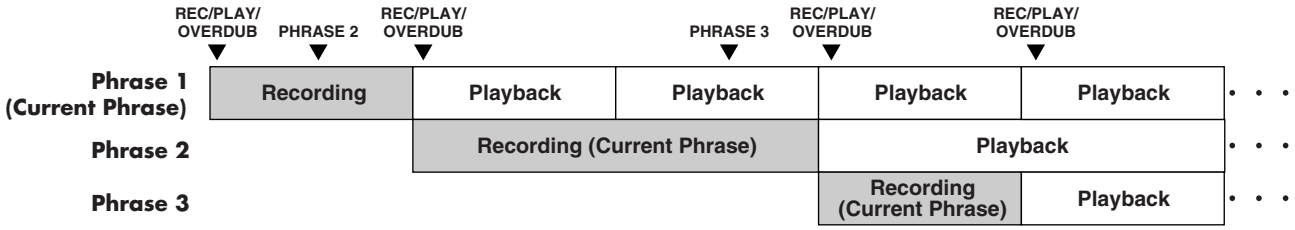


When you have a phrase that has already been recorded, recording continues until the end of the previously recorded phrase, after which overdubbing begins.

When Loop Sync is Off

When Loop Sync is switched off, each of the phrases plays back repeatedly according to the individual phrase's length.

Example 1) Recording three blank phrases, one after another, to create an ensemble when played in real time



In this manner, using the PHRASE 1, 2, and 3 pedals and REC/PLAY/OVERDUB pedal to switch the current phrase as you proceed with the recording, you can continue recording one phrase after another while playing back the phrase or phrases recorded thus far.

If Tempo Sync is on for the first phrase recorded (Phrase 1, as an example), you can record later phrases at the same tempo as that of the phrase recorded first (Loop Quantize; p. 42).

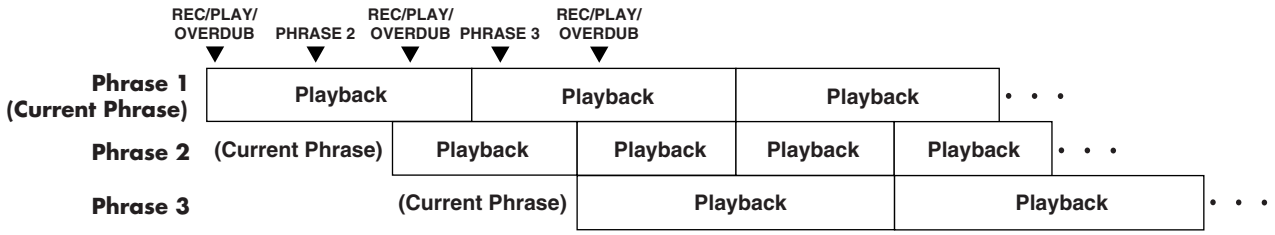
You can record each phrase with a different length, making it convenient for combining loops, each of which is only the length needed; for example, with a one-measure bass pattern and two-measure riff pattern.

MEMO

To match recorded lengths in measure units, use Loop Quantize.

→ "Loop Quantize" (p. 42)

Example 2) Repeated playback of desired recorded phrases



When the phrases are being played back, playback of the phrase begins after the phrase is made the current phrase and the REC/PLAY/OVERDUB pedal is pressed. This allows you mix effect sounds and instrument performances with timings that are almost inconceivable.

Pedal Operations in Multi Mode

Starting Recording and Operations During Recording

To record to a blank phrase, make the phrase you want to record to the current phrase and then press the REC/PLAY/OVERDUB pedal.

When Loop Sync is On

If there are any phrases other than the current phrase that already have been recorded, then recording continues up to the end point of the longest phrase, after which recording automatically switches to overdubbing.

For more detailed information, refer to "Playing Back Phrases with All Lengths and Beginnings Aligned: Loop Sync" (p. 28).

MEMO

You can have recording start simultaneously with the beginning of musical performances. For more detailed information, refer to "Simultaneously Starting Recording When Sounds Are Input (Auto Recording)" (p. 47).

Switching Phrases with the PHRASE Pedals

When you press a PHRASE pedal other than the one for the current phrase during recording, the orange indicator for the pressed PHRASE pedal flashes, indicating that recording or playback will begin at the same time recording of the current phrase ends (advanced selection of the current phrase).

To start recording or playback of the phrase for the pressed pedal, press the REC/PLAY/OVERDUB pedal to stop recording of the current phrase.

To cancel the advanced selection of the current phrase, press the pedal with the lit orange indicator once more.

NOTE

You cannot change the tempo, for example using the TEMPO pedal or [TAP TEMPO], while recording of the phrase is in progress.

Starting Playing and Operations During Playing

To play back a recorded phrase, make the phrase that you want to play back the current phrase, then press the REC/PLAY/OVERDUB pedal.

Playing Back One Shot Phrases Continuously

When a phrase is set to ONE SHOT (p. 52), then each time the REC/PLAY/OVERDUB pedal is pressed during playback, the phrase will start playing from the beginning again.

By continuously pressing the REC/PLAY/OVERDUB pedal, you can have the One Shot phrase play back continuously.

Adjusting the Patch Tempo

You can change the patch tempo while playback is in progress with the TEMPO pedal or [TAP TEMPO].

If Tempo Sync is SET to ON in the phrase, you can then control the phrase's playback speed.

Switching Phrases with the PHRASE Pedals

When you press a PHRASE pedal other than the one for the current phrase during playback, playback continues with the current phrase switched.

Operations at the Start of Overdubbing and During Overdubbing

When overdubbing to a recorded phrase, use the following procedure.

NOTE

You cannot overdub when the phrase is set to ONE SHOT (p. 52).

1. **Set the phrase you want to overdub as the current phrase.**
2. **While playing back the phrase, press the REC/PLAY/OVERDUB pedal.**

   #### When Loop Sync is On

   If there are any phrases other than the current phrase that already have been recorded, then recording continues up to the end point of the longest phrase, after which recording automatically switches to overdubbing.

   For more detailed information, refer to "Playing Back Phrases with All Lengths and Beginnings Aligned: Loop Sync" (p. 28).

Switching Phrases with the PHRASE Pedals

When you press a PHRASE pedal other than the one for the current phrase during overdubbing, the orange indicator for the pressed PHRASE pedal flashes, indicating that recording or playback will begin at the same time overdubbing to the current phrase ends (advanced selection of the current phrase).

To start recording or playback of the phrase for the pressed pedal, press the REC/PLAY/OVERDUB pedal to stop overdubbing to the current phrase.

To cancel the advanced selection of the current phrase, press the pedal with the lit orange indicator once more.

NOTE

- You cannot overdub a phrase when the phrase is set to ONE SHOT. Pressing the REC/PLAY/OVERDUB pedal during playback starts playback again from the beginning of the phrase.
- You cannot change the tempo, for example using the TEMPO pedal or [TAP TEMPO], while overdubbing is in progress.

Setting Phrases to Simul-Start with the Pedal

Setting Simul-Start lets you start recording or playback of phrases other than the current phrase simultaneously with the start of recording or playback of the current phrase.
You can set Simul-Start for pedal as well as button operations.

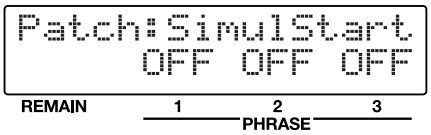
1. **If a performance is playing, first stop all phrases.**

2. **Press and hold down the PHRASE pedal corresponding to the phrase for which you want to set Simul-Start for at least two seconds.**
   The green indicator flashes when Simul-Start is set.

Setting Simul-Start with the Buttons

1. **Press [NAME/PATCH] twice.**

2. **Press PARAMETER [◄] [►] to display "Patch:SimulStart."**



3. **Use the PATCH/VALUE dial and PARAMETER [◄] [►] to switch the On/Off setting for each phrase.**

cf.

Refer to "Playing Multiple Phrases Simultaneously (Simul-Start)" (p. 50).

Starting and Stopping Playback of All Phrases Simultaneously (All Start/All Stop)

There may be times when Phrases 1, 2, and 3 all have material recorded to them and you want to start playback of all of the phrases simultaneously, or have all currently playing phrases simultaneously stop.
In such instances, you can have all of the phrases start playback (All Start) or stop (All Stop) at the same time by simultaneously pressing the PHRASE 2 and PHRASE pedals.

MEMO

- Using All Start when the current phrase is blank starts recording (rather than playback).
- You can also control All Start and All Stop using a foot switch or MIDI messages.
  → "Setting the Functions for the RC-50's Pedals and External Foot Switches (TEMPO/UNDO/CTL1/CTL2/CTL3/CTL4 Pedal Function)" (p. 70)
  → "Controlling Other Functions (CC#1/CC#7/CC#80 Functions)" (p. 77)

NOTE

Auto Start and Auto Stop do not function in Single mode, even if you press the PHRASE 2 and PHRASE 3 pedals simultaneously.

Chapter 6

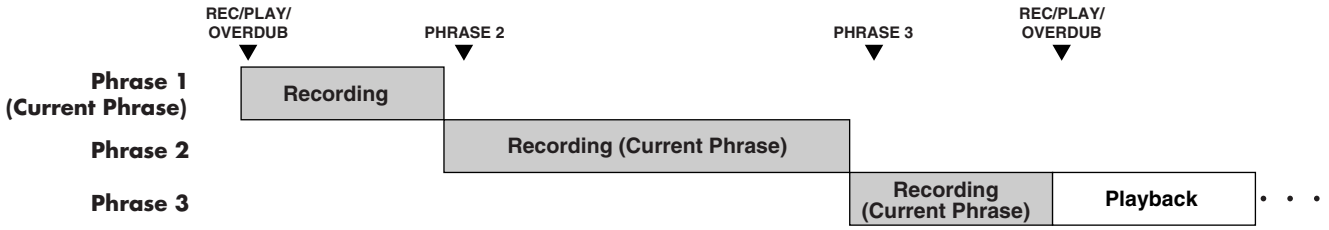
Using the RC-50 in Single Mode

This section describes operations when the Play mode (p. 28) is set to Single mode.

In Single mode, you can easily record and play back while sequentially switching the three phrases.

Examples of the Use of Single Mode

Example 1) Recording three blank phrases, one after another, performing while creating a song



In this manner, when a PHRASE pedal is pressed during recording to select the current phrase, the phrase being recorded up to that point stops, and recording of the next phrase begins.

If, for example, you record phrases with different chords to each of three phrases, after recording you can then create chord progressions by playing them back in the order desired as you perform.

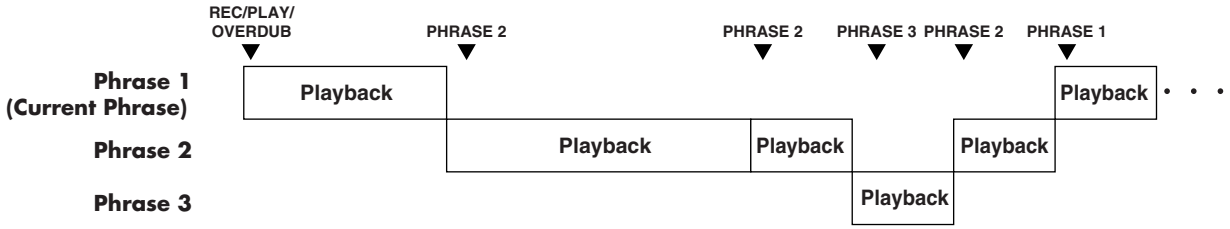
In addition, you can record whole sections of songs, such as Melody A, Melody B, and bridge, as is, allowing you to compose songs as you perform.

TIP

- Setting Phrase Change Mode (p. 49) to LOOP END is a convenient way to switch phrases at the point the loop ends.
- When Tempo Sync (p. 53) is on, you can play all of the phrases at the same tempo.

Example 2) Playing back three recorded One Shot phrases one after another

Record three phrases beforehand, set them to ONE SHOT (p. 52) and set Phrase Change mode (p. 49) to IMMEDIATE.



In this manner, if another PHRASE pedal is pressed while the current phrase is playing back, playback of the current phrase is cancelled, and playback of the next phrase begins.

Furthermore, when the REC/PLAY/OVERDUB pedal or the PHRASE pedal for the current phrase is pressed continuously, playback of the phrase starts over from the beginning each time the pedal is pressed.

For example, you can create performances with greater impact by playing back phrases one after another in a song using a variety of effects sounds as One Shot phrases.

Pedal Operations in Single Mode

Starting Recording and Operations During Recording

To record to a blank phrase, make the phrase you want to record to the current phrase and then press the REC/PLAY/OVERDUB pedal.

MEMO

You can have recording start automatically at the same time performance on a musical instrument begins. For more detailed information, refer to "Simultaneously Starting Recording When Sounds Are Input (Auto Recording)" (p. 47).

Switching Phrases with the PHRASE Pedals

When you press a PHRASE pedal other than the one for the current phrase during recording, the selected phrase becomes the new current phrase, and recording or playback of that phrase starts. Recording starts if the phrase is blank, playback starts if it is a recorded phrase.

NOTE

You cannot change the tempo, for example using the TEMPO pedal or [TAP TEMPO], while recording of the phrase is in progress.

Starting Playing and Operations During Playing

To play back a recorded phrase, make the phrase that you want to play back the current phrase, then press the REC/PLAY/OVERDUB pedal.

Playing Back One Shot Phrases Continuously

When a phrase is set to ONE SHOT (p. 52), then each time the REC/PLAY/OVERDUB pedal is pressed during playback, the phrase will start playing from the beginning again.

By continuously pressing the REC/PLAY/OVERDUB pedal, you can have the One Shot phrase play back continuously.

MEMO

When Phrase Change mode (p. 49) is set to IMMEDIATE, you can also achieve continuous playback by holding down a PHRASE pedal.

Adjusting the Patch Tempo

You can change the patch tempo while playback is in progress with the TEMPO pedal or [TAP TEMPO].

If Tempo Sync is set to ON in the phrase, you can then control the phrase's playback speed.

Switching Phrases with the PHRASE Pedals

The manner in which phrases are switched when a PHRASE pedal other than that for the current phrase is pressed differs according to the Phrase Change Mode setting.

