

HANDSONIC

HPD-20

Owner's Manual



Roland



Owner's Manual (this document)

Read this first.



PDF Manual (download from the Web)

- **Sound List**

This is a list of the sounds and effect parameters built into the HandSonic.

- **MIDI Implementation**

This is detailed information about MIDI messages.



To obtain the PDF manual

1. Enter the following URL in your computer.
<http://www.roland.com/manuals/>
▼
2. Choose "HandSonic HPD-20" as the product name.

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Quick Guide

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Parameter Guide (Things You Can Do)

This section explains all of the HandSonic's functions and settings in each screen, organized according to the menu structure. You can look up a topic according to its screen, or by what you want to accomplish.

For the procedure, refer to "Menu Operations" (p. 22).

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The appendix contains material that will help you when you have a problem or when an error occurs. Please be sure to read the safety cautions and the guidelines for use, and use the HandSonic safely.

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Before using this unit, carefully read the sections entitled "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (p. 74; p. 75). 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 of your new unit, read the Owner's manual in its entirety. This manual should be saved and kept on hand as a convenient reference.

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What is the HandSonic?

The HandSonic is an electronic percussion instrument that can be played with the hands and fingers. The sound can be varied by the playing position, pressure or interactivity between different pads. With built-in sounds and the possibility of using your own sounds, it's a unique instrument that will adapt to any musical style.

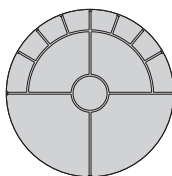
Look What You Can Do with the HandSonic

Play with your hands and fingers

From powerful shots using your palm, to subtle grooves using your fingertips, you'll have the full range of dynamic expressiveness offered by a percussion instrument. You can also use the D-BEAM to control the sound without touching the instrument.

Play combinations of sounds

The striking surface is divided into 13 sections, and your choice of more than 800 instrumental sounds and sound effects can be assigned to each section. You can store 200 of these sets of assignments and recall them instantly while you perform.



Edit sounds individually

You can individually make adjustments to each sound; for example, you can adjust the volume, raise or lower the pitch, shorten the decay, or brighten the tonal character.

Use effects to modify the sound

The built-in effects let you modify the sound in a variety of ways, such as distorting it or adding reverb. You can also control the effects while you perform, opening up fresh new possibilities that are not available on acoustic percussion.

Add your own sounds

Your own original sounds can be added to the sounds that are built-into the HandSonic.

Record and play back

It's easy to record your performance. Objectively listening to your playing is a great way to improve your skill. You can also export your performance as an audio file.

Metronome

A metronome function is built-in. It's a real convenience for rhythm training or for warming-up before a performance.

Works with your computer

Connect the HandSonic to your computer via USB, and you'll be able to exchange audio and MIDI data. Since the HandSonic doesn't require sticks, it's ideal for sound design or performance with your computer.



Add expansion pads

You can expand your system by adding a kick pad, footswitch, or hi-hat control pedal and using your feet to play. You can also add a bar pad or cymbal pad that you play using sticks, and play the HandSonic as a percussion set.



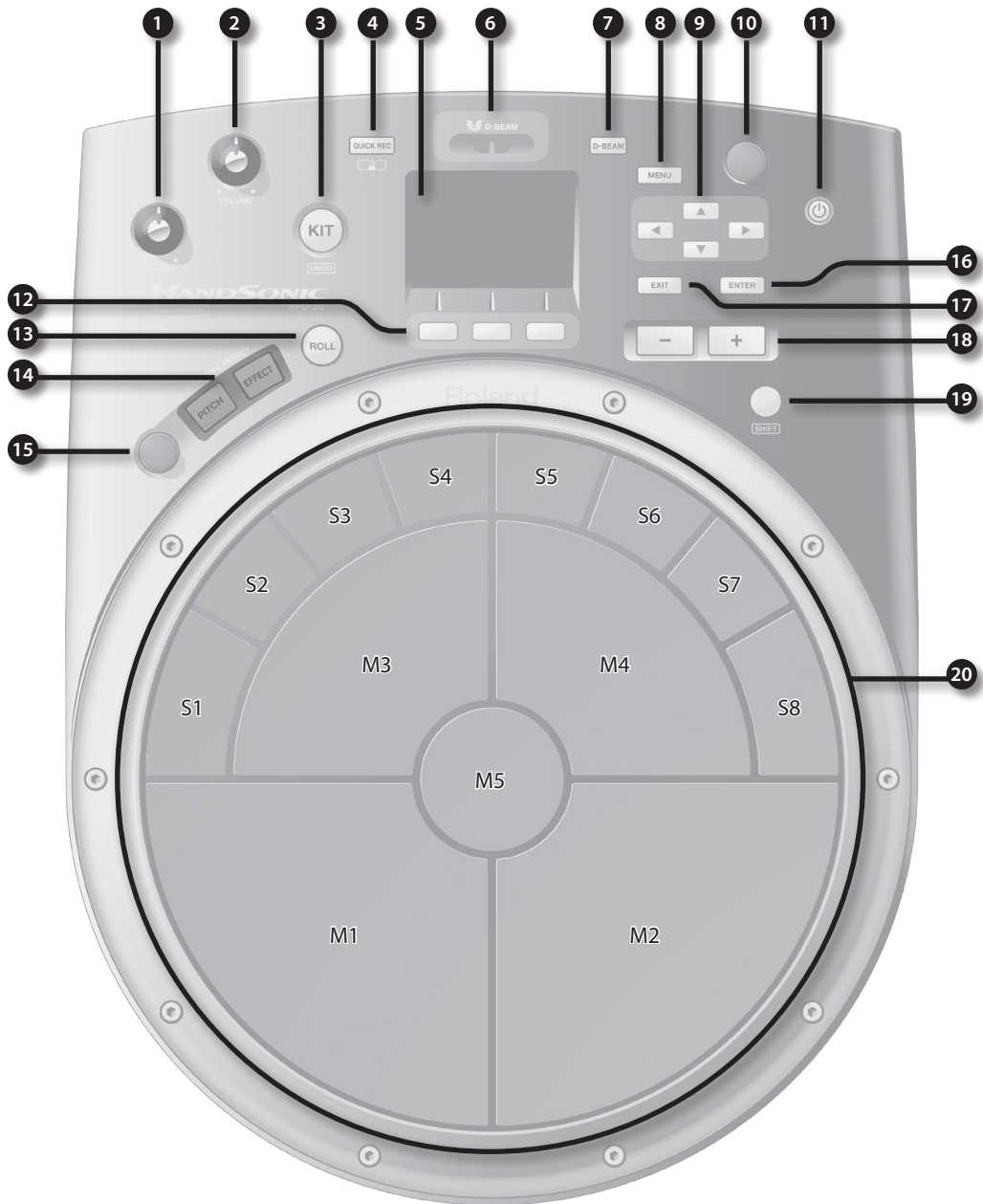
The HandSonic SuperNATURAL sound engine

SuperNATURAL

This percussion sound engine allows the nuances of your hand percussion (dynamics, position, mute, etc.) to be accurately reflected in the resulting sound, giving you a sense of presence, a comfortable playing feel, and a naturally expressive tone.