When Phrase Change Mode is Set to LOOP END

When you press a PHRASE pedal other than the one for the current phrase, the orange and green or red indicators for the pressed PHRASE pedal flash, indicating that, if left without further changes, recording/playback of the selected phrase will begin at the same time playback of the current phrase ends.

If you press the PHRASE pedal for the current phrase (with the lit orange indicator) while these indicators are flashing, the indicators stop flashing, and playback of the current phrase continues as is.

When Phrase Change Mode is Set to IMMEDIATE

When you press a PHRASE pedal other than the one for the current phrase, the selected phrase becomes the new current phrase, and recording or playback of that phrase starts. Recording starts if the phrase is blank, playback starts if it is a recorded phrase.

Operations at the Start of Overdubbing and During Overdubbing

When overdubbing to a recorded phrase, use the following procedure.

NOTE

You cannot overdub when the phrase is set to ONE SHOT (p. 52).

1. **Set the phrase you want to overdub as the current phrase.**
2. **While playing back the phrase, press the REC/PLAY/OVERDUB pedal.**

Switching Phrases with the PHRASE Pedals

When you press a PHRASE pedal other than the one for the current phrase during overdubbing, the RC-50 switches to the next phrase according to the Phrase Change Mode (p. 49) settings.

When Phrase Change Mode is Set to LOOP END

When you press a PHRASE pedal other than the one for the current phrase, the orange and red or green indicators for the pressed PHRASE pedal flash, while overdubbing of the current phrase switches to playback, and recording/playback of the selected phrase will begin at the same time playback of the current phrase ends.

If you press the PHRASE pedal for the current phrase (with the lit orange indicator) while these indicators are flashing, the indicators stop flashing, and overdubbing of the current phrase continues as is.

When Phrase Change Mode is Set to IMMEDIATE

When you press a PHRASE pedal other than the one for the current phrase, the selected phrase becomes the new current phrase, and recording or playback of that phrase starts. Recording starts if the phrase is blank, playback starts if it is a recorded phrase.

NOTE

- You cannot overdub a phrase when the phrase is set to ONE SHOT. Pressing the REC/PLAY/OVERDUB pedal during playback starts playback again from the beginning of the phrase.
- You cannot change the tempo, for example using the TEMPO pedal or [TAP TEMPO], while overdubbing is in progress.

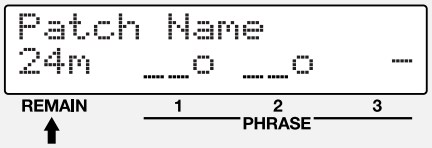
Chapter 7

Other Functions

Checking the Remaining Recording Time

The RC-50 features about 250 MB of built-in memory for saving patches and recording, and the amount of recording time that remains available will vary depending on the length of the phrases in the saved patches.

The available recording time is indicated in the lower part of the right display when the Play screen is displayed.



About the Available Recording Time

With the RC-50, you can change the recording mode (p. 48) to record for more extended periods, and record with the RC-50 switched to stereo or mono mode.

When all of the RC-50's patches are blank, the available recording time in each recording mode is as shown below.

Recording Mode	Available Recording Time
STEREO	Approx. 24 minutes
MONO	Approx. 49 minutes

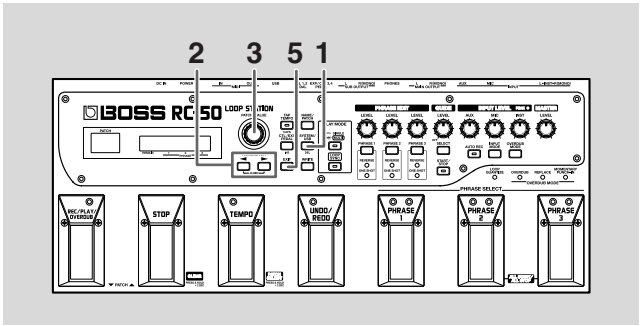
NOTE

The times listed above take into account the amount of memory needed for the actual recording combined with the memory required for the RC-50's operations (e.g., Undo/Redo).

System Settings

System settings cover parameters whose settings affect the overall operation of the RC-50.

These parameters remain unchanged, even when the patches are switched.



1. **Press [SYSTEM/USB].**

2. **Press PARAMETER [◄] [►] until the parameter you want to set is displayed.**

   (Example)

   ```
   Sys:LCD Contrast
                   16
   ```

3. **Rotate the PATCH/VALUE dial to change the value of the setting.**

4. **Repeat Steps 2 and 3 as needed.**

5. **When you have finished making the settings, press [EXIT] to return to the Play screen.**

Adjusting the Screen Brightness (LCD Contrast)

In some locations where the RC-50 is set up, you may find that the (right) display is difficult to read.

If this occurs, adjust the display's contrast (brightness).

```
Sys:LCD Contrast
                16
```

Available Settings: 1–16

Limiting the Patches That Can Be Switched (Patch Extent)

Setting upper and lower limits for patches the RC-50 can switch to, thereby defining the range of available patches for switching, enables you to select only the necessary patches. For example, by saving patches for different applications in ranges from 1 to 10, 11 to 20, and so on, and setting these ranges with Patch Extent, you can then limit the range of patches the RC-50 can switch to in Patch Select mode or with the PATCH/VALUE dial, thus reducing the operations involved in switching patches.

Press PARAMETER [◄] [►] to move the cursor, and rotate the PATCH/VALUE dial to set the upper and lower limits of the range.

```
Sys:Patch Extent
   # 1 => #99
```

Available Settings: 1–99

Setting the Knob Functions (Knob Mode)

This sets the way the values of settings are changed when the control knobs are turned.

* *The Knob Mode setting works with respect to the PHRASE 1/2/3 LEVEL and GUIDE LEVEL knobs.*

```
Sys:Knob Mode
        IMMEDIATE
```

Available Settings	Description
IMMEDIATE	Turning the knobs immediately changes the values.
CURRENT SETTING	Values begin to change only once the knob position reaches the values set in the patch.
KNOB POSITION	Values correspond to the knob positions at all times.

NOTE

When patches are switched with Knob Mode set to "KNOB POSITION," the settings of the patch in effect immediately following the switch are changed to the values corresponding to the knob positions, so the patch will not function according to the patch settings.

Adjusting the Auto Recording Sensitivity (Trigger Level)

This sets the input level at which recording is started (the trigger level) when Auto Recording is used.Input levels at or above the value set here will cause recording to start.



Available Settings: 1–100

Overdubbing Immediately After Recording (REC Pedal Action)

You can change the manner in which recording, playback, and overdubbing are switched when the REC/PLAY/OVERDUB pedal is pressed with a blank current phrase.
This enables you to start overdubbing immediately after recording.



NOTE

When the REC/PLAY/OVERDUB pedal is pressed during recording while the phrase is set to ONE SHOT (p. 52) or with Reverse (p. 52) set to ON, playback begins without overdubbing starting.

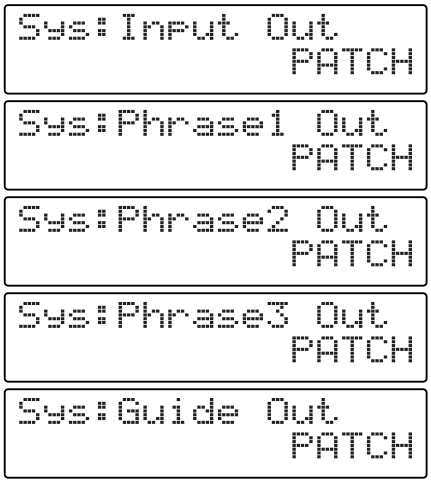
MEMO

When REC Pedal Action is set to REC → OVERDUB, pressing the STOP pedal during recording stops recording and starts playback.

Available Settings	Description
REC → PLAY	Normal setting.Pressing the pedal after an initial recording switches the RC-50 to playback mode. Successive presses of the pedal result in the function switching as follows: Recording → Playback → Overdubbing → Playback...
REC → OVERDUB	Pressing the pedal after an initial recording switches the RC-50 to overdub mode. Successive presses of the pedal result in the function switching as follows: Recording → Overdubbing → Playback → Overdubbing...

Using the Same Audio Outputs for All Patches (Input/Phrase 1, 2, 3/Guide Output Select)

Normally, the settings determining which jacks are used in outputting input sounds, phrases, and guide sounds are stored in each patch, but you can elect, as a setting affecting the RC-50 overall, to have all of these use the same output at all times.
This is convenient when, for example, you are using the RC-50 for live performances in varying environments, and you want to temporarily change the output settings for all of the patches.

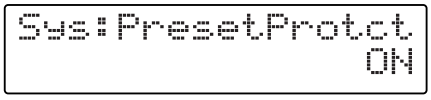


Available Settings	Description
PATCH	Outputs stored in the patches are used.
MAIN	The sound is output from the MAIN OUTPUT and PHONES jacks, regardless of the patch settings.
SUB	The sound is output from SUB OUTPUT, regardless of the patch settings. The sound is not output from the MAIN OUTPUT and PHONES jacks.
MAIN+SUB	The sound is output from the MAIN and SUB OUTPUT jacks and the PHONES jack, regardless of the patch settings.
MUTE (Input Out only)	Regardless of the patch settings, the input sound is not output. * *Recording to the phrase still takes place.*

Protecting Patch Numbers 1–5 (Preset Protect)

You can prevent accidental deletion or erasure of data in the patches numbered 1–5. This feature is called "Preset Protect."
When Preset Protect is set to ON, you can still make temporary changes to the patch settings, but you cannot overwrite the patch with the changed content.

* *Even when Factory Reset (p. 95) is executed, the data in patch numbers 1–5 remains unchanged if Preset Protect is switched on.*



Available Settings: OFF, ON

NOTE

When the RC-50 is connected with the computer via USB and performs Recover/Import, the patch data will be overwritten regardless of the setting of Preset Protect.

Pedal Settings

While the RC-50 already features seven pedals, you can also switch the pedal functions of the TEMPO pedal and UNDO/REDO pedal.

Rather than using the pedal for UNDO and REDO, you can switch the pedal to perform another desired function, for example to increase patch numbers one by one.

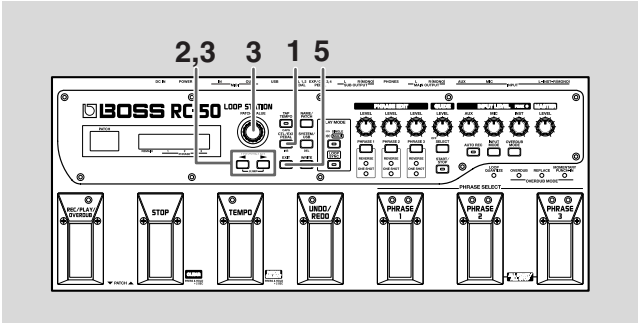
In addition, by connecting external pedals to the CTL 1, 2 PEDAL and EXP/CTL 3, 4 PEDAL jacks, you can use the external pedals to control functions that are difficult to handle using the RC-50's pedals alone, making operation of the RC-50 easier and more convenient.

System Settings and Patch Settings

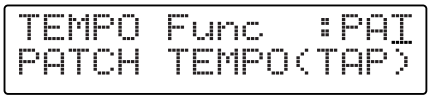
Pedal functions operate in accordance with system settings, that is, settings that are shared by and applied the same way to all of the RC-50's functions and that remain the same regardless of the patch selected, and patch settings, or settings that are used to select different functions for each individual patch.

In each parameter, you select whether the system settings or the patch settings are to be applied, giving you the freedom to apply them as needed for any environment.

Use the following procedure to switch between system and patch settings.



1. Press [CTL/EXP PEDAL] to display the pedal settings screen.



2. Press PARAMETER [◄] [►] to display the pedal function screen for the pedal whose settings you want to change.

3. After using PARAMETER [◄] [►] to move the cursor to "SYS" or "PAT" in the upper row of the display, you can then rotate the PATCH/VALUE dial to select either the system settings or patch settings as the settings to be used.

Available Settings	Description
~~: SYS	The system settings are used.
~~: PAT	The patch settings are used.

* *When switching between the system settings and patch settings, "EXP Func," "EXP Level Min/Max," and "EXP Tempo Min/Max" are together affected.*

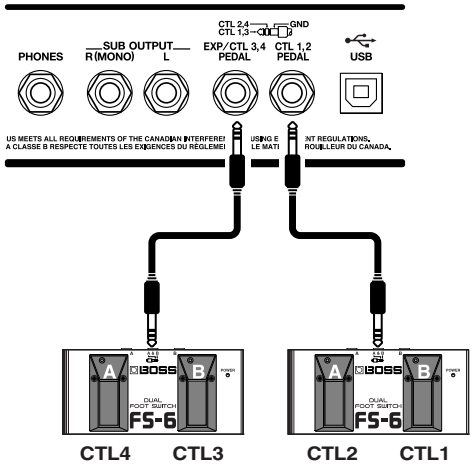
4. Repeat Steps 2 and 3 as needed.

5. Press [EXIT] to return to the Play screen.

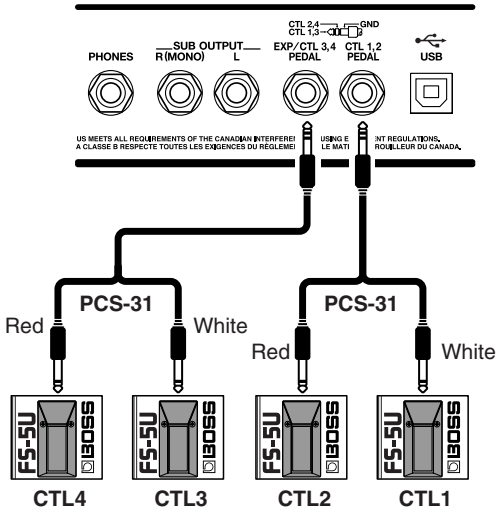
Setting the Functions for the RC-50's Pedals and External Foot Switches (TEMPO/UNDO/ CTL1/CTL2/CTL3/CTL4 Pedal Function)

This procedure sets the functions for the RC-50's TEMPO pedal and UNDO/REDO pedals and for foot switches connected to the CTL 1,2 PEDAL jack and the EXP/CTL 3, 4 PEDAL jack.

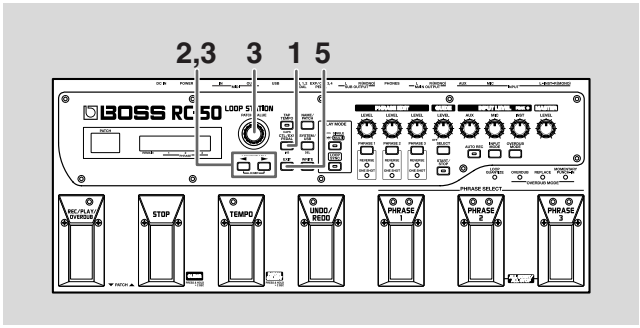
* *The following shows the correspondence between pedal switch (A/B) and CTL pedal functions when an FS-6 is connected.*



* *When connecting two foot switches with the special connection cable (Roland PCS-31; optional, sold separately), the correspondence between pedal switch and CTL pedal functions is as shown below.*

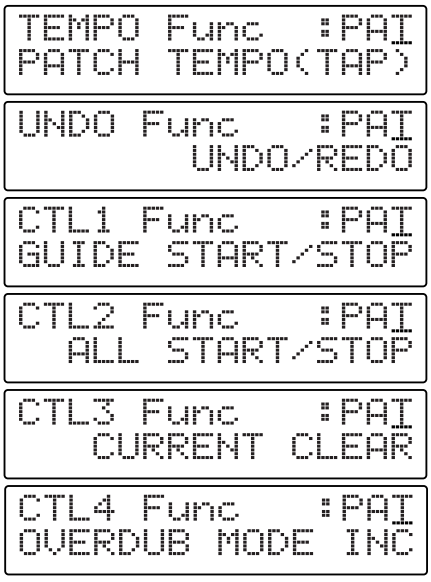


* *If you want to connect foot switches individually, the CTL1 pedal function and CTL3 pedal function settings are used.*



1. **Press [CTL/EXP PEDAL].**

2. **Press PARAMETER [◄] [►] to display the desired parameter, either "TEMPO Func," "Undo Func," "CTL1 Func," "CTL2 Func," "CTL3 Func," or "CTL4 Func."**



3. **Use PARAMETER [◄] [►] to move the cursor to the lower row of the display, then use the PATCH/VALUE dial to set the pedal or foot switch function.**

4. **Repeat Steps 2 and 3 as needed.**

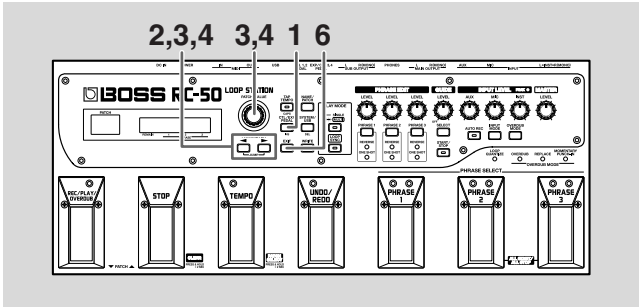
5. **Press [EXIT] to return to the Play screen.**

* *When selecting patch pedal settings, use the procedure described in "Saving by Patch Numbers (Patch Write)" (p. 54) when saving the settings.*

Available Settings	Description
Applies to both system settings and patch settings	
OFF	No operation
ALL START/STOP	Starts and stops playback of all Phrases 1–3 simultaneously
PHRASE 1 PLY/STP	Starts and stops playback of Phrase 1 (*)
PHRASE 2 PLY/STP	Starts and stops playback of Phrase 2 (*)
PHRASE 3 PLY/STP	Starts and stops playback of Phrase 3 (*)
PHRASE 1 PLAY	Starts playback of Phrase 1 (*)
PHRASE 2 PLAY	Starts playback of Phrase 2 (*)
PHRASE 3 PLAY	Starts playback of Phrase 3 (*)
(*) • Playback does not start if the phrase is blank. • Playback begins immediately, with no playback count-in sound played.	
PHRASE 1 STOP	Stops playback of Phrase 1
PHRASE 2 STOP	Stops playback of Phrase 2
PHRASE 3 STOP	Stops playback of Phrase 3
PHRASE 1 REVERSE	Turns reverse playback of Phrase 1 on and off
PHRASE 2 REVERSE	Turns reverse playback of Phrase 2 on and off
PHRASE 3 REVERSE	Turns reverse playback of Phrase 3 on and off
PHRASE 1 ONESHOT	Switches Loop and One Shot playback for Phrase 1
PHRASE 2 ONESHOT	Switches Loop and One Shot playback for Phrase 2
PHRASE 3 ONESHOT	Switches Loop and One Shot playback for Phrase 3
PHRASE 1 CLEAR	Clears Phrase 1 (*)
PHRASE 2 CLEAR	Clears Phrase 2 (*)
PHRASE 3 CLEAR	Clears Phrase 3 (*)
(*) Phrases cannot be cleared if the current phrase is being recorded/overdubbed.	
CURRENT REVERSE	Turns reverse playback of the current phrase on and off
CURRENT ONE SHOT	Switches Loop and One Shot playback for the current phrase
CURRENT CLEAR	Clears the current phrase (*)
(*) Phrases cannot be cleared if the current phrase is being recorded/overdubbed.	
UNDO/REDO	Undo/Redo
PATCH TEMPO (TAP)	Tap input for patch tempo
OVERDUB MODE INC	Switches Overdubbing mode switching sequence to OVERDUB → REPLACE → MOMENTARY PUNCH-IN
GUIDE START/STOP	Starts and stops the guide
PLAY MODE	Switches the Play mode (Single/Multi) * *All phrases stop when the mode is switched during recording, playback, or overdubbing.*
Applies to system settings only	
PATCH NUMBER INC	Switches to the next higher patch number
PATCH NUMBER DEC	Switches to the next lower patch number
PATCH WRITE	Writes the patch * *When pressing a pedal twice, Patch Write is executed.*

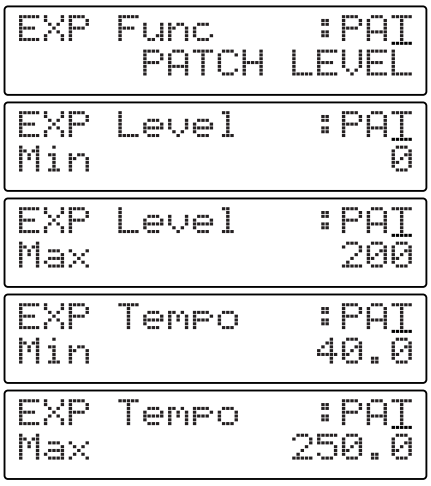
Setting the Functions for the EXP pedal

This procedure sets the functions for the EXP pedal connected to the EXP/CTL 3,4 PEDAL jack.



1. **Press [CTL/EXP PEDAL].**

2. **Press PARAMETER [◄] [►] to display either "EXP Func," "EXP Level," or "EXP Tempo."**



3. **After using PARAMETER [◄] [►] to move the cursor to "SYS" or "PAT" in the upper row of the display, you can then rotate the PATCH/VALUE dial to select either the system settings or patch settings as the settings to be used.**

Available Settings	Description
~~: SYS	The system settings are used.
~~: PAT	The patch settings are used.

4. **Use PARAMETER [◄] [►] to move the cursor to the lower row of the display, then use the PATCH/VALUE dial to change the setting.**

5. **Repeat Steps 2 and 4 as needed.**

6. **Press [EXIT] to return to the Play screen.**

* *When selecting patch pedal settings, use the procedure described in "Saving by Patch Numbers (Patch Write)" (p. 54) when saving the settings.*

MEMO

When switching between the system settings and patch settings, "EXP Func," "EXP Level Min/Max," and "EXP Tempo Min/Max" are together affected.

EXP Pedal Functions

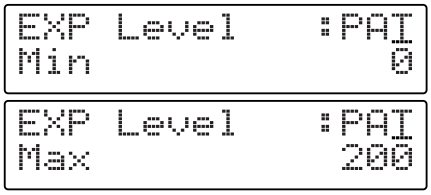
This procedure selects the function to be controlled by the EXP pedal.



Available Settings	Description
OFF	No operation
PHRASE 1 LEVEL	Controls the volume level of Phrase 1
PHRASE 2 LEVEL	Controls the volume level of Phrase 2
PHRASE 3 LEVEL	Controls the volume level of Phrase 3
Pressing the pedal down increases the volume level.	
PHRASE 1 PAN	Controls the panning of Phrase 1
PHRASE 2 PAN	Controls the panning of Phrase 2
PHRASE 3 PAN	Controls the panning of Phrase 3
Pressing the pedal down shifts the sound to the right; releasing the pedal shifts the sound to the left.	
CURRENT LEVEL	Controls the volume level of the current phrase
CURRENT PAN	Controls the panning of the current phrase
GUIDE LEVEL	Controls the volume level of the guide sound
PATCH LEVEL	Controls the patch's volume level
PATCH TEMPO	Controls the patch tempo
Pressing the pedal down increases the tempo.	

EXP Pedal Min/Max Level

This procedure sets the minimum and maximum volume levels when the level is being controlled with the EXP pedal.



Available Settings: 0–200

EXP Pedal Min/Max Tempo

This procedure sets the minimum and maximum tempos when the patch level is being controlled with the EXP pedal.

Press PARAMETER [◄] [►] to move the cursor to the digit you want to change, then rotate the PATCH/VALUE dial to change the setting.



Available Settings: 40.0–250.0

Chapter 8

Using MIDI

What You Can Do with MIDI

You can use MIDI with the RC-50 for the following kinds of operations.

* *Use of MIDI requires that the MIDI channels be matched with those of the connected device. Data cannot be transmitted to, nor received from another MIDI device unless the MIDI channels are set properly.*

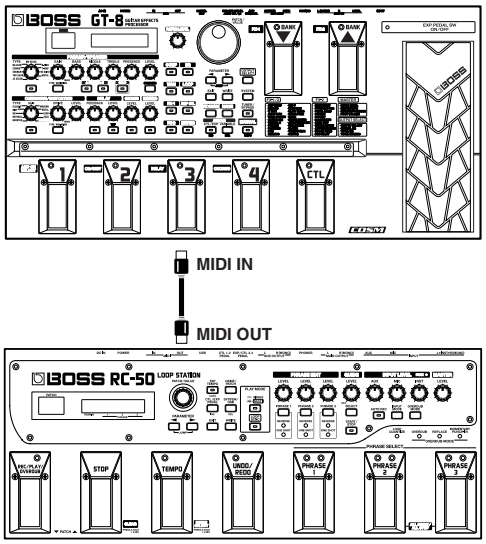
Controlling Operations from the RC-50

Outputting Tempo Data and Data for Starting and Stopping Playback

- The RC-50's performance tempo data is transmitted to external MIDI devices as MIDI clock.
  Synchronizing tempos to the RC-50 enables control of MIDI clock-based effects processors and other such devices.
- Playback start and stop operations with the RC-50's pedals can be transmitted as MIDI Start and Stop messages.
  Sequencers, recorders, and other such devices can be synchronized to start and stop playback simultaneously with the RC-50.

Outputting Program Change Messages

When a patch is selected with the RC-50, a Program Change message corresponding to the selected patch number is transmitted simultaneously. The external MIDI device switches its settings in accordance with the received Program Change message.



Outputting Control Change Messages

An ongoing description of all operations you perform using an externally connected foot switch or EXP pedal can be output in the form of data called Control Change messages. These messages can be used for various purposes, such as controlling the parameters of an external MIDI device.

Controlling Operations from External Devices

Receiving Tempo Data and Data for Starting and Stopping Playback

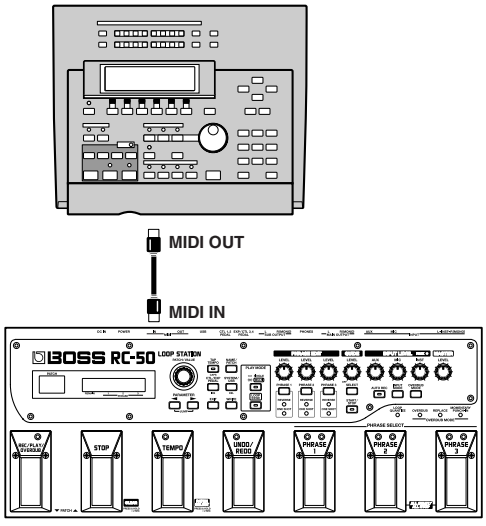
- The RC-50 can receive MIDI clock from external MIDI devices and perform at the same tempo as (be synchronized with) the external MIDI device. This enables control of the RC-50 using the same tempo as that of recorders and other equipment.
- Playback of the current phrase and control of All Stop can be achieved through receipt of MIDI Start and Stop messages.
  If Simul-Start (p. 50) is set, you can also start playback of any desired phrase from an external MIDI device.

Switching Patch Numbers

The RC-50's patches switch simultaneously upon receipt of corresponding Program Change messages from external MIDI devices.

MEMO

The following figure shows a connection scheme whereby the performance with the RC-50 is automatically played as a backing performance. Patches switch automatically when a Program Change message (Program Number) corresponding to the patch, along with the performance data, is input at the point where you want the RC-50's patches to be switched.



Receiving Control Change Messages

The RC-50 can be controlled using Control Change messages from external MIDI devices.

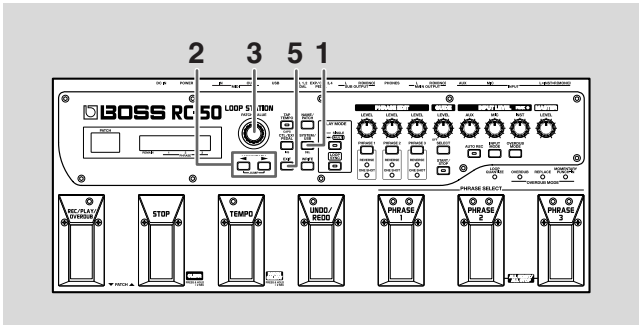
MEMO

You can set how the RC-50 responds to MIDI Control Change #1, #7, and #80 with the CC#1/CC#7/CC#80 Func setting (p. 77).

You can also change the RC-50's tempo by connecting an optional FC-200 MIDI foot controller.