Panel Descriptions

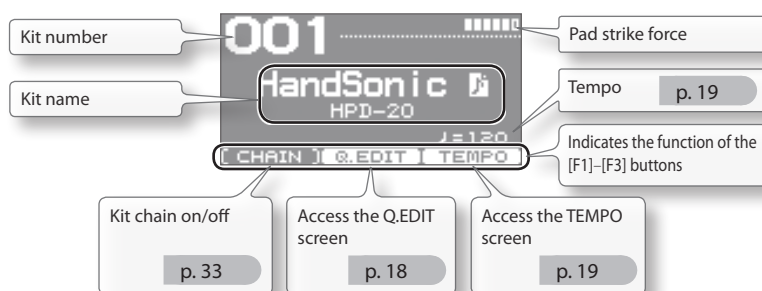
Top Panel



Number	Name	Explanation	Page
1	[PHONES] knob	Adjusts the volume of the headphones connected to the PHONES jack.	p. 10
2	[VOLUME] knob	Adjusts the volume of the OUTPUT jacks.	p. 10
3	[KIT] button	Displays the Kit screen (the screen you use for performance).	–
		Hold down the [SHIFT] button and press the [KIT] button to UNDO an operation.	p. 33
4	[QUICK REC] button	Displays the QUICK REC screen, where you can record and play back your performance.	p. 20
		Hold down the [SHIFT] button and press the [QUICK REC] button to turn the metronome on/off.	p. 19
5	Display	Shows the number and name of the currently selected kit. Menu screens are also shown here, allowing you to edit a variety of settings.	–
6	D-BEAM	This is the D-BEAM sensor area. By positioning your hand above this sensor you can play sounds or modify them.	p. 15
7	[D-BEAM] button	Turns the D-BEAM on/off. The button will light if this is on.	
8	[MENU] button	Accesses the menu screen.	p. 45
9	Cursor buttons [▲] [▼] [◀] [▶]	Move the cursor (the selected item) in the screen up, down, left, or right.	p. 22
10	Value knob	Turn this knob to change the kit number or parameter value. The knob has the same function as the [-][+] buttons. If you turn it while holding down the [SHIFT] button, the value will change in larger steps.	p. 22
11	[] button	Turns the power of the HandSonic on/off.	p. 10
12	Function buttons [F1] [F2] [F3]	The function of these buttons will change depending on the screen. The names of the current functions are shown in the bottom of the screen. From the left, these are called the [F1], [F2], and [F3] buttons.	p. 22
13	[ROLL] button	Turns the Roll function on/off. When the function is on the button will be lit, and a roll will be heard when you apply pressure to the pad.	p. 14
14	[PITCH] button [EFFECT] button	Choose what will be controlled by the realtime modify knob. [PITCH]: The pitch will be controlled. [EFFECT]: The multi-effect will be controlled.	p. 15
15	Realtime Modify knob	Turn this knob to temporarily modify the sound.	
16	[ENTER] button	Confirms a selection, such as in a menu.	p. 22
17	[EXIT] button	Returns to the previous screen.	–
18	[-] [+] buttons	Modify the kit number or parameter value. This has the same function as the value knob. If you use the [-][+] buttons while holding down the [SHIFT] button, the value will change in larger steps.	p. 22
19	[SHIFT] button	You can access a variety of functions by using this in conjunction with other buttons.	p. 68
20	Pads	Strike these surfaces (pads) to play. By varying your striking force and pressure, you can obtain a variety of performance expressions.	p. 14
		These pads are referred to as M1–5 (Main) and S1–8 (Sub).	

Display

When you turn on the power, the display will show a “kit screen” like the one shown at right.

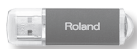


* The explanations in this manual include illustrations that depict what should typically be shown by the display. Note, however, that your unit may incorporate a newer, enhanced version of the system (e.g., includes newer sounds), so what you actually see in the display may not always match what appears in the manual.

Rear Panel (Connections)

USB MEMORY port

Connect a USB flash drive (sold separately) here. You can save the HandSonic's settings on a USB flash drive. You can also use a USB flash drive to load user instruments.



p. 38

p. 34

USB COMPUTER port

Use a USB cable to connect the HandSonic to your computer. You can use DAW software on your computer to record the HandSonic's performance as audio or as MIDI.

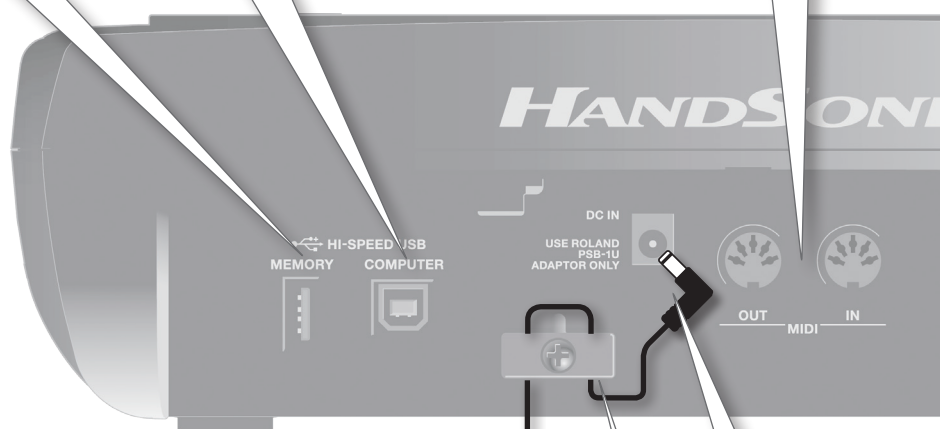


p. 44

MIDI connectors

Connect a sound module or other external MIDI device here. You can also control an external video device.

p. 50



* This connection is required.

DC IN jack

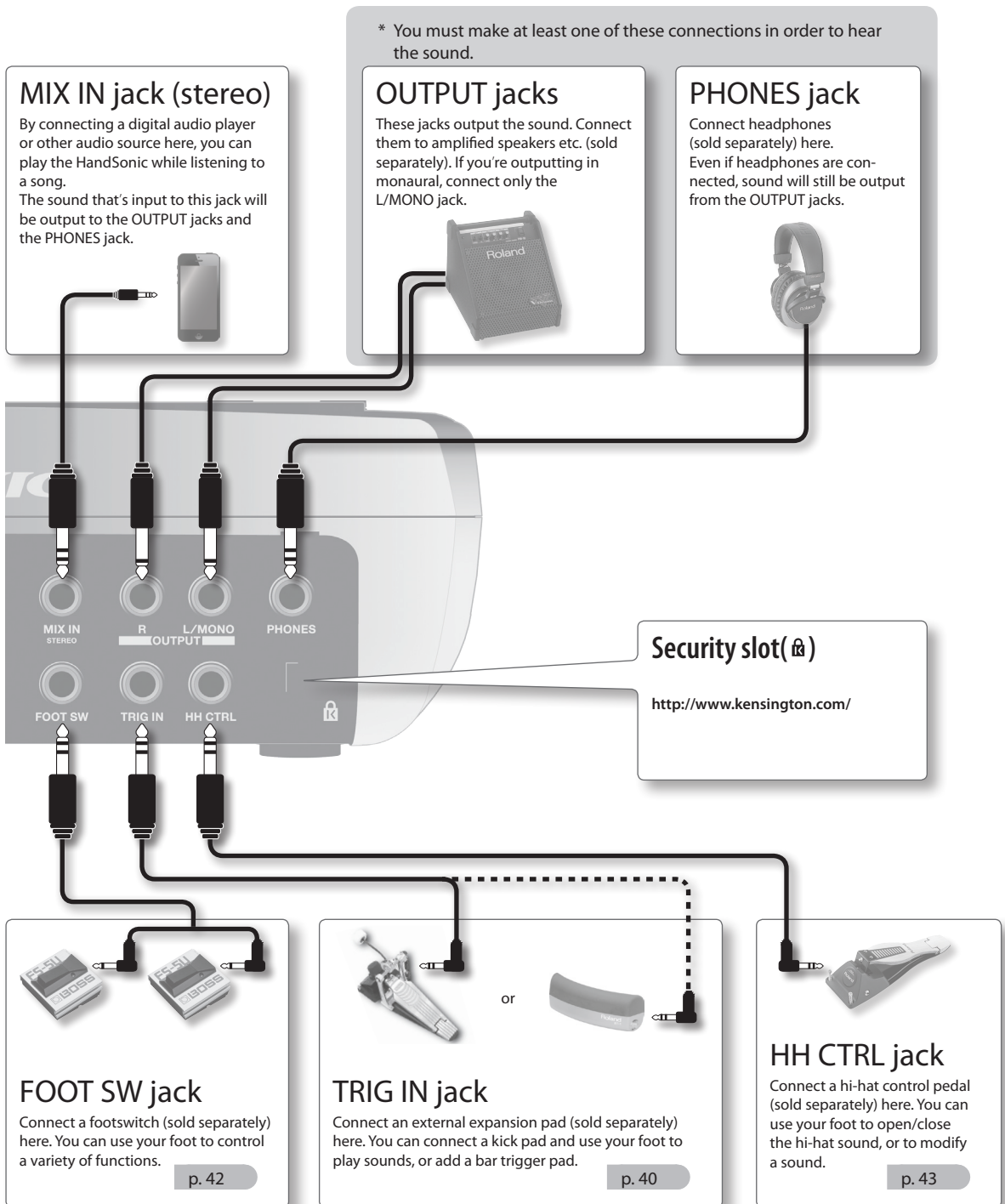
Connect the included AC adaptor here.

Place the AC adaptor so the side with the indicator (see illustration) faces upwards and the side with textual information faces downwards. The indicator will light when you plug the AC adaptor into an AC outlet.

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 DC IN jack, anchor the power cord using the cord hook, as shown in the illustration.