Making the Settings for MIDI-Related Functions

This section describes the RC-50's MIDI-related functions. Make the settings in accordance with how the RC-50 is to be used.

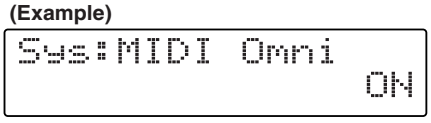


1. **Press [SYSTEM/USB] several times until the MIDI settings screen is displayed.**



2. **Press PARAMETER [◄] [►] to display the screen for the parameter you want to set.**

(Example)



3. **Use the PATCH/VALUE dial to change the value of the setting.**
4. **Repeat Steps 2 and 3 as needed.**
5. **Press [EXIT] to return to the Play screen.**

MIDI Receive Channel

This procedure sets the MIDI channel used for receiving MIDI messages.



Available Settings: 1–16 (Channel 1–Channel 16)

MIDI Omni Mode

When set to ON, messages are received via all MIDI channels, regardless of the MIDI Receive Channel settings.



Available Settings: OFF, ON

MIDI Transmit Channel

This procedure sets the MIDI channel used for transmitting MIDI messages. When set to "RX," messages are transmitted over the same channel used as the MIDI Receive Channel.



Available Settings: 1–16, RX

MIDI Sync

You can have performances be synchronized to a MIDI sequencer or other external MIDI device.



Available Settings	Description
PATCH	Synchronization settings are determined separately for each individual patch. Patch synchronization settings are made with MIDI Sync (p. 50) in the patch's settings.
AUTO	Although performances are normally played at the tempo set with the RC-50, if a MIDI Start message is received while playback of all phrases is stopped, the performance begins automatically with the tempo determined by the MIDI clock message from the external MIDI device.
INTERNAL	Performances are played at the tempo set with the RC-50, with recording, playback, and overdubbing carried out with the RC-50's controls.
REMOTE	Although performances are played at the tempo set with the RC-50, the start of recording, playback, and stopping (only) are controlled with the external MIDI device.

MIDI Program Change Out

This selects whether or not MIDI Program Change messages are output.



Available Settings: OFF, ON

MIDI Control Change Out

This selects whether or not MIDI Control Change messages are output.



Available Settings: OFF, ON

Controlling Operations from the RC-50

Synchronizing Performances on External Devices to the RC-50

You can play performances on external devices at the same tempo as the RC-50's tempo (Synchronized Performance).

To Play Performances on External MIDI Devices at the Same Tempo as the RC-50's Tempo

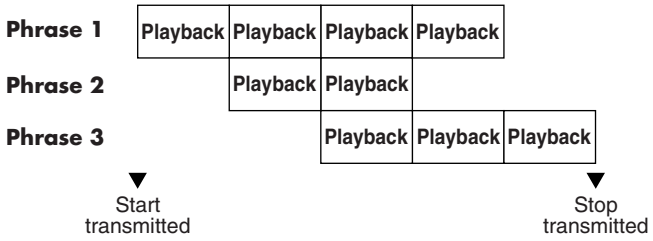
MIDI clock messages are output from the RC-50 at all times.Set the external MIDI device beforehand so it is ready to receive MIDI Clock and MIDI Start and Stop messages.
For details, refer to the owner's manual that came with the device.

To Transmit Start

A MIDI Start message is transmitted at the moment that recording or playback of the current phrase begins, when all phrases had been stopped.
This message is also transmitted when an All Start is carried out.

To Transmit Stop

A MIDI Stop message is transmitted when all of the phrases have stopped. This is also transmitted when All Stop is in effect.



Transmitting Program Changes

When patches are switched on the RC-50, a MIDI Program Change message is transmitted to the connected external MIDI device.
You can transmit Program Change messages numbered 1 through 99,corresponding to the 99 individual patches 1–99.

Patch Number	Program Number
1	1
2	2
3	3
:	:
99	99

* *Set MIDI Program Change Out (p. 75) to ON beforehand.*

* *Program Change messages 100–128 cannot be transmitted.*

* *Bank Select MIDI messages (Control Change #0, #32) cannot be transmitted.*

Transmitting Control Changes

You can transmit MIDI Control Change messages by operating the external foot switch connected to the CTL 1,2 PEDAL jack or EXP pedal connected to the EXP/CTL 3,4 PEDAL jack.
The following Control Change messages are transmitted by the foot switch and EXP pedal.

Pedal	Controller Number
CTL 1 pedal	CC#80
CTL 2 pedal	CC#81
EXP pedal	CC#7
CTL 3 pedal	Not output
CTL 4 pedal	Not output

* *Set MIDI Control Change Out (p. 75) to ON.*

Controlling Operations from an External MIDI Device

Synchronizing RC-50 Performances to the External Device

You can have the RC-50's performances be played at the same tempo as the external device's tempo (Synchronized Performance).

To Play Performances on External MIDI Devices at the Same Tempo as the RC-50's Tempo (Synchronized Performance)

To set Synchronized Performance for all patches, set System MIDI Sync (p. 75) to AUTO.

To set Synchronized Performance for each patch individually, set System MIDI Sync to PATCH and set the patch's MIDI Sync (p. 50) setting to AUTO.

When the RC-50 is set to use Synchronized Performance, the RC-50's patch tempos conform at all times to the tempo data (MIDI Clock) from the external MIDI device.

However, Loop Quantize (p. 42) is enabled for use, allowing you to record phrases with the correct measure lengths.

* *Set the external MIDI device beforehand so it is ready to transmit MIDI Clock and MIDI Start and Stop messages. For details, refer to the owner's manual that came with the device.*

To Receive Start

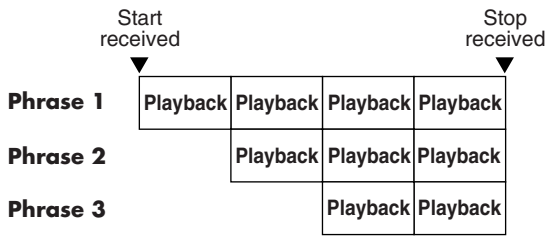
When the MIDI Start message is received while all phrases are stopped, playback of the current phrase begins. At this time, any phrase set to start simultaneously also begins playing back.

MEMO

- Upon reception of MIDI Start, recording or playback begins immediately, with no recording/playback count-in (p. 40) sound played.
- Upon reception of MIDI Start, recording begins immediately, even if Auto Recording (p. 47) is set.

To Receive Stop

When the MIDI Stop message is received, playback of all phrases stops



Switching Patches

You can switch the RC-50's patches with Program Change messages from external MIDI devices.

The RC-50 can receive Program Change messages numbered 1 through 99, corresponding to the 99 individual patches 1–99.

Program Number	Patch Number
1	1
2	2
3	3
:	:
99	99

* *Program Change messages 100–128 cannot be received.*

* *Even if received, Bank Select MIDI messages (Control Change #0, #32) are disregarded.*

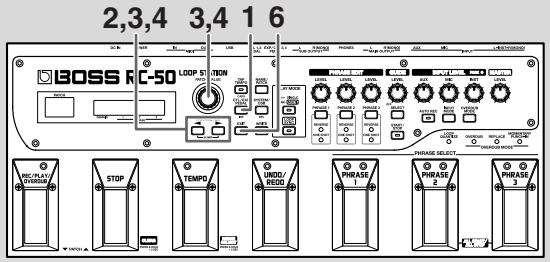
Controlling Other Functions (CC#1/CC#7/CC#80 Functions)

With Control Change messages from external MIDI devices, you can use such external MIDI devices to control functions that are difficult to handle using the RC-50's pedals alone, making operation of the RC-50 easier and more convenient.

System Settings and Patch Settings

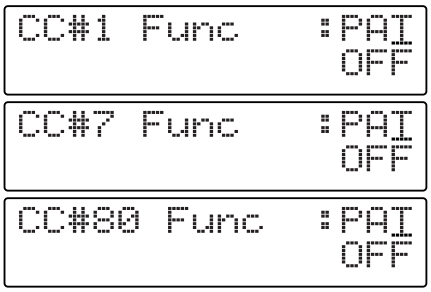
CC#1/CC#7/CC#80 (Control Change) functions operate in accordance with system settings, that is, settings that are shared by and applied the same way to all of the RC-50's functions and that remain the same regardless of the patch selected, and patch settings, or settings that are used to select different functions for each individual patch. In each parameter, you select whether the system settings or the patch settings are to be applied, giving you the freedom to apply them as needed for any environment.

Use the following procedure to switch between system and patch settings.



1. Press [CTL/EXP PEDAL] to display the pedal settings screen.

2. Press PARAMETER [◄] [►] to display the CC# Function screen for the Control Change message whose settings you want to change.



3. **After using PARAMETER [◄] [►] to move the cursor to "SYS" or "PAT" in the upper row of the display, you can then rotate the PATCH/VALUE dial to select either the system settings or patch settings as the settings to be used.**

Available Settings	Description
~~: SYS	The system settings are used.
~~: PAT	The patch settings are used.

4. **Press PARAMETER [◄] [►] to move the cursor to the lower row of the display, then use the PATCH/VALUE dial to set how you want the Control Change to be used.**

5. **Repeat Steps 2–4 as needed.**

6. **Press [EXIT] to return to the Play screen.**

* *When selecting patch pedal settings, use the procedure described in "Saving by Patch Numbers (Patch Write)" (p. 54) when saving the settings.*

CC#1, CC#7

Available Settings	Description
OFF	No operation
PHRASE 1 LEVEL	Controls the volume level of Phrase 1
PHRASE 2 LEVEL	Controls the volume level of Phrase 2
PHRASE 3 LEVEL	Controls the volume level of Phrase 3
PHRASE 1 PAN	Controls the panning of Phrase 1
PHRASE 2 PAN	Controls the panning of Phrase 2
PHRASE 3 PAN	Controls the panning of Phrase 3
CURRENT LEVEL	Controls the volume level of the current phrase
CURRENT PAN	Controls the panning of the current phrase
GUIDE LEVEL	Controls the volume level of the guide sound
PATCH LEVEL	Controls the patch's volume level
PATCH TEMPO	Controls the patch tempo

CC#80

Available Settings	Description
Applies to both system settings and patch settings	
OFF	No operation
ALL START/STOP	Starts and stops playback of all Phrases 1–3 simultaneously
PHRASE 1 PLY/STP	Starts and stops playback of Phrase 1 (*)
PHRASE 2 PLY/STP	Starts and stops playback of Phrase 2 (*)
PHRASE 3 PLY/STP	Starts and stops playback of Phrase 3 (*)
PHRASE 1 PLAY	Starts playback of Phrase 1 (*)
PHRASE 2 PLAY	Starts playback of Phrase 2 (*)
PHRASE 3 PLAY	Starts playback of Phrase 3 (*)
(*) • Playback does not start if the phrase is blank. • Playback begins immediately, with no playback count-in sound played.	
PHRASE 1 STOP	Stops playback of Phrase 1
PHRASE 2 STOP	Stops playback of Phrase 2
PHRASE 3 STOP	Stops playback of Phrase 3
PHRASE 1 REVERSE	Turns reverse playback of Phrase 1 on and off
PHRASE 2 REVERSE	Turns reverse playback of Phrase 2 on and off
PHRASE 3 REVERSE	Turns reverse playback of Phrase 3 on and off
PHRASE 1 ONESHOT	Switches Loop and One Shot playback for Phrase 1
PHRASE 2 ONESHOT	Switches Loop and One Shot playback for Phrase 2
PHRASE 3 ONESHOT	Switches Loop and One Shot playback for Phrase 3
PHRASE 1 CLEAR	Clears Phrase 1 (*)
PHRASE 2 CLEAR	Clears Phrase 2 (*)
PHRASE 3 CLEAR	Clears Phrase 3 (*)
(*) Phrases cannot be cleared if the current phrase is being recorded/overdubbed.	
CURRENT REVERSE	Turns reverse playback of the current phrase on and off
CURRENT ONE SHOT	Switches Loop and One Shot playback for the current phrase
CURRENT CLEAR	Clears the current phrase (*)
(*) Phrases cannot be cleared if the current phrase is being recorded/overdubbed.	
UNDO/REDO	Undo/Redo
PATCH TEMPO (TAP)	Tap input for patch tempo
OVERDUB MODE INC	Switches Overdubbing mode switching sequence to OVERDUB → REPLACE → MOMENTARY PUNCH-IN
GUIDE START/STOP	Starts and stops the guide
PLAY MODE	Switches the Play mode (Single/Multi) * *All phrases stop when the mode is switched during recording, playback, or overdubbing.*
Applies to system settings only	
PATCH NUMBER INC	Switches to the next higher patch number
PATCH NUMBER DEC	Switches to the next lower patch number
PATCH WRITE	Writes the patch * *When pressing a pedal twice, Patch Write is executed.*

Chapter 9

Connecting to Computers

Before Using USB

The RC-50 is equipped with a USB connector, and connecting the RC-50 to a computer with a USB cable enables you to carry out the following operations.

Backup

Save the RC-50's user data to the computer

Recover

Return data saved to a computer back to the RC-50.

Export

Copy the RC-50's phrase data to computers as WAV files.

Import

Load WAV files on computers to the RC-50.

Compatible OSs

Windows

Windows Me/2000/XP

Macintosh

Mac OS 9.1.x/9.2.x
Mac OS X

Drivers

The RC-50 uses the OS's standard driver, which is installed automatically when the RC-50 and computer are connected via USB.