NOTE

- * Never insert or remove a USB flash drives while this unit is turned on. Doing so may corrupt the unit's data or the data on the USB flash drives.
- * Carefully insert the USB flash drives all the way in—until it is firmly in place.
- * Use USB flash drive sold by Roland. We cannot guarantee operation if other products are used.



* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.

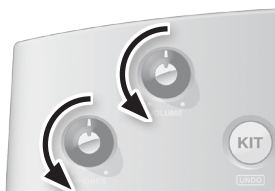
Turning the Power On/Off

NOTE

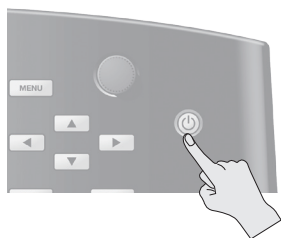
- * Once everything is properly connected (p. 8), be sure to follow the procedure below to turn on their power. If you turn on equipment in the wrong order, you risk causing malfunction or equipment failure.
- * Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

Turning the power on

1. Minimize the volume by turning the [VOLUME] and [PHONES] knobs all the way to the left.

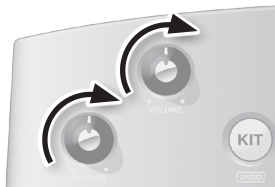


2. Minimize the volume of the amplified speakers that are connected to the OUTPUT jacks.
3. Press the [⏻] button.
The HandSonic's power will turn on.



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

4. Turn on the power of your amplified speakers, adjust the volume to an appropriate level.
5. Turn the [VOLUME] and [PHONES] knobs toward the right to adjust the volume.

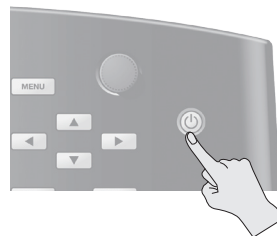


Turning the power off

1. Minimize the volume of the HandSonic and of your amplified speakers.



2. Turn off the power of your amplified speakers.
3. Hold down the HandSonic's [⏻] button.
The SHUTDOWN screen will appear.



4. Use the cursor [◀ ▶] buttons to select "YES," and press the [ENTER] button.



5. Verify that the screen has gone dark.
The HandSonic will be powered-off.

About Auto Off function

The power to this unit will be turned off automatically after a predetermined amount of time has passed since it was last used for playing music, or its buttons or controls were operated (Auto Off function).
If you do not want the power to be turned off automatically, disengage the Auto Off function (p. 65).
To restore power, turn the power on again.

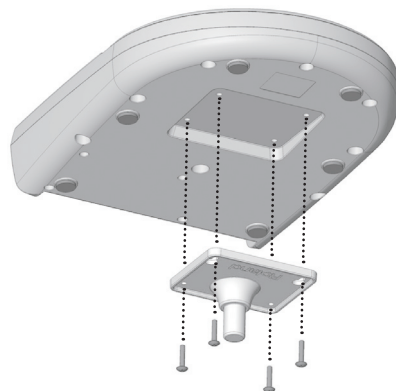
Attaching to a Stand

If you want to play the HandSonic with a stand, use a pad stand (PDS-10; sold separately).

- * You must use the screws on the bottom panel of the HandSonic. Using any other screws may cause malfunction.
- * When turning the unit over, be careful so as to protect the buttons and knobs from damage. Also, handle the unit carefully; do not drop it.

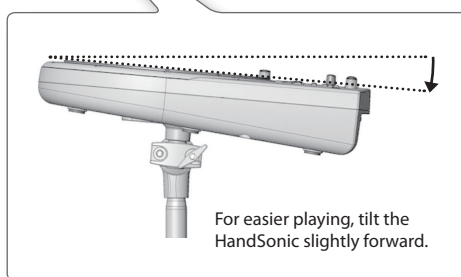
1. Using the screws on the bottom of the HandSonic, attach the PDS-10 mounting plate.

- * Do not use the screws included with the pad stand.



2. Attach the HandSonic to the pad stand.

For the details on how to assemble the pad stand and use the mounting plate, refer to the owner's manual of the pad stand.



HandSonic Basics

This section explains the basic terms that you'll need to know, and how the HandSonic is structured.

Pads and Kits

Pads

The HandSonic has 13 striking surfaces that you can strike with your hands and fingers. Each of these striking surfaces is called a **"pad."** You can assign a different sound to each pad.

A sound can also be assigned to the D-BEAM just like a pad. This means that the HandSonic lets you play a large number of instrumental sounds simultaneously, or skillfully switch between the sounds of different playing techniques.

Kits

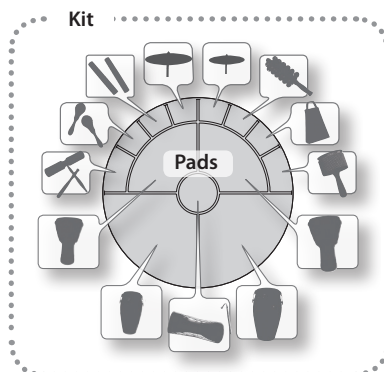
A set of sounds assigned to these pads is called a **"kit."**

The HandSonic can store 200 such kits; you can switch instantly between kits.

You can edit the pitch, duration, and tonal character of the sound assigned to each pad; these edited sounds are automatically saved in the kit, and will be applied the next time you select that kit.

The HandSonic comes with more than 100 such kits that cover a wide range of musical styles.

When you power-on the HandSonic, the number and name of the currently selected kit is shown. This is called the **"kit screen."**



Kit screen

"Switching Sound Sets (Kits)" (p. 16)

Instruments and Layers

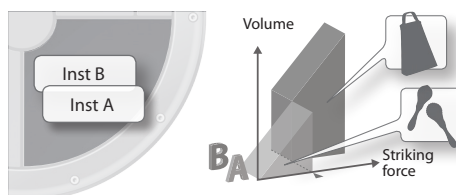
Instruments

The HandSonic provides more than 800 sounds. Each sound is called an **"instrument"** (abbreviated **"inst"**). If an instrument is assigned to a pad, you'll be able to play it.

"Changing Sounds (Instruments)" (p. 17)

Layers

Two instruments can be assigned to each pad; these two assignments are called **"layers."** The instruments (Inst A and Inst B) assigned to the two layers can sound together, or you can switch between them according to how strongly you strike the pad.



"Layering Sounds (Layer)" (p. 24)

Effects

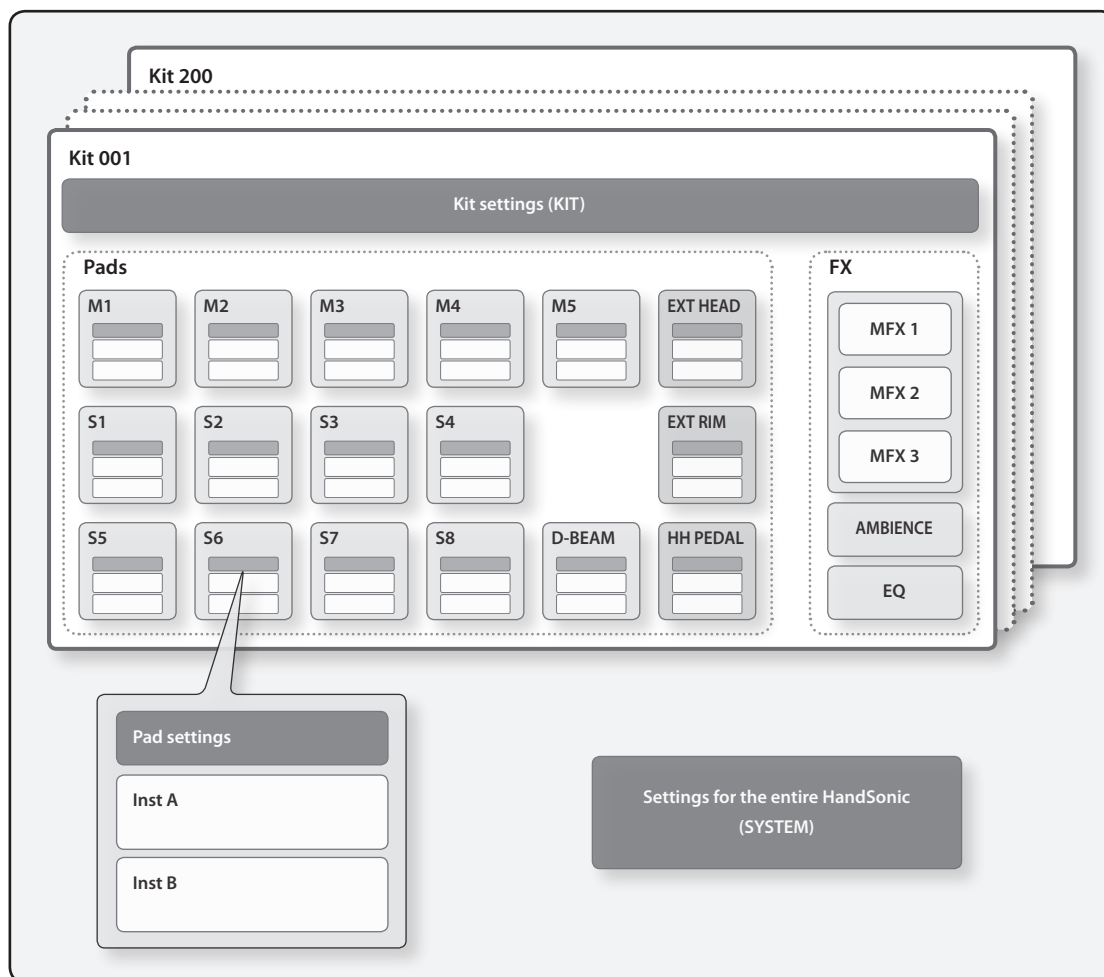
In addition to editing the instruments, the HandSonic provides other ways for you to modify the sound. These are called “**effects**” (abbreviated “**FX**”). While editing will modify the way in which the instrument produces sound, effects can add a special effect to the sound produced by the instrument.

The HandSonic contains the following effect processors.

Multi-effects (MFX1–3)	These provide a choice of effect types that let you distort the sound, add depth, or add cyclic modulation. You can use three effect processors (MFX1–3) simultaneously.	p. 26
Ambience	This adds reverberation to the sound. It lets you create the sensation of performing in a concert hall or studio.	p. 28
EQ	This lets you boost or cut the volume in the low, mid, and high-frequency regions of the sound. You can use EQ to make the sound more powerful by boosting the low region, or boost the high region to make the sound brighter.	p. 30

How the HandSonic is Structured

The following illustration shows how the kits, pads, layers, and FX are structured.



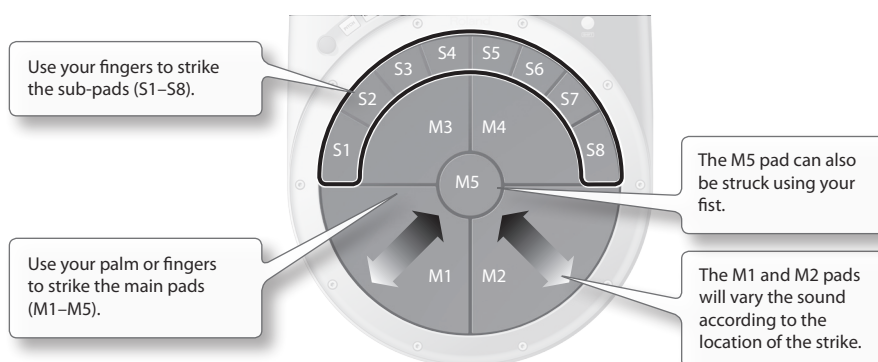
Performing

Here's how to use the HandSonic's pads and D-BEAM for a variety of performance techniques.

Pads

Strike

Strike a pad using your palm or fingers (one to three fingers). The sound you hear will depend on the force of your strike. For the two pads closest to you (M1, M2), the tonal character will change depending on the location of your strike. The tonal change or effect will differ depending on the instrument.



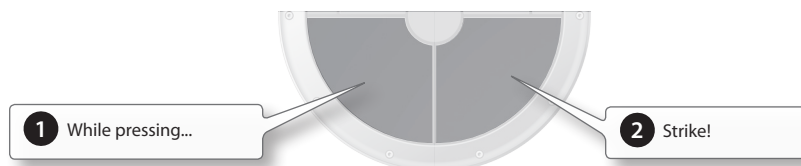
Press

Each of the pads can be pressed using your hand or elbow.

By pressing one pad while you strike another pad, you can shorten (mute) the sound or raise the pitch. The tonal change or effect will differ depending on the kit.

You can specify the muting or pitch change for each pad.

"Modifying the sound by pressing down on a pad" (p. 48)

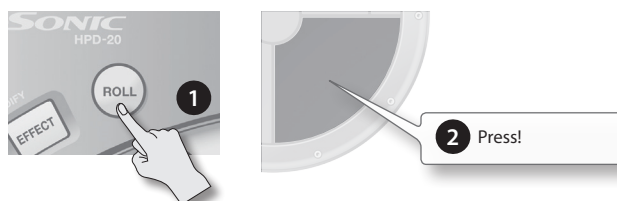


Roll

Press the [ROLL] button to make it light, and press a pad; the sound will play repeatedly. The pressure you apply will affect the volume or tonal character.

To specify the speed of the roll, hold down the [SHIFT] button and press the [ROLL] button.

"Adjusting the roll speed (Roll Speed)" (p. 49)



D-BEAM

To use the D-BEAM, press the [D-BEAM] button to make it light.

Playing sounds

Position the palm of your hand above the D-BEAM sensor; you'll hear a sound. The volume will change according to the height of your hand, and will become louder as get closer to the sensor.

To play the sound again, take your hand away from the D-BEAM and then position your palm above the sensor again.

* There won't be any sound if no instrument is assigned to the D-BEAM.

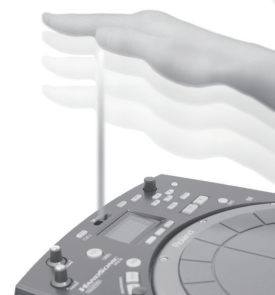
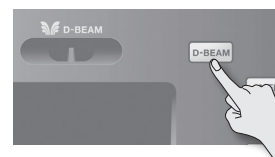
Modifying the sound

By positioning your hand above the D-BEAM sensor, you can modify the pitch or another aspect of the sound proportionately to the distance between your hand and the sensor.

While repeatedly striking a pad, move the palm of your hand up and down over the D-BEAM sensor, and listen to the change.

* For some settings, there might not be an effect.

"Modifying the sound by pressing down on a pad" (p. 48)



* The light beam in the illustration is shown for conceptual purposes.

Realtime Modify Knob

Modifying the pitch (PITCH)

Press the [PITCH] button to make it light.

While playing, turn the realtime modify knob; the pitch will change, and the amount of change will be shown in the screen.

Press the [PITCH] button once again to make it go dark; the sound will return to the original pitch.

* You can specify for each pad whether the pitch will change.

Controlling an effect (EFFECT)

Press the [EFFECT] button to make it light.

While playing, turn the realtime modify knob; a multi-effect parameter will be temporarily adjusted, and the sound will change.

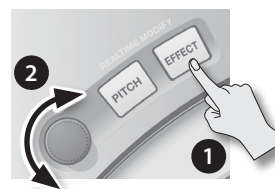
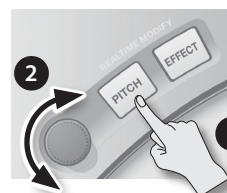
The multi-effect being controlled is shown in the screen.

Press the [EFFECT] button once again to make it go dark; the change produced by the effect will return to its original state.

* There will be no effect on kits or pads for which the effect is not enabled.

HINT

- You can make the [PITCH] and [EFFECT] buttons both light. Use the [F2] and [F3] buttons to select what will be controlled by the realtime modify knob.
- You can also make the sound change when you simply press the [PITCH] or [EFFECT] buttons.
- You can change the realtime modify settings by holding down the [SHIFT] button and pressing the [PITCH] or [EFFECT] button.



"Realtime modify knob settings" (p. 49)

Switching Sound Sets (Kits)

When you switch kits, the sounds of all pads will be switched simultaneously.
The HandSonic comes with more than 100 kits already provided; here's how to select and play them.

1. Press the [KIT] button to access the kit screen.

The kit screen shows the number and name of the currently selected kit.

* This screen will appear immediately after you power-on the HandSonic.



2. Use the [-][+] buttons or the value knob to switch kits.

The kit number and name in the screen will change, and you'll instantly switch to the stored content.

HINT

You can view a kit list by pressing the [ENTER] button, and select a kit from the list. Press the [ENTER] button to close the list.



* Use the cursor [◀▶] buttons to switch pages.

3. Strike the pads to play them.

Now you can perform using the sounds of the newly selected kit.