NOTE

When Using Windows XP/Windows 2000

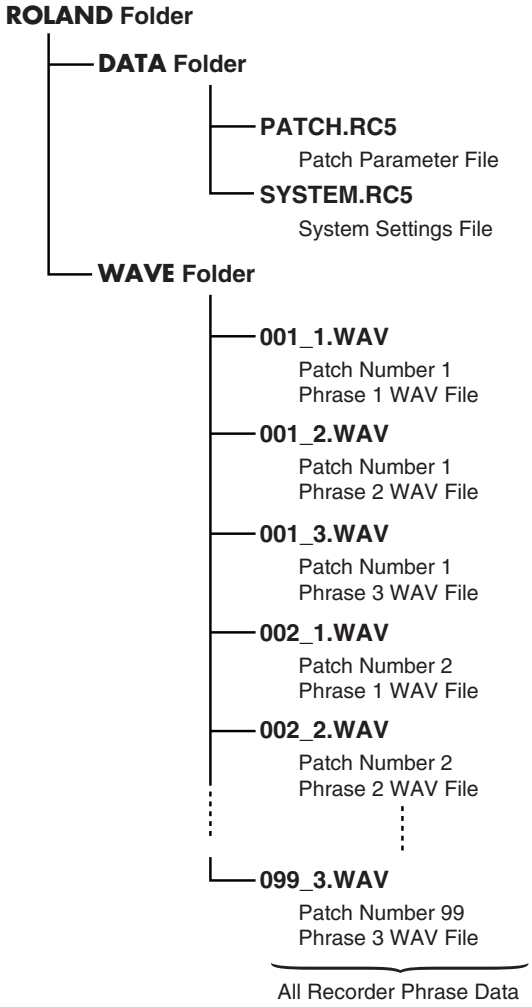
Log on to Windows with any of the following user names.

- Administrator or other user name in the Administrator's group.
- User name whose account category is that of computer administrator.

Note that a proper USB connection cannot be achieved with user names other than the above.
For more details, consult the system administrator for the computer you are using.

Organization of the RC-50's Data

When the RC-50 is connected to a computer via USB, "BOSS_RC-50" (or the "Removable Disk (*:)" icon) appears in My Computer in Windows, or on the desktop with Macintosh OS.
The "ROLAND" folder resides within "BOSS_RC-50," with the RC-50's data saved according to the hierarchy shown below.



NOTE

- When the RC-50 performs Recover/Import, the patch data will be overwritten regardless of the setting of Preset Protect (p. 69).
- Be sure not to write corrupt files to PATCH.RC5 or SYSTEM.RC5.
- Do not delete or change the folder names of the ROLAND folder, DATA folder, or WAVE folder.
- Do not transfer any files to the RC-50 other than those in the "ROLAND" folder. Although files from other folders are ignored by the RC-50, they reduce the amount of space available for saving data.

About WAV Files Handled by the RC-50

You can save patch phrases to computers as WAV files as well as import files from computers to the RC-50. This makes it convenient when you want to use phrases created with the RC-50 in putting together songs using sequencer software or when importing phrases with effects to the RC-50.

The following describes the WAV file format that can be used by the RC-50.

Sampling Rate	44.1 KHz	
Quantization Bit Rate	16 bit	
Number of Channels	Mono or Stereo	
Compression Format	No compression	
File Names 001_1.WAV / / | \ \ (1) (2) (3) (4) (5)	(1)	Patch Numbers: Three-digit number (001-099)
	(2)	Underscore (underline) character
	(3)	Phrase Numbers: Single-digit number (1, 2, or 3)
	(4)	Dot (period) character
	(5)	The uppercase letters "WAV"

NOTE

- After importing a WAV file to the RC-50, confirm in the Play screen that the phrase can be played back normally.
- Content that can be saved to the RC-50 includes all patches, phrases, and system settings up to a maximum of 250 MB. WAV files in excess of this size cannot be imported to the RC-50.
- You cannot import a short WAV file at the minimum recording time (about 1.5 seconds).
- The RC-50 includes no sequencer software.

Determining the Original Tempo of a Phrase Created from an Imported WAV File

When you import a WAV file into the RC-50, the original tempo set for the import-destination phrase is not changed.

Performing while synchronizing to the tempos of phrases created by importing commercially available loops and other such material requires proper setting of the phrases' original tempos.

You can use the following procedure to check the original tempo.

If you know the song's tempo:

Set that song's tempo to the original tempo.

If you know the song length (in seconds), time signature, and number of measures:

If you have determined the song's length (time), time signature, and number of measures by playing back the WAV file on your computer or other device, you can then calculate the original tempo as shown below.

Time signature (Numerator/Denominator) x 4 x Number of Measures x 60 ÷ Total Song Length (Seconds) = Tempo

For example, if the song is in 4/4 time, is 2 measures long, and runs 4.8 seconds, the tempo is calculated as follows:

4/4 x 4 x 2 x 60 / 4.8 = 100

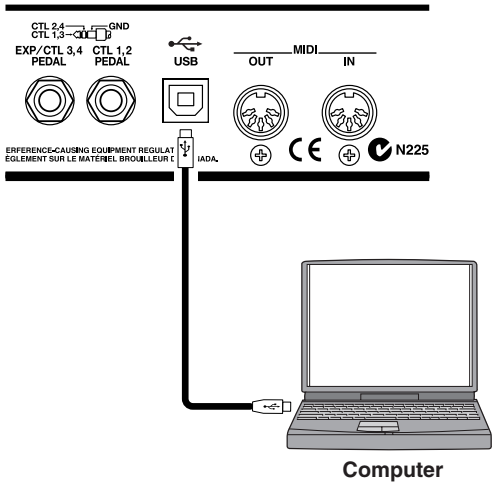
Once you know the tempo, use the procedure described in "Confirming and Setting the Original Tempo" (p. 37) to set the original tempo.

Connecting to the Computer

Use a USB cable to connect the USB connector on the computer to the RC-50's USB connector.

NOTE

When connecting the USB cable, remove the cover attached to the USB connector. Leave the cover attached when not using the USB connector.



Notes on Using USB

Do not perform the following operations when the RC-50 and the computer are enabled for data transfers or while data is being transmitted. Doing so may cause the computer to fail to respond.It can also result in corruption of the RC-50's data.

- Removing the USB cable
- Suspending the computer (placing it in standby), placing it in hibernation, restarting, or shutting down
- Turning off the power to the RC-50

With Windows

Backup and Recovery of the RC-50's Data

NOTE

When the RC-50 performs Recover, the patch data will be overwritten regardless of the setting of Preset Protect (p. 69).

The supplied CD includes a "ROLAND" folder containing the factory default data.

NOTE

Recovering data by merely copying this folder to the RC-50 as is overwrites the RC-50's "ROLAND" folder, returning the unit to its original factory settings.
Any data for original phrases already saved to this folder is cleared. Recover only the data required to the RC-50.

* *Carry out the following procedure only with all performances stopped.*

1. Connect the computer and the RC-50 with a USB cable.

2. Press [SYSTEM/USB] several times until the USB screen is displayed.



3. Press [WRITE].

* *"Stop PLAY/REC!" is displayed if you press [WRITE] while a phrase or guide is playing. If this occurs, stop the performance of the phrase or guide, then press [WRITE] again.*

* *If you have any unsaved data (phrase or patch settings), the message "Cancel rec data?" appears.*
If you press [WRITE], any data currently being worked on in this operation is deleted, and the procedure continues using the data as it was before the current operation was begun. To cancel the procedure, press [EXIT].

When the connection to the computer is completed, the message "Copy data files." appears.
The "BOSS_RC-50" icon (or "Removable Disk (*:)" icon) appears in the My Computer.

(Ex.)



4. Open the "BOSS_RC-50" icon (or the "Removable Disk (*:)" icon) located in My Computer.

The "ROLAND" folder is displayed.

5. Execute the backup or recover.

If backing up:

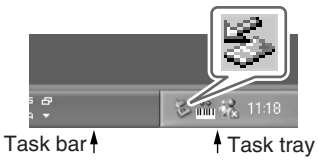
Copy the "ROLAND" folder to any desired folder on the computer.
You can create a new folder to use as the backup folder.

If recovering:

1) Delete the RC-50's "ROLAND" folder.
2) Copy the "ROLAND" folder on the computer to the "BOSS_RC-50" icon.

6. End the USB connection.

1) All windows on the computer close.
2) Click the Task tray icon, then click the message displayed that indicates use of the drive (*:) is to be stopped.



3) Close the "Safe to Remove Hardware" dialog.

End the USB connection; the RC-50's display changes to the following.



7. Press [EXIT].

The Play screen soon reappears in the display.
If the message "Disconnect, OK?" appears, press [EXIT] and end the USB connection.
In this state, the USB cable can be safely disconnected from the RC-50 and computer.

Importing and Exporting WAV Files

NOTE

When the RC-50 performs Import, the patch data will be overwritten regardless of the setting of Preset Protect (p. 69).

The included CD contains WAV files with sample phrases that can be used by the RC-50.

NOTE

The WAV files on the CD cannot be imported with their file names left unaltered. Change the file names after referring to p. 81.

* *Carry out the following procedure only with all performances stopped.*

1. Connect the computer and the RC-50 with a USB cable.

MEMO

With importing, the beat cannot be changed after the data is imported. If you do want to change the beat, set the beat beforehand using the procedure described on p. 46.

2. Press [SYSTEM/USB] several times until the USB screen is displayed.



3. Press [WRITE].

* *"Stop PLAY/REC!" is displayed if you press [WRITE] while a phrase or guide is playing. If this occurs, stop the performance of the phrase or guide, then press [WRITE] again.*

* *If you have any unsaved data (phrase or patch settings), the message "Cancel rec data?" appears.*
If you press [WRITE], any data currently being worked on in this operation is deleted, and the procedure continues using the data as it was before the current operation was begun. To cancel the procedure, press [EXIT].

When the connection to the computer is completed, the message "Copy data files." appears.
The "BOSS_RC-50" icon (or "Removable Disk (*:)" icon) appears in the My Computer.

(Ex.)



4. Open the "BOSS_RC-50" icon (or the "Removable Disk (*:)" icon) located in My Computer.

The "ROLAND" folder is displayed.

5. Double-click the "ROLAND" folder, then double-click the "WAVE" folder.

The WAV files are displayed.

6. Execute the export or import.

If exporting:

1) Select the WAV file you want to export.
2) Copy the selected WAV file to the desired folder on the computer.

If importing:

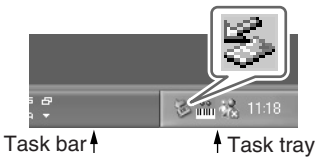
1) Open the folder on the computer containing the WAV files, then select the WAV file you want to import.
2) Refer to p. 81, then change the file name.
3) Copy the selected WAV file to the "WAVE" folder on the RC-50.

NOTE

If the RC-50's "WAVE" folder contains a WAV file with the same name as the one being imported (i.e., phrase in the import-destination patch), a "file overwrite confirmation" dialog appears. If you want to proceed and overwrite the file, click [OK]. If you want to keep the existing file instead of overwriting it, click [Cancel].
In this case, either save the required WAV file to the computer (export), or change the file name and repeat the procedure from Step 6.

7. End the USB connection.

1) All windows on the computer close.
2) Click the Task tray icon, then click the message displayed that indicates use of the drive (*:) is to be stopped.



3) Close the "Safe to Remove Hardware" dialog.

End the USB connection; the RC-50's display changes to the following.



8. Press [EXIT].

The Play screen soon reappears in the display.
If the message "Disconnect, OK?" appears, press [EXIT] and end the USB connection.
In this state, the USB cable can be safely disconnected from the RC-50 and computer.

Importing WAV files to three phrases and playing them back as is may result in excessive volume levels which can cause the sound to distort.
After importing, adjust the volume of each phrase with the PHRASE 1/2/3 LEVEL knobs.

With Macintosh

Backup and Recovery of the RC-50's Data

NOTE

When the RC-50 performs Recover, the patch data will be overwritten regardless of the setting of Preset Protect (p. 69).

The supplied CD includes a "ROLAND" folder containing the factory default data.

NOTE

Recovering data by merely copying this folder to the RC-50 as is overwrites the RC-50's "ROLAND" folder, returning the unit to its original factory settings.
Any data for original phrases already saved to this folder is cleared. Recover only the data required to the RC-50.

* *Carry out the following procedure only with all performances stopped.*

1. Connect the computer and the RC-50 with a USB cable.

2. Press [SYSTEM/USB] several times until the USB screen is displayed.



3. Press [WRITE].

* *"Stop PLAY/REC!" is displayed if you press [WRITE] while a phrase or guide is playing. If this occurs, stop the performance of the phrase or guide, then press [WRITE] again.*

* *If you have any unsaved data (phrase or patch settings), the message "Cancel rec data?" appears.*
If you press [WRITE], any data currently being worked on in this operation is deleted, and the procedure continues using the data as it was before the current operation was begun. To cancel the procedure, press [EXIT].

When the connection to the computer is completed, the message "Copy data files." appears.

The "BOSS_RC-50" icon appears on the computer's screen.

(Ex.)



4. Double-click the "BOSS_RC-50" icon.

The "ROLAND" folder is displayed.

5. Execute the backup or recover.

If backing up:

Copy the "ROLAND" folder to any desired folder on the computer.

You can create a new folder to use as the backup folder.

If recovering:

1) Delete the RC-50's "ROLAND" folder.
2) Copy the "ROLAND" folder on the computer to the "BOSS_RC-50" icon.

6. End the USB connection.

1) All windows on the computer close.
2) Drag the "BOSS_RC-50" icon on the computer's desktop into the Trash.

End the USB connection; the RC-50's display changes to the following.



7. Press [EXIT].

The Play screen soon reappears in the display.

If the message "Disconnect, OK?" appears, press [EXIT] and end the USB connection.

In this state, the USB cable can be safely disconnected from the RC-50 and computer.

Importing and Exporting WAV Files

NOTE

When the RC-50 performs Import, the patch data will be overwritten regardless of the setting of Preset Protect (p. 69).

The included CD contains WAV files with sample phrases that can be used by the RC-50.

NOTE

The WAV files on the CD cannot be imported with their file names left unaltered. Change the file names after referring to p. 81.

* *Carry out the following procedure only with all performances stopped.*

1. Connect the computer and the RC-50 with a USB cable.

MEMO

With importing, the beat cannot be changed after the data is imported. If you do want to change the beat, set the beat beforehand using the procedure described on p. 46.

2. Press [SYSTEM/USB] several times until the USB screen is displayed.



3. Press [WRITE].

* *"Stop PLAY/REC!" is displayed if you press [WRITE] while a phrase or guide is playing. If this occurs, stop the performance of the phrase or guide, then press [WRITE] again.*

* *If you have any unsaved data (phrase or patch settings), the message "Cancel rec data?" appears.*
If you press [WRITE], any data currently being worked on in this operation is deleted, and the procedure continues using the data as it was before the current operation was begun. To cancel the procedure, press [EXIT].