(user instrument icon)

If this icon is shown at the kit name, the kit contains user instruments. You can use user instruments to play your favorite audio phrases or your own original sounds.

For details, refer to "User Inst."

"User Inst" (p. 34)

Checking the sounds (instruments)

In the kit screen, hold down the [SHIFT] button and strike a pad; the instrument that's assigned to that pad will be shown in the screen.



Changing Sounds (Instruments)

You can individually change the instrument that is assigned to each pad of each kit. Your changes are automatically saved to the kit, and the instruments you chose will be there the next time you select that kit.

"Assigning Sounds to Pads (Inst)" (p. 23)

1. Strike the pad whose instrument you want to change.

As an example, we'll change the instrument that's assigned to the S1 pad.

HINT

You can also change the instrument that's assigned to the D-BEAM or to an external expansion pad.

2. Press the [MENU] button.

The menu screen will appear.

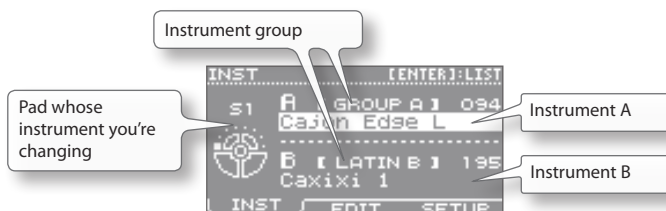
3. Use the cursor [▲] [▼] [◀] [▶] buttons to select "INST."

4. Press the [ENTER] button.

You'll enter the "INST" menu.

5. Press the [F1] (INST) button to select the "INST" tab.

The INST screen will appear.



6. Use the [-][+] buttons or the value knob to change the instrument.

Use the cursor [▲] [▼] buttons to select instrument A or B. You can also change the instrument group.

HINT

- Press the [ENTER] button to see the instrument list.
- Strike the S1 pad to audition the sound.
If you strike a different pad, you'll be able to change the instrument for that pad.
- If you want to hear only instrument A, press the [F3] (SETUP) button and turn the "Layer" parameter "OFF" (p. 24).

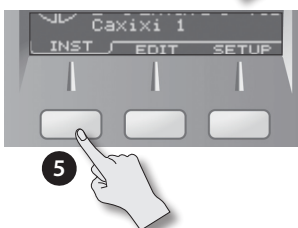
7. Press the [KIT] button to return to the kit screen.

Your changes will be saved automatically.

HINT

Even if you've modified a kit, you can return individual kits to their factory-set kit settings.

"Returning a Kit to the Factory Settings" (p. 32)



Adjusting Instruments (QUICK EDIT)

By using QUICK EDIT you can quickly and easily edit the pitch or decay of an instrument.
For more detailed editing, refer to “Adjusting the Sound (Edit).”

“Adjusting the Sound (Edit)” (p. 25)

1. Strike the pad whose instrument you want to adjust.

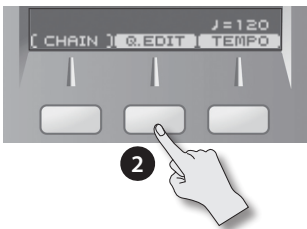
HINT

You can also adjust the instrument that’s assigned to the D-BEAM or to an external expansion pad.



2. In the kit screen, press the [F2] (Q.EDIT) button.

The QUICK EDIT screen will appear.



3. Use the [F1] – [F3] buttons to select the parameter.



Button	Parameter	Explanation
[F1] (VOLUME)	Volume	Adjusts the volume.
[F2] (TUNING)	Tuning	Adjusts the pitch. Positive (“+”) settings raise the pitch, and negative (“-”) settings lower the pitch.
[F3] (MUFFLING)	Muffling	Adjusts the decay of the sound. Greater values reduce the decay, emphasizing the attack.

4. Use the cursor [◀] [▶] buttons to select instrument “A” or “B.”

5. Use the [-][+] buttons or the value knob to adjust the value.

6. Strike another pad that you want to edit.

Repeat steps 3–6.

7. Press the [KIT] button to return to the kit screen.

Your changes will be saved automatically.



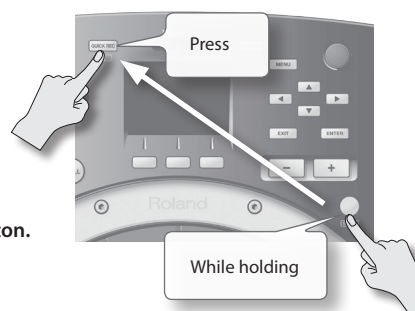
Using the Metronome

The HandSonic provides a metronome function. You can use this for rhythm training to improve your skill, or for warming up before a performance.

"Specifying the metronome time signature" (p. 59)

Starting/stopping the metronome

1. Hold down the [SHIFT] button and press the [QUICK REC] button.
The metronome will sound.
The kit screen will show the tempo.
2. Once again hold down the [SHIFT] button and press the [QUICK REC] button.
The metronome will stop.

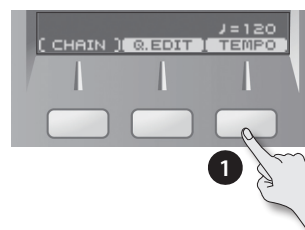


Changing the tempo

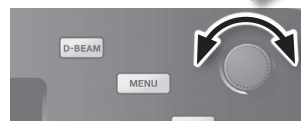
1. In the kit screen, press the [F3] (TEMPO) button.
The TEMPO screen will appear.



2. Use the [-][+] buttons or the value knob to change the tempo.
The metronome tempo will be changed.



3. Press the [KIT] button to return to the kit screen.



Tap tempo

You can specify the tempo by pressing a button at the desired interval. This is a convenient way to find out the tempo of a song.

1. In the kit screen, press the [F3] (TEMPO) button.
The TEMPO screen will appear.
2. Press the [F3] (TAP) button at least three times in rhythm with the song.
The tempo will be changed.

Recording Your Performance (QUICK REC)

It's easy to record your HandSonic performance. A recorded performance can be played back, or exported to a USB flash drive as an audio file.

Listening objectively to your performance is a good way to improve your skill, and you can also use a recorded performance as material for your rhythm tracks.

Recording

1. Press the [QUICK REC] button.

The QUICK REC screen will appear.



2. Press the [F2] (REC) button.

The STANDBY screen will appear.

You can sound the metronome by holding down the [SHIFT] button and pressing the [QUICK REC] button.

Use the value knob to adjust the tempo.



3. Begin performing.

Recording will start.

* You can also start recording by pressing the [F1] (START) button.

* If the [F2] (HIT PAD) button is off, recording will not start when you begin performing.



4. Press the [F1] (STOP) button to stop recording.



Playing back

5. Press the [F1] (PLAY) button.

The recorded performance will play.

Press the [F2] (REPEAT) button to make playback repeat.

* Playback will use the sounds of the currently selected kit.

* If you sound the metronome, you can use the value knob to change the tempo.



6. Press the [F1] (STOP) button to stop playback.

Playback will stop automatically when it reaches the end of the recorded performance.



* The recorded performance will disappear when you power-off the HandSonic.

Exporting a recorded performance as an audio file

* Connect your USB flash drive before you continue.

"Rear Panel (Connections)" (p. 8)

1. Stop recording or playback, and then press the [F3] (EXPORT) button.

The EXPORT screen will appear.



2. Note the file name, and adjust the tempo.

The file will be saved with the name that's shown here.

If you sound the metronome, the tempo will be displayed, allowing you to adjust the tempo.

Use the value knob to adjust the tempo.

As necessary, use the cursor [▲] [▼] buttons to select the following parameters, and use the value knob to set the values.

Parameter	Explanation
Post Export Time	In some cases, the reverberant decay at the end of the exported audio file may be cut off. If this occurs, you can increase this value so that the reverberant decay will not be cut off.
Export Gain	While reading the output level meter, adjusts the volume of the audio file. Positive ("+") values will increase the volume.



Output level for the export

Press the [F1] (PREVIEW) button to audition the performance.

3. Press the [F3] (EXECUTE) button.

Exporting to the USB flash drive will begin.

When export is completed, the screen will indicate "Completed!"

* The audio file will be saved in the top level (root) of the USB flash drive.

NOTE

Do not strike the HandSonic's pads during the export.
The vibration may cause unexpected errors.



4. Press the [KIT] button to return to the kit screen.

Menu Operations

The HandSonic has numerous parameters (items that you can set) that specify how it will operate and its sounds will be produced. This section explains the procedure for the basic menu operations you'll use when setting the parameters. The basic procedure will be the same for any of the screens.