When the connection to the computer is completed, the message "Copy data files." appears.

The "BOSS_RC-50" icon appears on the computer's screen.

(Ex.)



4. Double-click the "BOSS_RC-50" icon.

The "ROLAND" folder is displayed.

5. Double-click the "ROLAND" folder, then double-click the "WAVE" folder.

The WAV files are displayed.

6. Execute the export or import.

If exporting:

1) Select the WAV file you want to export.
2) Copy the selected WAV file to the desired folder on the computer.

If importing:

1) Open the folder on the computer containing the WAV files, then select the WAV file you want to import.
2) Refer to p. 81, then change the file name.
3) Copy the selected WAV file to the "WAVE" folder on the RC-50.

NOTE

If the RC-50's "WAVE" folder contains a WAV file with the same name as the one being imported (i.e., phrase in the import-destination patch), a "file overwrite confirmation" dialog appears. If you want to proceed and overwrite the file, click [OK]. If you want to keep the existing file instead of overwriting it, click [Cancel].
In this case, either save the required WAV file to the computer (export), or change the file name and repeat the procedure from Step 6.

7. End the USB connection.

1) All windows on the computer close.
2) Drag the "BOSS_RC-50" icon on the computer's desktop into the Trash.

End the USB connection; the RC-50's display changes to the following.



8. Press [EXIT].

The Play screen soon reappears in the display.

If the message "Disconnect, OK?" appears, press [EXIT] and end the USB connection.

In this state, the USB cable can be safely disconnected from the RC-50 and computer.

Importing WAV files to three phrases and playing them back as is may result in excessive volume levels which can cause the sound to distort.
After importing, adjust the volume of each phrase with the PHRASE 1/2/3 LEVEL knobs.

Troubleshooting

Error Messages

When errors in operation occur or when operations cannot be executed properly, an error message will appear in the display.
Take the corrective measures in accordance with the message displayed.

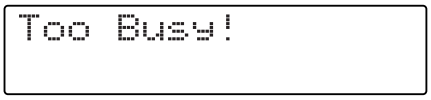


❒ **[WRITE] was pressed while playback of the Guide was in progress.**

→ Stop playback of the Guide, then press [WRITE].

❒ **[WRITE] was pressed while playback, recording, or overdubbing of a phrase was in progress.**

→ Stop playback, recording, or overdubbing of the phrase, then press [WRITE].



❒ **The RC-50 could not process the data completely.**

→ Lower the performance tempo.

→ Save the current content to a patch.

→ Reduce the number of adjustments or changes made with the RC-50's knobs and pedals.

→ Reduce the number or size of MIDI messages transmitted to the RC-50.



❒ **No available recording time remains. You cannot proceed with any further recording or overdubbing.**

→ First initialize any unneeded patches or clear unneeded phrases (p. 32), then carry out the Patch Write procedure (p. 54).



❒ **The phrase cannot be played back correctly since it is playing at a tempo significantly faster than the tempo at which it was recorded.**

→ Adjust the tempo.



❒ **The phrase cannot be played back correctly since it is playing at a tempo significantly slower than the tempo at which it was recorded.**

→ Adjust the tempo.



❒ **MIDI messages could not be properly received.**

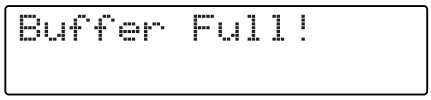
→ Check to make sure that no corrupt MIDI messages are being transmitted.

→ Reduce the number or size of MIDI messages transmitted to the RC-50.

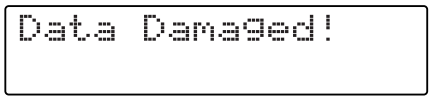


❒ **There is a problem with the MIDI cable connection.**

→ Check to make sure the cable has not been disconnected and that there is no short in the cable.

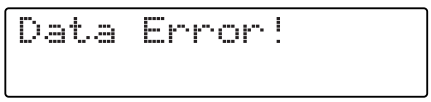


❒ **An excessive volume of messages were received and could not be processed properly.**



❒ **Corrupt files may have been written to the RC-50 while connected via USB (e.g., during Recover or Import).**

→ Execute Factory Reset (p. 95) to restore the RC-50 to its factory default condition.



❒ **A problem has occurred with the content of the RC-50's memory.**

→ Consult your Roland dealer or local Roland Service.



❒ **A problem has occurred in the system.**

→ Consult your Roland dealer or local Roland Service.

Correspondence Between the Indicators and Operational Status

If, while using the RC-50, you find that you are unaware of the current operating status, refer to the table below and determine the current status by viewing the indicators.

Left Display		Numbers lit	Indicates current patch number.
		Numbers flashing	Indicates that a patch has been selected in advance to be switched.
[TAP TEMPO]		Flashing	Flashes in time with the current patch's patch tempo. Flashes red on the downbeat of the measure, green on other beats. When the RC-50 is in Patch Select mode (p. 33), or a patch has been selected in advance to be switched, the indicator flashes at the tempo of patch to which you are switching.
[PLAY MODE]		Off	Play mode (p. 28) is set to Single mode.
		Lit	Play mode (p. 28) is set to Multi mode.
		Flashing	When a patch has been selected in advance to be switched, this indicates that the Play mode in the patch to which you are switching is set to Multi mode.
[LOOP SYNC]		Off	Loop Sync (p. 28) is set to OFF.
		Lit	Loop Sync (p. 28) is set to ON.
		Flashing	When a patch has been selected in advance to be switched, this indicates that Loop Sync (p. 28) in the patch to which you are switching is set to ON.
PHRASE 1/2/3	**REVERSE**	Off	Reverse (p. 52) in the respective phrase is set to OFF.
		Lit	Reverse (p. 52) in the respective phrase is set to ON.
		Flashing	When a patch has been selected in advance to be switched, this indicates that Reverse (p. 52) in the phrases for the patch to which you are switching are set to ON.
	ONE SHOT	Off	The phrase is set to LOOP (p. 52).
		Lit	The respective phrase is set to ONE SHOT (p. 52).
		Flashing	When a patch has been selected in advance to be switched, this indicates that the phrases for the patch to which you are switching are set to ONE SHOT (p. 52).
GUIDE [START/STOP]		Off	The guide (p. 39) is stopped.
		Lit	The guide (p. 39) is playing.
		Flashing	When a patch has been selected in advance to be switched, this indicates that the phrases for the patch to which you are switching are set to ONE SHOT (p. 52).
[AUTO REC]		Off	Auto Recording (p. 47) is set to OFF.
		Lit	Auto Recording (p. 47) is set to ON.
		Flashing	When a patch has been selected in advance to be switched, this indicates that Auto Recording (p. 47) in the patch to which you are switching is set to ON.
PEAK		Off	Input level is appropriate, or sound is muted.
		Lit	Sound input level is too high.
LOOP QUANTIZE		Off	Loop Quantize (p. 42) is disabled.
		Lit	Loop Quantize (p. 42) is enabled.
		Flashing	When a patch has been selected in advance to be switched, this indicates that Loop Quantize (p. 42) in the patch to which you are switching is enabled.
OVERDUB MODE	**OVERDUB**	Off	Overdubbing mode (p. 47) is not set to OVERDUB.
		Lit	Overdubbing mode (p. 47) is set to OVERDUB.
		Flashing	When a patch has been selected in advance to be switched, this indicates that Overdubbing mode (p. 47) in the patch to which you are switching is set to OVERDUB.
	REPLACE	Off	Overdubbing mode (p. 47) is not set to REPLACE.
		Lit	Overdubbing mode (p. 47) is set to REPLACE.
		Flashing	When a patch has been selected in advance to be switched, this indicates that Overdubbing mode (p. 47) in the patch to which you are switching is set to REPLACE.
OVERDUB MODE	**MOMENTARY PUNCH-IN**	Off	Overdubbing mode (p. 47) is not set to MOMENTARY PUNCH-IN.
		Lit	Overdubbing mode (p. 47) is set to MOMENTARY PUNCH-IN.
		Flashing	When a patch has been selected in advance to be switched, this indicates that Overdubbing mode (p. 47) in the patch to which you are switching is set to MOMENTARY PUNCH-IN.

Correspondence Between the Indicators and Operational Status

REC/PLAY/OVERDUB Pedal		Lit (Red)	Current phrase is being recorded.
		Lit (Green)	Current phrase is being played back.
		Lit (Orange)	Current phrase is being overdubbed.
		Flashing (Red)	Current phrase is enabled for recording.
		Flashing (Green)	Current phrase is enabled for playback.
		Flashing Rapidly (Red)	Current phrase is enabled for recording and on standby for Auto Recording (p. 47).
		Flashing Rapidly (green)	The current phrase is fading in or out, or the RC-50 is waiting for the end of a loop with Stop Mode (p. 53) set to LOOP END.
TEMPO Pedal		Off	The TEMPO pedal function (p. 70) is assigned to a function other than PATCH TEMPO (TAP), or the RC-50 is in Patch Select mode (p. 33).
		Flashing	Flashes in time with the current patch's patch tempo. Flashes red on the downbeat of the measure, green on other beats.
UNDO/REDO Pedal		Off	Indicates redo cannot be executed. Also, indicates that a function other than Undo/Redo is assigned.
		On	Indicates redo can be executed.
PHRASE 1/2/3 Pedal	**Orange Indicator**	Off	Not current phrase.
		On	Current phrase.
		Flashing	When a patch has been selected in advance to be switched, and when a phrase is selected and the RC-50 is set in advance to switch to the current phrase, this indicates that the current phrase will be active from that point.
	Green/Red Indicators	Off	Not current phrase, and phrase is stopped.
		Lit (Red)	Current phrase, which is currently recording.
		Lit (Green)	Phrase is being played back.
		Lit (Orange)	Current phrase, which is currently being overdubbed.
		Flashing (Red)	Indicates in the following cases that recording of the phrase is to begin: • When phrase is current phrase, and it is stopped • When a patch is selected and advance patch switching is set (status of patch to which you are switching) • When a patch is selected and advance switching to the current phrase is set.
		Flashing (Green)	Indicates in the following cases that playback of the phrase is to begin: • When phrase is current phrase, and it is stopped • When Simul-Start is set to ON in the phrase, and all phrases are stopped • When a patch is selected and advance patch switching is set • When a patch is selected and advance switching to the current phrase is set.
		Flashing Rapidly (Red)	Indicates Auto Recording (p. 47) standby when the current phrase is enabled for recording and all phrases are stopped.
		Flashing Rapidly (Green)	The phrase is fading in or out, or the RC-50 is waiting for the end of a loop with Stop Mode (p. 53) set to LOOP END.

Troubleshooting

If no sound is being output or if you think the RC-50 is not operating as it should, first check the following points. If the information below does not lead to a resolution of the problem, contact your dealer or the nearest Roland Service Center.

Problems with Sound

No sound/low volume

❒ **Are the connection cables shorted?**
→ Try substituting with other connection cables.

❒ **Is the RC-50 properly connected to other devices?**
→ Confirm the connections to other devices (p. 16).

❒ **Is the power to the connected amp or mixer not turned on, or is the volume turned down?**
→ Confirm the settings for connected devices.

❒ **Is the PHRASE LEVEL knob or MASTER LEVEL knob turned down?**
→ Adjust knobs to the suitable positions (p. 19).

❒ **Is the patch level (p. 49) turned down?**
→ Adjust the patch level.
→ Confirm that the patch is not such that the patch level is adjusted by an EXP pedal or other such controller. Setting the Functions for the EXP pedal (p. 72).

❒ **Are input, phrases, and the guide output all set correctly?**
→ Confirm the output settings.
"Setting the Output for the Sounds Being Input (Input Output Select)" (p. 50)
"Switching the Output for the Guide Sound (Guide Output Select)" (p. 40)
"Switching the Output for the Phrase Sounds (Output Select)" (p. 53)
→ Confirm that the same output is not set for use by all patches.
"Using the Same Audio Outputs for All Patches (Input/Phrase 1, 2, 3/Guide Output Select)" (p. 69)

❒ **Has anything been recorded to the phrases?**
→ In Play mode (p. 28), check the right display to confirm whether or not any material has been recorded.

Unable to hear sounds from device connected to AUX/MIC/INST

❒ **Are the AUX, MIC, and INST LEVEL knobs turned down?**
→ Adjust knobs to the suitable positions (p. 19).

❒ **Is "Input Output Select" set correctly?**
→ Confirm the output setting.
"Setting the Output for the Sounds Being Input (Input Output Select)" (p. 50)

Low volume from device connected to AUX/MIC/INST

❒ **Are you using a connection cable that introduces or adds resistance?**
→ Use a cable that does not add resistance (such as one from the Roland PCS Series).

Problems with Operation

Patches not switching

❒ **Is something other than the Play screen appearing in the display?**
→ With the RC-50, you cannot switch patches while any screen other than the Play screen is displayed. Press [EXIT] to return to the Play screen (p. 18).

Recording/overdubbing stops before finishing

❒ **Is there insufficient memory remaining?**
→ If memory is insufficient, initialize any unneeded patches (p. 44) before recording or overdubbing.

❒ **Is Loop Sync set to ON in Multi mode?**
→ When recording with Loop Sync set to ON, once the end of the longest phrase is reached, the RC-50 automatically switches to overdubbing.
"Playing Back Phrases with All Lengths and Beginnings Aligned: Loop Sync" (p. 28)

Recording starts immediately when Auto Start is set to ON

→ If large amounts of noise are being introduced by distortion effects or other effects processors connected to the input jack, it may be that recording is being triggered by that noise. Reduce the noise, for example by lowering the distortion level.

Unable to overdub

❒ **Is the phrase set to ONE SHOT (p. 52)?**
→ You cannot overdub to phrases set to ONE SHOT. If you want to overdub, change the ONE SHOT setting to LOOP.

Playback tempo not changing

❒ **Is recording or overdubbing in progress?**
→ You cannot change the tempo during recording or overdubbing. Change the tempo while the performance is stopped or being played back.

❒ **Is Tempo Sync set to ON in the phrase?**
→ When Tempo Sync is not set to ON in a phrase, the playback speed does not change even if the patch tempo is changed. To match the playback speed to the patch tempo, set the phrase's Tempo Sync setting to ON.
"Synchronizing Playback of the Phrase to the Patch Tempo (Tempo Sync)" (p. 53)

MIDI messages not being transmitted/received

❒ **Could there be a short in the MIDI cable?**
→ Try replacing the MIDI cable.

❒ **Is the external MIDI device properly connected?**
→ Check the connections to the external MIDI device.

❒ **Are the MIDI channels matched to those of the external MIDI device?**
→ Confirm that both devices are set to the same MIDI channels. (p. 75)

❒ **If transmitting from the RC-50, have you made the necessary settings for transmission?**
→ Check the Program Change Message Transmit ON/OFF (p. 75) and Control Change Message Transmit ON/OFF (p. 75) settings.

Problems with USB

Unable to communicate with computer

❒ **Is the USB cable properly connected?**

→ Check the connection.

❒ **Is the OS compatible with the RC-50?**

→ Confirm the OS used by the computer. (p. 80)

Unable to import WAV file

❒ **Are the file name and format of the WAV file correct?**

→ Confirm the file name and format of the WAV file. (p. 81)

Appendices

About MIDI

MIDI is an acronym for Musical Instrument Digital Interface, and is a world-wide standard for allowing electronic musical equipment to communicate by transmitting messages such as performance information and sound selections. Any MIDI equipped device is able to transmit applicable types of data to another MIDI equipped device, even if the two devices are different models or were made by different manufacturers.

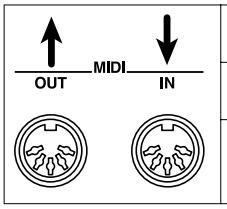
In MIDI, performance information such as playing a key or pressing a pedal are transmitted as MIDI Messages.

How MIDI messages are transmitted and received

First, we will explain briefly how MIDI messages are transmitted and received.

MIDI connectors

The following types of connector are used to convey MIDI messages. MIDI cables are connected to these connectors as needed.



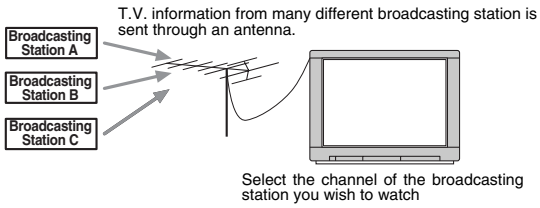
MIDI IN	This connector receives messages from another MIDI device.
MIDI OUT	This connector transmits messages from this device.
MIDI THRU	This connector re-transmits the messages that were received at MIDI IN.

The RC-50 features both MIDI IN and MIDI OUT connectors.

MIDI channels

MIDI is able to independently control more than one MIDI device over a single MIDI cable. This is possible because of the concept of MIDI channels.

The idea of MIDI channels is somewhat similar to the idea of television channels. By changing channels on a television set, you can view a variety of programs. This is because the information of a particular channel is received when the channels of the transmitter and receiver match.



MIDI has sixteen channels 1–16, and MIDI messages will be received by the instrument (the receiving device) whose channel matches the channel of the transmitter.

If omni mode is on, data of all MIDI channels will be received regardless of the MIDI channel setting. If you do not need to control a specific MIDI channel, you may set Omni On.

Main types of MIDI message used by the RC-50

MIDI includes many types of MIDI messages that can convey a variety of information. MIDI messages can be broadly divided into two types; messages that are handled separately by MIDI channel (channel messages), and messages that are handled without reference to a MIDI channel (system messages).

Channel messages

These messages are used to convey performance information. Normally these messages perform most of the control. The way in which a receiving device will react to each type of MIDI message will be determined by the settings of the receiving device.

Program change messages

These messages are generally used to select sounds, and include a program change number from 1 to 128 which specifies the desired sound. The RC-50 also allows you to select any of the 99 different patch numbers.

Control change messages

These messages are used to enhance the expressiveness of a performance. Each message includes a controller number, and the settings of the receiving device will determine what aspect of the sound will be affected by control change messages of a given controller number. With the RC-50, you can control specified functions with the CC#1/CC#7/CC#80 functions.

System messages

System messages include exclusive messages, messages used for synchronization, and messages used to keep a MIDI system running correctly. The RC-50 handles the following types of messages.

Realtime Messages

These messages are used for synchronization. They include Clock messages used to synchronize the tempo, Start and Stop messages to start/stop playback, and Continue (which re-starts playback from where it was last stopped).

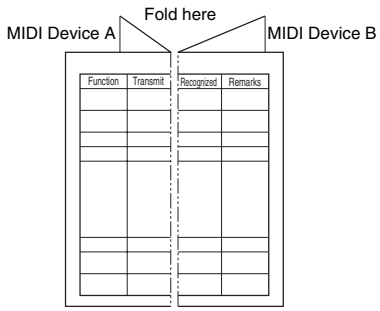
The RC-50 handles Start (FA) and Stop (FC) messages.

In addition, Realtime messages also include Active Sensing messages, which are used to monitor things such as whether or not any MIDI cables have been disconnected; the RC-50 supports the use of these messages.

About the MIDI Implementation Chart

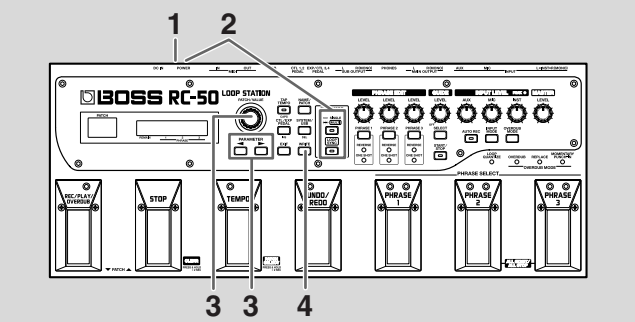
MIDI allows a variety of messages to be exchanged between instruments, but it is not necessarily the case that all types of message can be exchanged between any two MIDI devices. Two devices can communicate only if they both use the types of messages that they have in common.

Thus, every owner's manual for a MIDI device includes a MIDI Implementation Chart. This chart shows the types of message that the device is able to transmit and receive. By comparing the MIDI implementation charts of two devices, you can tell at a glance which messages they will be able to exchange. Since the charts are always of a uniform size, you can simply place the two charts side by side.



Restoring the Factory Settings (Factory Reset)

Restoring the RC-50's system settings (System parameters) to their original factory default settings is referred to as "Factory Reset." In addition to restoring the system settings to the original factory settings, you can also initialize all of the patches (INIT PATCH).



1. Turn off the power.

2. While holding down [PLAY MODE] and [LOOP SYNC], turn on the power.

The Factory Reset range setting screen appears in the display.



* *To cancel Factory Reset, press [EXIT].*

3. Press PARAMETER [◄] [►] to move the cursor, and rotate the PATCH/VALUE dial to specify the range of settings you want to restore to factory settings.

Available Settings	Description
SYSTEM	System parameters * *Does not include the Preset Protect (p. 69) settings.*
PATCH	All patches (all phrase data deleted)

NOTE

Selecting PATCH results in a loss of all patch content.

* *When Preset Protect (p. 69) is set to ON, the data in Patch Numbers 1–5 is left intact.*

4. If you want to proceed with the factory reset, press [ENTER].

When SYSTEM is selected, the System Parameters are returned to their original factory settings.

When PATCH is selected, all of the patches are initialized.

Once the Factory Reset is completed, the Play screen returns to the display.

MEMO

- For more on the factory default settings for each parameter, refer to the "Parameter List" (p. 96).
- The included CD contains the "ROLAND" folder with the factory default data.
  If you want to restore the factory default patches and phrases, recover the data as described in "Chapter 9 Connecting to Computers" (p. 79).

Parameter List

System Parameters

Displayed	Name	Available Settings	Factory Default Setting (Initial Value)
SYSTEM			
LCD Contrast	LCD Contrast	1–16	16
Patch Extent	Patch Extent	Start: 1–99 End: 1–99	Start: 1 End: 99
Knob Mode	Knob Mode	IMMEDIATE, CURRENT SETTING, KNOB POSITION	IMMEDIATE
Auto Rec Trigger	Auto Recording Trigger Level	0–100	50
REC Pdl Act	REC Pedal Action	REC → PLAY, REC → OVERDUB	REC → PLAY
Input Out	Input Output Select	PATCH, MAIN, SUB, MAIN+SUB, MUTE	PATCH
Phrase1, 2, 3 Out	Phrase 1, 2, 3 Output Select	PATCH, MAIN, SUB, MAIN+SUB	PATCH
Guide Out	Guide Output Select	PATCH, MAIN, SUB, MAIN+SUB	PATCH
PresetProtct	Preset Protect	OFF, ON	ON
MIDI			
MIDI Rx Ch	MIDI Receive Channel	1–16	1
MIDI Omni	MIDI Omni Mode	OFF, ON	ON
MIDI Tx Ch	MIDI Transmit Channel	1–16, RX	RX
MIDI Sync	MIDI Sync	PATCH, AUTO, INTERNAL, REMOTE	PATCH
MIDI PC Out	MIDI Program Change Out	OFF, ON	ON
MIDI CC Out	MIDI Control Change Out	OFF, ON	ON
PEDAL			
TEMPO Func: SYS	TEMPO Pedal Function	Refer to p. 71	PATCH TEMPO (TAP)
UNDO Func: SYS	UNDO/REDO Pedal Function	Refer to p. 71	UNDO/REDO
CTL1 Func: SYS	CTL1 Pedal Function	Refer to p. 71	GUIDE START/STOP
CTL2 Func: SYS	CTL2 Pedal Function	Refer to p. 71	ALL START/STOP
CTL3 Func: SYS	CTL3 Pedal Function	Refer to p. 71	CURRENT CLEAR
CTL4 Func: SYS	CTL4 Pedal Function	Refer to p. 71	OVERDUB MODE INC
EXP Func: SYS	EXP Pedal Function	Refer to p. 72	PATCH LEVEL
EXP Level Min: SYS	EXP Pedal Min Level	0–200	0
EXP Level Max: SYS	EXP Pedal Max Level	0–200	100
EXP Tempo Min: SYS	EXP Pedal Tempo Min	40.0–250.0	40.0
EXP Tempo Max: SYS	EXP Pedal Tempo Min	40.0–250.0	250.0
CC#1 Func: SYS	CC#1 Function	Refer to p. 78	OFF
CC#7 Func: SYS	CC#7 Function	Refer to p. 78	OFF
CC#80 Func: SYS	CC#80 Function	Refer to p. 78	OFF

Patch Parameters

Displayed	Name	Available Settings	Factory Default Setting (Initial Value)
NAME			
Patch Name	Patch Name	Max. 16 characters	INIT PATCH
COMMON			
Level	Patch Level	0–200	100
PhraseChng	Phrase Change Mode	IMMEDIATE, LOOP END	IMMEDIATE
Fade In Time	Fade In Time	0–100	50
Fade Out Time	Fade Out Time	0–100	50
SimulStart	Simul Start	OFF, ON	1: OFF, 2: OFF, 3: OFF
Input Out	Input Output select	MAIN, SUB, MAIN+SUB	MAIN+SUB
MIDI Sync	MIDI Sync	AUTO, INTERNAL, REMOTE	AUTO
Current Phrase	Current Phrase	Phrase 1/2/3	Phrase 1
PLAY MODE			
Play Mode	Play Mode	SINGLE, MULTI	MULTI
LOOP SYNC			
Loop Sync	Loop Sync	OFF, ON	ON
OVERDUB MODE			
Overdub Mode	Overdubbing Mode	OVERDUB, REPLACE, MOMENTARY PUNCH-IN	OVERDUB
INPUT MODE			
AUX Center Cancel	AUX Center Cancel	OFF, ON	OFF
AUX & MIC Flat Amp	AUX & Mic Flat Amp Simulate	OFF, ON	OFF
Rec Mode	Recording Mode	STEREO, MONO	STEREO
TEMPO			
Tempo	Patch Tempo	40.0–250.0	120
AUTO REC			
Auto Rec	Auto Recording	OFF, ON	OFF
GUIDE			
Pattern	Guide Pattern	Refer to p. 41	Simple Beat 1
Beat	Beat	2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 5/8, 6/8, 7/8, 8/8, 9/8, 10/8, 11/8, 12/8, 13/8, 14/8, 15/8	4/4
Rec Count	Recording Count In	OFF, 1 MEAS	OFF
Play Count	Playback Count In	OFF, 1 MEAS	OFF
Level	Guide Level	OFF, 2–200	100
Output	Guide Output Select	MAIN, SUB, MAIN+SUB	MAIN+SUB
PEDAL			
TEMPO Func: PAT	TEMPO Pedal Function	Refer to p. 71	PATCH TEMPO (TAP)
UNDO Func: PAT	UNDO/REDO Pedal Function	Refer to p. 71	UNDO/REDO
CTL1 Func: PAT	CTL1 Pedal Function	Refer to p. 71	GUIDE START/STOP
CTL2 Func: PAT	CTL2 Pedal Function	Refer to p. 71	ALL START/STOP
CTL3 Func: PAT	CTL3 Pedal Function	Refer to p. 71	CURRENT CLEAR
CTL4 Func: PAT	CTL4 Pedal Function	Refer to p. 71	OVERDUB MODE INC
EXP Func: PAT	EXP Pedal Function	Refer to p. 72	PATCH LEVEL
EXP Level Min: PAT	EXP Pedal Min Level	0–200	0

Displayed	Name	Available Settings	Factory Default Setting (Initial Value)
EXP Level Max: PAT	EXP Pedal Max Level	0–200	100
EXP Tempo Min: PAT	EXP Pedal Tempo	Min 40.0–250.0	40.0
EXP Tempo Max: PAT	EXP Pedal Tempo	Max 40.0–250.0	250.0
CC#1 Func: PAT	CC#1 Function	Refer to p. 78	OFF
CC#7 Func: PAT	CC#7 Function	Refer to p. 78	OFF
CC#80 Func: PAT	CC#80 Function	Refer to p. 78	OFF
PHRASE 1–3			
One Shot	One Shot	LOOP, ONE SHOT	LOOP
Reverse	Reverse	OFF, ON	OFF
Start	Start Mode	IMMEDIATE, FADE IN	IMMEDIATE
Stop	Stop Mode	IMMEDIATE, FADE OUT, LOOP END	IMMEDIATE
Level	Phrase Level	0–200	100
Pan	Pan	L50–CENTER–R50	CENTER
Tempo Sync	Tempo Sync	OFF, ON	ON
Original Tempo	Original Tempo	40.0–250.0	120.0
Output	Output Select	MAIN, SUB, MAIN+SUB	MAIN+SUB

LOOP STATION
Model RC-50

MIDI Implementation Chart

Date: Oct. 11, 2005
Version: 1.00

Function...		Transmitted	Recognized	Remarks
Basic	Default	1–16	1–16	Memorized
Channel	Changed	1–16	1–16	
Mode	Default	X	OMNI ON/OFF	Memorized
	Messages	X	X	
	Altered	**********	X	
Note Number :	True Voice	X **********	X **********	
Velocity	Note ON	X	X	
	Note OFF	X	X	
After Touch	Key's	X	X	
	Ch's	X	X	
Pitch Bend		X	X	
Control Change	1	X	O	
	7	O * 1	O	
	80	O * 2	O	
	81	O * 3	X	
Prog Change	: True #	O 0–98	O 0–98	Program Number 1–99
System Exclusive		X	X	
System Common	: Song Pos	X	X	
	: Song Sel	X	X	
	: Tune	X	X	
System Real Time	: Clock	O	O	
	: Command	O * 4	O * 5	
Aux Message	: All sound off	X	X	
	: Local ON/OFF	X	X	
	: All Notes OFF	X	X	
	: Active Sense	O	O	
	: Reset	X	X	
Notes		* 1 Transmitted when EXP pedal is operated. * 2 Transmitted when CTL 1 pedal is operated. * 3 Transmitted when CTL 2 pedal is operated. * 4 FA is transmitted upon start of current phrase; FC is transmitted when all phrases are stopped. * 5 With Play mode set to Single: current phrase starts upon reception of FA, stops upon reception of FC. With Play mode set to Multi: current phrase starts upon reception of FA, with all stop upon reception of FC.		