"Parameter Guide" (p. 45)

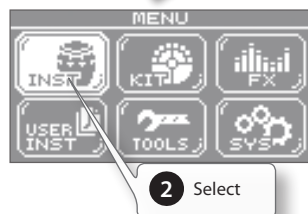
1. Press the [MENU] button.

The MENU screen will appear.



2. Use the cursor [▲] [▼] [◀] [▶] buttons to select an item.

Example) Select the "INST."



3. Press the [ENTER] button to confirm your selection.

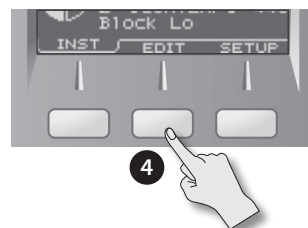
The INST screen will appear.



4. Use the [F1]–[F3] buttons to select a tab.

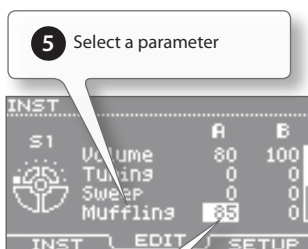
Example) Select the "EDIT" tab. The INST-EDIT screen will appear.

* In some cases, buttons as well as tabs may be displayed.
Some screens do not have tabs.



5. Use the cursor [▲] [▼] buttons to select a parameter.

Example) Select the "Muffling" parameter.



7. Use the [-][+] buttons or value knob to set the value.

Example) Set the value to "85."

8. When you've finished making settings, press the [KIT] button to return to the kit screen.

The changes you've made will be saved automatically.

6 Set the value

* You can return to the kit screen from any screen by pressing the [KIT] button

In this manual, steps 1–4 of the above procedure will be given in the form "choose MENU → INST → EDIT."

Frequently Used Functions

This section explains functions that help you take full advantage of the HandSonic.
For the procedure, refer to “Menu Operations” (p. 22).

Sound Editing

You can customize your very own kit by assigning your choice of instruments to the pads, or creating your own sounds.
If you like, you can also copy a kit before you start editing it.

“Copying a Kit” (p. 32)

Assigning Sounds to Pads (Inst)

1. Choose MENU → INST → INST.

The INST screen will appear.

2. Strike to select the pad that you want to change.

To select the D-BEAM or hi-hat control pedal, make it produce sound.

3. Use the cursor [▲] [▼] buttons to select instrument “A” or “B.”

* For more about instruments A and B, refer to “Layering Sounds (Layer)” (p. 24).

4. Use the value knob to change the instrument.

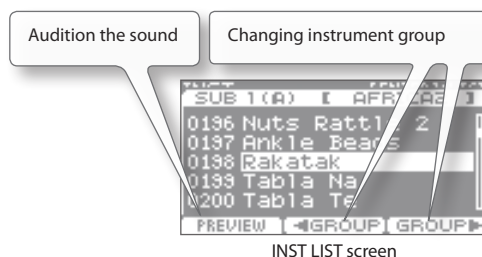
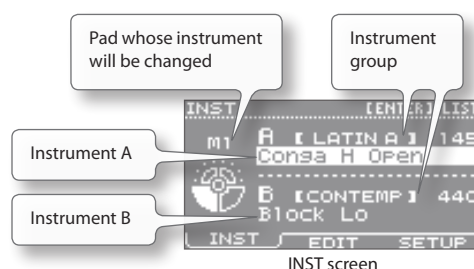
The instruments are organized by group; to change the group, select the instrument group in step 3.

You can also assign user instruments in the same way as the built-in instruments.

MEMO

- You can strike a pad to audition the instrument you selected.
By holding down the [SHIFT] button and striking a pad, you can play instruments A or B separately.
- Press the [ENTER] button to see the instrument list.
- If layer is “OFF,” instrument B is shown as “Layer is OFF,” and will be unavailable.

5. Repeat steps 2–4.



Applying the same values to all pads (ALL)

If you hold down the [SHIFT] button and press the [ENTER] button, the value of the selected parameter will be copied to all pads. For example this is convenient when you want to assign the same instrument (A or B) to all pads, or if you want to set the “Tuning” to “0.”

Checking the instruments in the kit screen

In the kit screen, hold down the [SHIFT] button and strike a pad; the instrument that's assigned to that pad will be shown in the screen.



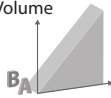
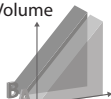
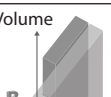
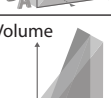
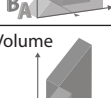
Layering Sounds (Layer)

You can assign two instruments (A and B) to each pad. You can make these two instruments sound together, or you can switch between them or vary their balance depending on the strength of your strike.

1. Choose MENU → INST → SETUP.
The INST-SETUP screen will appear.
2. Strike to select the pad that you want to change.
3. Use the cursor [▲] [▼] buttons to select the “Layer” or “Fade Point” parameter, and use the value knob to edit the value.



INST-SETUP screen

Parameter	Explanation	
Layer	OFF	 Only instrument A will sound
	MIX	 Instruments A and B will always sound together.
	VELO MIX	 Instrument B will be layered only for strikes stronger than “Fade Point.”
	VELO FADE	 Instrument B will be layered according to the force of the strike only for strikes stronger than “Fade Point.”
	VELO SW	 Switches between instrument A for strikes that are weaker than “Fade Point” and instrument B for stronger strikes.
Fade Point	Specifies the striking force at which instrument B will begin to be heard. If this is “0,” instrument B will sound for strikes of any force. If this is “127,” instrument B will sound only for the strongest strike. * This parameter is unavailable if “Layer” is “OFF” or “MIX.”	

4. Press the [F1] (INST) button to access the INST screen.
5. Use the cursor [▲] [▼] buttons to select instrument “A” or “B,” and use the value knob to edit the instrument.

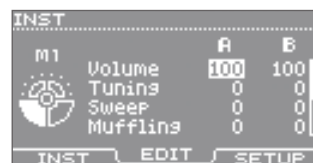
Hints for using layers

Layer	Fade Point	Explanation
MIX	–	By assigning the same sound and settings to instruments A/B, and changing “Tuning” to be approximately 10–20 apart, you can create a spacious sound.
VELO FADE	110–127	By assigning the same sound to instruments A/B and setting the maximum “Muffling” for instrument B, you can cause the sense of attack to be emphasized for strong strikes. Use the instrument B “Color” or “Volume” to adjust the strength of the attack.

Adjusting the Sound (Edit)

You can adjust the pitch, duration, and tonal character of each instrument.

- 1. Choose MENU → INST → EDIT.**
The INST-EDIT screen will appear.
- 2. Strike to select the pad that you want to change.**
- 3. Use the cursor [◀▶] buttons to select instrument "A" or "B."**
- 4. Use the cursor [▲▼] buttons to select a parameter, and use the value knob to edit the value.**



INST-EDIT screen

Parameter	Explanation
Volume	Adjusts the volume.
Tuning	Adjusts the pitch. Positive (“+”) settings raise the pitch, and negative (“-”) settings lower the pitch. The units are cents; 100 cents = one semitone.
Sweep	Sweeps the pitch upward (or downward). With positive (“+”) settings, the pitch starts high and sweeps down; with negative (“-”) settings, the pitch starts low and sweeps up. Greater values produce greater change.
Muffling	Adjusts the decay of the sound. Greater values reduce the decay, emphasizing the attack.
Color	Adjusts the brightness of the sound. Positive (“+”) settings brighten the sound, and negative (“-”) settings darken the sound.
Pan	Adjusts the left/right position. “CTR” is center.
Amb Send	Adjusts the amount of sound sent to ambience. This is the same parameter as in the PAD AMBIENCE SEND screen. Refer to “Applying ambience” (p. 28).
MFX Asgn	Select MFX1–3 as the multi-effect that will be used to apply an effect. This is the same parameter as in the MFX ASSIGN screen. Refer to “Applying a multi-effect to a pad” (p. 26).

Setting the pitch of chromatic instruments

Use the pad copy (p. 57) or ALL function (p. 23) to assign the same sound to multiple pads (e.g., S1–S8).

Set the "Tuning" value of these pads as shown below.