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO O : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO X : No

Main Specifications

RC-50: Loop Station

AD Conversion
24 bit

DA Conversion
24 bit

Sampling Frequency
44.1 kHz

Program Memories
99

Nominal Input Level
INST: -10 dBu
MIC: -50 dBu
AUX: -16 dBu

Input Impedance
INST: 1 MΩ
MIC: 1 kΩ
AUX: 100 kΩ

Nominal Output Level
MAIN OUTPUT: -10 dBu
SUB OUTPUT: -10 dBu

Output Impedance
MAIN OUTPUT: 2 kΩ
SUB OUTPUT: 2 kΩ
PHONES: 47 Ω

Available Recording Time
STEREO: Approx. 24 minutes
MONO: Approx. 49 minutes

* *The times listed above take into account the amount of memory needed for the actual recording combined with the memory required for the RC-50's operations (e.g., Undo/Redo).*

Control

<Front Panel>
REC/PLAY/OVERDUB pedal
STOP pedal
TEMPO pedal
UNDO/REDO pedal
PHRASE 1 pedal
PHRASE 2 pedal
PHRASE 3 pedal
PATCH/VALUE dial
PARAMETER buttons (◄ / ►)
TAP TEMPO button
NAME/PATCH button
CTL/EXP PEDAL button
SYSTEM/USB button
EXIT button
WRITE button
PLAY MODE button
LOOP SYNC button
AUTO REC button
INPUT MODE button
OVERDUB MODE button
LOOP QUANTIZE indicator
OVERDUB MODE indicators
(OVERDUB, REPLACE, MOMENTARY PUNCH-IN)

(PHRASE EDIT)
PHRASE LEVEL knobs (PHRASE 1, 2, 3)
PHRASE buttons (PHRASE 1, 2, 3)
REVERSE indicators (PHRASE 1, 2, 3)
ONE SHOT indicators (PHRASE 1, 2, 3)

(GUIDE)
LEVEL knob
SELECT button
START/STOP button

(INPUT LEVEL)
AUX knob
MIC knob
INST knob
PEAK indicator

(MASTER)
LEVEL knob

<Rear Panel>
PHANTOM switch
POWER switch

Display
16 characters, 2 lines (backlit LCD)
2 characters, 7 segment LED

Connectors

INST jacks R (MONO)/L (1/4 inch phone type)
MIC connector (XLR type; supports use of phantom power)
AUX jack (Stereo miniature phone type)
MAIN OUTPUT jacks R (MONO)/L (1/4 inch phone type)
PHONES jack (Stereo 1/4 inch phone type)
SUB OUTPUT jacks R (MONO)/L (1/4 inch phone type)
EXP/CTL 3,4 PEDAL jack (TRS 1/4 inch phone type)
CTL 1,2 PEDAL jack (TRS 1/4 inch phone type)
USB connector
MIDI connectors (IN/OUT)
DC IN (AC adaptor) jack

Power Supply

DC 9 V: Supply AC adaptor (Roland ACI or ACB series)

Current Draw

450 mA

Dimensions

472 (W) x 198 (D) x 64 (H) mm
18-5/8 (W) x 7-13/16 (D) x 2-9/16 (H) inches

Weight

2.9 kg/ 6 lbs 7 oz (excluding AC adaptor)

Accessories

AC adaptor (Roland ACI or ACB series)
USB cable
Owner's Manual
Roland Service (information sheet)
Sound Library for RC-50 (Sample Phrase CD)

Options

Foot Switch: FS-5U
Dual Foot Switch: FS-6
Expression Pedal: EV-5 (Roland), FV-500L/H
Foot Switch Cable: PCS-31 (Roland)
(Stereo 1/4 inch phone plug–1/4 inch phone plug x 2)

* *0 dBu = 0.775 Vrms*

NOTE

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

About Sound Library for RC-50

This CD is **CD Extra**-compatible and includes sample phrases for the RC-50 in the following formats.

- Audio data that can be played back with audio CD players
- WAV files usable with computers

About the Phrase List

★	Audio data is divided into two or three phrases and converted to WAV files. These are suitable for use in Single Mode.
★★	Audio data is divided into drum and bass sounds and converted to WAV files. These are suitable for use in Multi Mode.
★★★	These are effects sounds.
*	Contains DISCRETE DRUMS® drum loops.
**	Contains BOSS Dr. Rhythm DR-880 drum sounds.

Note

- The WAV files cannot be imported using the same file names on the CD. Change the file names using the procedures described in "About WAV Files Handled by the RC-50" (p. 81).
- When the included CD is loaded by the computer, the "ROLAND" folder also appears in addition to the WAV files. This folder contains the factory default data.

  * *Recovering data merely by copying this folder to the RC-50 as is overwrites the "ROLAND" folder, returning the unit to its original factory settings, but any data for original phrases already saved to this folder is cleared. Recover only the data required to the RC-50.*

Phrase List

Track	Name	Original Tempo	File Name		
01	Funky Blues	126	FunkBlP1.wav	★	*
		126	FunkBlP2.wav	★	*
		126	FunkBlP3.wav	★	*
02	Shuffle Groove	158	SflGrvP1.wav	★	**
		158	SflGrvP2.wav	★	**
		158	SflGrvP3.wav	★	**
03	Big Rock	74	BigRckP1.wav	★	*
		74	BigRckP2.wav	★	*
		74	BigRckP3.wav	★	*
04	Rock Ballad	67	RockBlld.wav		**
05	Slap Funk	100	SlapFunk.wav		*
06	Power Metal	234	PwrMetal.wav		*
07	Chicago Blues	126	ChcgBlP1.wav	★	**
		126	ChcgBlP2.wav	★	**
		126	ChcgBlP3.wav	★	**
08	Straight Rock	118	StrghtRk.wav		**
09	Power Funk	108	PowrFunk.wav		**
10	Slow Blues	70	SloBlsP1.wav	★	**
		70	SloBlsP2.wav	★	**
		70	SloBlsP3.wav	★	**
11	Funk Groove	95	Funk_Grv.wav		*
12	Mode Jazz	180	ModeJzP1.wav	★	**
		180	ModeJzP2.wav	★	**
13	Slow Rock1	82	SloRock1.wav		
14	Slow Rock2	118	SloRock2.wav		
15	T.Wah Funk	105	TWahFunk.wav		
16	Clav Funk	105	ClavFunk.wav		
17	Straight Funk	115	StrtFunk.wav		
18	Slap Bass	147	SlapBass.wav		
19	Acid Funk	105	AcidFunk.wav		
20	Simple Groove	120	SimplGrv.wav		
21	Dance1	130	Dance1.wav		
22	Dance2	130	Dance2.wav		
23	Dance3	130	Dance3.wav		
24	Cool Groove	103	CoolGrDr.wav	★★	**
		103	CoolGrBs.wav	★★	**
25	Shuffle Funk	100	ShflFunk.wav		**
26	Slow Groove	70	SloGrvDr.wav	★★	**
		70	SloGrvBs.wav	★★	**
27	Rock Jam	96	Rock_Jam.wav		**
28	Classic Rock	140	ClassRck.wav		**
29	Snare Groove	126	SnareGrv.wav		**
30	Blues Rhythm	56	BlsRhthm.wav		**
31	Shuffle	130	ShffleDr.wav	★★	**
		130	ShffleBs.wav	★★	**
32	Mid-Fast Rock	136	MidFstRk.wav		**
33	Reggae Shuffle	140	ReggShfl.wav		**
34	Half-Time Shuffle	86	HlfSflDr.wav	★★	**
		86	HlfSflBs.wav	★★	**
35	Rock Toms	94	RockToms.wav		**
36	Downbeat Snare	118	DwnbtSnr.wav		**
37	Surf Rock	150	SurfRkDr.wav	★★	**
		150	SurfRkBs.wav	★★	**
38	Heavy Rock1	99	HvyRock1.wav		**
39	Heavy Rock2	86	HvyRock2.wav		**
40	Heavy Rock3	78	HvyRk3Dr.wav	★★	**
		78	HvyRk3Bs.wav	★★	**
41	Metal Beat1	246	MtlBeat1.wav		**
42	Metal Beat2	210	MtlBeat2.wav		**
43	Heavy Shuffle	170	HvyShffl.wav		**
44	Acoustic Rock1	110	AcoRk1Dr.wav	★★	**
		110	AcoRk1Bs.wav	★★	**
45	Acoustic Rock2	110	AcoRock2.wav		**
46	Funk1	90	Funk1.wav		**
47	Funk2	106	Funk2Dr.wav	★★	**
		106	Funk2Bs.wav	★★	**
48	Funk3	116	Funk3Dr.wav	★★	**
		116	Funk3Bs.wav	★★	**
49	Funk4	118	Funk4.wav		**
50	Funk Rock	116	FunkRock.wav		**
51	Fast Funk	150	FastFunk.wav		**
52	Fusion1	126	Fusion1.wav		**
53	Fusion2	98	Fusion2.wav		**
54	Ballad1	68	Balld1Dr.wav	★★	**
		68	Balld1Bs.wav	★★	**
55	Ballad2	64	Ballad2.wav		**
56	Ballad3	68	Ballad3.wav		**
57	Ballad4	70	Ballad4.wav		**
58	Ballad5	60	Ballad5.wav		**
59	Swing Jazz1	160	SwingJz1.wav		**
60	Swing Jazz2	145	SwingJz2.wav		**
61	Latin Pop1	115	LtPop1Dr.wav	★★	**
		115	LtPop1Bs.wav	★★	**
62	Latin Pop2	120	LatnPop2.wav		**
63	Perc Bossa	110	PerBssDr.wav	★★	**
		110	PerBssBs.wav	★★	**
64	Samba	120	Samba.wav		**
65	R&B Pop1	100	RBPop1Dr.wav	★★	**
		100	RBPop1Bs.wav	★★	**
66	R&B Pop2	104	RnB_Pop2.wav		**
67	R&B Pop3	84	RnB_Pop3.wav		**
68	Simple Beat1	110	SimplBt1.wav		**
69	Simple Beat2	115	SimplBt2.wav		**
70	Simple Beat3	110	Simpl3Dr.wav	★★	**
		110	Simpl3Bs.wav	★★	**
71	Simple Beat4	124	SimplBt4.wav		**
72	Slow Shuffle	68	SloSflDr.wav	★★	**
		68	SloSflBs.wav	★★	**
73	Kick&HiHat1	112	KckHH1Dr.wav	★★	**
		112	KckHH1Bs.wav	★★	**
74	Kick&HiHat2	112	Kick_HH2.wav		**
75	Synth FX1	94	SynthFX1.wav	★★★	
76	Synth FX2	77	SynthFX2.wav	★★★	
77	Synth FX3	155.5	SynthFX3.wav	★★★	
78	Birds1	97	Birds1.wav	★★★	
79	Birds2	70	Birds2.wav	★★★	
80	Birds3	71	Birds3.wav	★★★	
81	Foot Steps	114	FootStep.wav	★★★	
82	Insect	90	Insect.wav	★★★	
83	Machine	86	Machine.wav	★★★	
84	Mysterious	155	Mystery.wav	★★★	
85	Owl	106	Owl.wav	★★★	
86	Applause	96	Applause.wav	★★★	
87	Water1	150.5	Water1.wav	★★★	
88	Water2	121	Water2.wav	★★★	
89	Water3	136	Water3.wav	★★★	
90	Water4	117	Water4.wav	★★★	
91	Honk	105	Honk.wav	★★★	
92	Plane	103.5	Plane.wav	★★★	
93	Motor1	140	Motor1.wav	★★★	
94	Motor2	127	Motor2.wav	★★★	
95	Swing	91	Swing.wav	★★★	
96	Zap1	68.5	Zap1.wav	★★★	
97	Zap2	84.5	Zap2.wav	★★★	
98	Zap3	147	Zap3.wav	★★★	

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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

CE This product complies with the requirements of European Directive 89/336/EEC.

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.

For the USA

DECLARATION OF CONFORMITY Compliance Information Statement

Model Name : RC-50
Type of Equipment : Loop Station
Responsible Party : Roland Corporation U.S.
Address : 5100 S.Eastern Avenue, Los Angeles, CA 90040-2938
Telephone : (323) 890-3700



This product must be disposed of separately at your local waste recycling centre.
Do not dispose of in household waste bin.

BOSS Corporation

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