Example) If the pitch is "C" when Tuning = 0

Pitch	-6(F#)	-5(G)	-4(G#)	-3(A)	-2(A#)	-1(B)	0(C)
Tuning	-600	-500	-400	-300	-200	-100	0
Pitch	+1(C#)	+2(D)	+3(D#)	+4(E)	+5(F)	+6(F#)	+7(G)
Tuning	+100	+200	+300	+400	+500	+600	+700

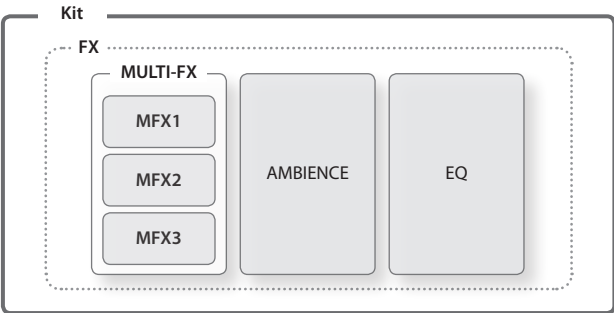
Hints for using Sweep

- Use “Tuning” to adjust the pitch at which the sound ends.
- If you use “Muffling” to shorten the sound, the pitch change produced by “Sweep” will also be shortened.
- If the sound is too bass-heavy when you’ve set “Sweep” to a negative value, adjust “Color” in the positive direction to lighten the sound.

Using Effects to Modify the Sound (FX)

While editing an instrument will change the way in which the instrument itself produces sound, effects can modify the sound produced by the instrument. You can use effects to create dramatic changes in the character of the sound.

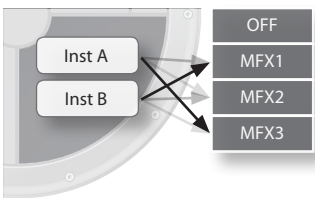
As effect units, the HandSonic provides three multi-effect units (MFX1–3), ambience, and EQ.



Multi-Effects (MFX1–3)

The multi-effects are versatile effects that give you a choice of numerous effect types, such as effects that distort, thicken, or cyclically modulate the sound. There are three multi-effect units (MFX1, MFX2, MFX3), and you can set each unit to produce a different effect.

For the instruments assigned to each pad, you can choose one of the MFX1–3 units for it to use.

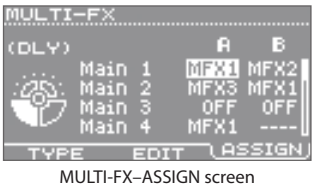


Applying a multi-effect to a pad

1. Choose MENU → FX → MULTI-FX → ASSIGN.
The MULTI-FX–ASSIGN screen will appear.
2. Strike a pad to select it, and use the cursor [◀ ▶] buttons to select instrument A or B.
3. Use the value knob to select MFX1–3.

Choose “OFF” if you don’t want to use a multi-effect.

- * The effect type produced by each multi-effect unit is specified in “Selecting the multi-effect type” (p. 27).
- * You can also use the MENU → INST → EDIT parameter “MFX Asgn.”



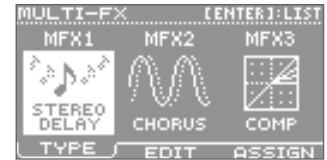
Selecting the multi-effect type

1. Choose MENU → FX → MULTI-FX → TYPE.

The MULTI-FX-TYPE screen will appear.

2. Use the cursor [◀ ▶] buttons to select MFX1–3, and use the value knob to specify the effect type for each unit.

You can view a list of the effect types by pressing the [ENTER] button. Press [ENTER] button once again to close the list.



MULTI-FX-TYPE screen

MULTI-FX type list

No.	Name	Explanation	No.	Name	Explanation
0	THRU	The effect won't be applied.	13	COMPRESSOR	Smoothing out fluctuations in volume.
1	STEREO DELAY	Repeats the sound.	14	SATURATOR	Producing a rougher tonal character and boosting the loudness. This also cuts the low-frequency region of the input audio.
2	SYNC DELAY	This is a delay whose delay time is specified in terms of a note value relative to the tempo. You can also synchronize it to the metronome tempo.	15	FILTER	This is a filter with an extremely sharp slope. The cutoff frequency can be varied cyclically.
3	TAPE ECHO	Simulates a tape-type echo unit of the past.	16	FILTER+DRIVE	Cuts the high-frequency range, and adds distortion.
4	CHORUS	Adds spaciousness and depth to the sound.	17	AUTO WAH	Produces a wah effect (a cyclic shift in frequency emphasis).
5	SPACE-D	It gives no impression of modulation, but produces a transparent chorus effect.	18	LO-FI COMPRESS	This is an effect that intentionally degrades the sound quality for creative purposes.
6	PHASER	A phase-shifted sound is added to the original sound and modulated.	19	OVERDRIVE	Mildly distorts the sound.
7	STEP PHASER	The phaser effect will be varied gradually.	20	DISTORTION	Intensely distorts the sound.
8	FLANGER	It produces a metallic resonance that rises and falls like a jet airplane taking off or landing.	21	BIT CRUSH	Produces an extreme lo-fi effect.
9	STEP FLANGER	This is a flanger in which the flanger pitch changes in steps.	22	ISOLATOR	Creating unique effects by cutting the volume of specific frequency regions.
10	REVERB	Adds reverberation to the sound, simulating an acoustic space.	23	RING MOD	A ring modulator that varies the modulated frequency in a stepwise manner.
11	LONG REVERB	This is a very rich sounding reverb.	24	PITCH SHIFT	Shifts the pitch of the original sound.
12	EQUALIZER	Adjusts the tonal character.	25	AUTO PAN	Cyclically modulates the stereo location of the sound.

* For details on each type, refer to "Sound List" (PDF file).

Editing multi-effect settings

1. Choose MENU → FX → MULTI-FX → EDIT.

The MULTI-FX-EDIT screen will appear.

2. Use the cursor [◀ ▶] buttons to select MFX1–3.

3. Use the cursor [▲ ▼] buttons to select a parameter, and use the value knob to edit the value.

* For details on each parameter, refer to "Sound List" (PDF file).



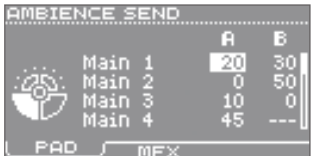
MULTI-FX-EDIT screen

Ambience

This effect unit adds reverberation, creating the sensation that you’re performing in a hall or studio. You can adjust the amount of ambience for each instrument assigned to each pad.

Applying ambience

- 1. Choose MENU → FX → AMBIENCE → SEND → PAD.
The AMBIENCE SEND–PAD screen will appear.
- 2. Strike a pad to select it, and use the cursor [◀ ▶] buttons to select instrument A/B.
- 3. Use the value knob to edit the value.



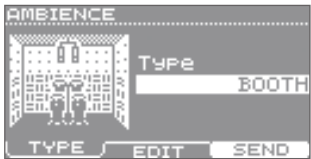
AMBIENCE SEND–PAD screen

This specifies the amount of ambience that will be applied.
With a setting of “0,” no ambience will be applied.

- * Even if you’re applying a multi-effect to an instrument, the ambience will be applied to the sound before it has been processed by the multi-effect. You can also apply ambience to the sound produced by the multi-effect (p. 29).
- * You can also use the MENU → INST → EDIT parameter “Amb Send.”

Selecting the ambience type

- 1. Choose MENU → FX → AMBIENCE → TYPE.
The AMBIENCE–TYPE screen will appear.
- 2. Use the value knob to specify the ambience type.



AMBIENCE–TYPE screen

Ambience type list

No.	Name	Explanation	No.	Name	Explanation
1	BOOTH	Recording booth	6	BALLROOM	Dance hall
2	STUDIO	Recording studio	7	CONCERT HALL	Large concert hall
3	BASEMENT	Underground room with numerous reflections	8	EXPO HALL	Broad space
4	JAZZ CLUB	Small club	9	GATE	Reverberation is cut off sharply
5	ROCK CLUB	Large club	10	SPIRAL	Spiral-like reverberation

* For details on each type, refer to “Sound List” (PDF file).

Adjusting the ambience

1. Choose MENU → FX → AMBIENCE → EDIT.

The AMBIENCE-EDIT screen will appear.

2. Use the cursor [▲] [▼] buttons to select a parameter, and use the value knob to edit the value.

* For details on each parameter, refer to “Sound List” (PDF file).



AMBIENCE-EDIT screen

Applying ambience to the multi-effect's sound

If you've applied a multi-effect unit to the sound of instruments, you can apply ambience to the sound that's been modified by the multi-effects.

1. Choose MENU → FX → AMBIENCE → SEND → MFX.

The AMBIENCE SEND-MFX screen will appear.

2. Use the cursor [▲] [▼] buttons to select MFX1-3, and use the value knob to edit the value.

Specify the amount of ambience that will be applied to the sound from each multi-effect.

With a setting of “0,” no ambience will be applied.



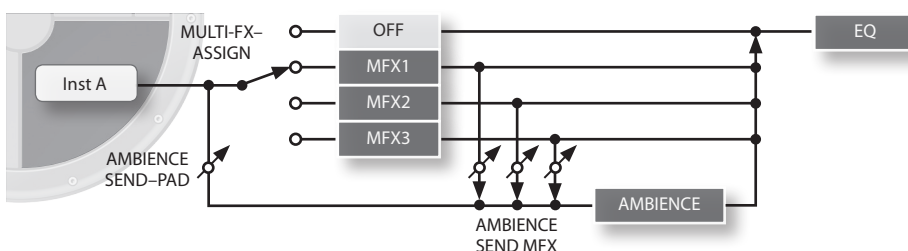
AMBIENCE SEND-MFX screen

Multi-effect and ambience routing

The sound of a pad's instrument A is sent to ambience (AMBIENCE SEND-PAD) before it enters the multi-effect (MFX1-3). This allows you to adjust the amount of ambience independently for each pad of each instrument.

Applying a multi-effect can modify the sound dramatically, but the sound sent to ambience will not be modified by the multi-effect.

You can use “AMBIENCE SEND-MFX” if you want the sound that's been processed by the multi-effect to be sent to ambience. However, since the multi-effect is also receiving sound from other pads, it won't be possible to adjust the ambience send individually for each pad.



EQ

This divides the sound of the entire kit into low, mid, and high frequency regions, allowing you to boost or cut the volume of each region.
You can boost the low range to make the sound more powerful, or boost the high range to make the sound brighter.

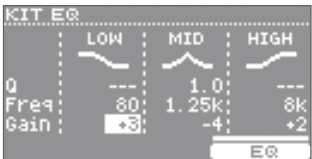
Applying EQ to a kit

1. Choose MENU → FX → EQ.

The KIT EQ screen will appear.

2. Press the [F3] (EQ) button to turn EQ on.

If this is off, EQ will not be applied.



KIT EQ screen

3. Use the cursor [▲] [▼] [◀] [▶] buttons to select a parameter, and use the value knob to edit the value.

Parameter	Explanation
Q	Adjusts the width of the frequency region selected by "Freq." Higher values make the region narrower, producing a more distinctive sound. * This is available only for MID.
Freq	Selects the frequency range at which the volume will be boosted or cut. Lower values affect a lower frequency range; higher values affect a higher frequency range. * The available range differs between LOW/MID/HIGH.
Gain	Specifies the amount by which the volume is boosted or cut. Positive ("+") values boost the frequency region specified by "Freq." Negative ("-") values cut the frequency region specified by "Freq." If you don't want to apply an effect, set this to "0."

Overall Settings for a Kit

These settings let you adjust the volume of the entire kit, or assign a name to it.

Adjusting the Volume of the Kit

This setting adjusts the overall volume of the entire kit.

This is convenient when a multi-effect has caused the volume to increase, or if you want to adjust the volume balance relative to other kits.

1. Choose MENU → KIT → KIT PRM → COMMON.

The KIT COMMON screen will appear.

2. Use the cursor [▲] [▼] buttons to select the “Kit Volume” parameter.

3. Use the value knob to adjust the value.



KIT COMMON screen

Adjusting the Pad Sensitivity

This setting adjusts the pad sensitivity for the entire kit. You can use this to adjust the sensitivity between kits that you play using your hand and kits that you play using your fingers.

1. Choose MENU → KIT → KIT PRM → COMMON.

The KIT COMMON screen will appear.

2. Use the cursor [▲] [▼] buttons to select the “Pad Sensitivity” parameter.

3. Use the value knob to adjust the value.

Moving the setting closer to the “FINGER” side will increase the sensitivity.



KIT COMMON screen

Naming a Kit

You can assign a name to a kit you’ve edited.

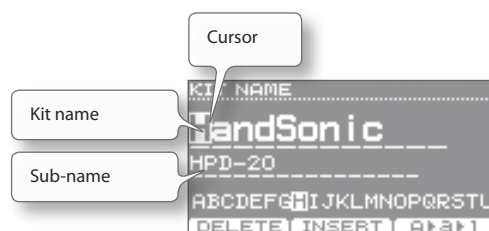
1. Choose MENU → KIT → KIT PRM → NAME.

The KIT NAME screen will appear.

2. Enter a name.

Enter a name using the buttons listed below.

You can enter a kit name (upper line) of 12 characters, and a sub-name (lower line) of up to 16 characters.



KIT NAME screen

Button	Explanation
Value knob [-] [+] buttons	Change the character.
Cursor [◀] [▶] buttons	Move the cursor.
Cursor [▲] [▼] buttons	Move the cursor between the kit name and the sub-name.
[F1] (DELETE) button	Deletes the character at the cursor location.
[F2] (INSERT) button	Inserts a space at the cursor location.
[F3] (A ▶ a ▶ 1) button	Switches the type of character (uppercase/lowercase/numeral) at the cursor location.

Copying a Kit

When you want to create a new kit, you can save time by copying a kit from which to start.

1. Choose MENU → TOOLS → KIT COPY.

The KIT COPY screen will appear.

2. Use the value knob to select the copy-source kit.

Select a kit from "USER."

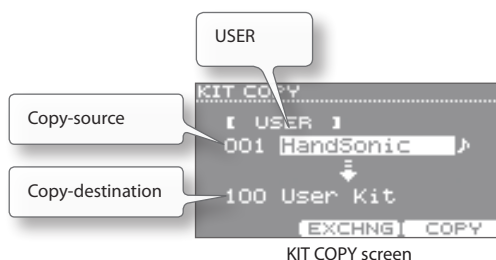
3. Use the cursor [▲] [▼] buttons to move to the lower line, and select the copy-destination kit.

4. Press the [F3] (COPY) button.

A confirmation screen will appear.

5. Use the cursor [◀] [▶] buttons to select "YES," and press the [ENTER] button.

The copy will be executed.



KIT COPY screen



CONFIRMATION screen

Returning a Kit to the Factory Settings

You can select a factory-set kit and copy it to another kit.

1. Choose MENU → TOOLS → KIT COPY.

The KIT COPY screen will appear.

2. Use the cursor [▲] [▼] buttons to move to "USER," and use the value knob to select "PRESET."

3. Use the value knob to select the copy-source kit.

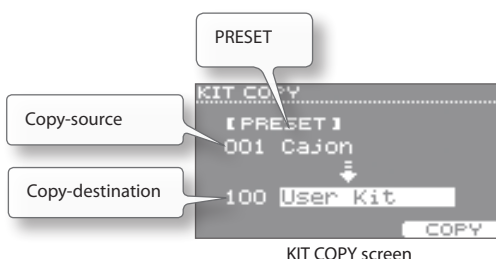
4. Use the cursor [▲] [▼] buttons to move to the lower line, and select the copy-destination kit.

5. Press the [F3] (COPY) button.

A confirmation screen will appear.

6. Use the cursor [◀] [▶] buttons to select "YES," and press the [ENTER] button.

The factory-set kit will be copied.



KIT COPY screen



CONFIRMATION screen

* If the factory-set user instruments have been deleted, the user instruments used by the factory-set kit will not sound as intended.

Returning all kits and user instruments to the factory-set state

Put a backup containing the factory-set data on your USB flash drive, and load the data as described in "Loading a Backup" (p. 39).

The factory-set data can be downloaded from the Roland website.

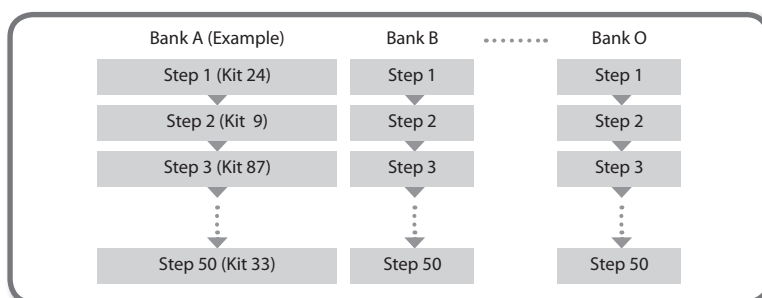
From the following URL, choose "Downloads" and then select "HandSonic HPD-20."

<http://www.roland.com/support/en/>

Kit Chain

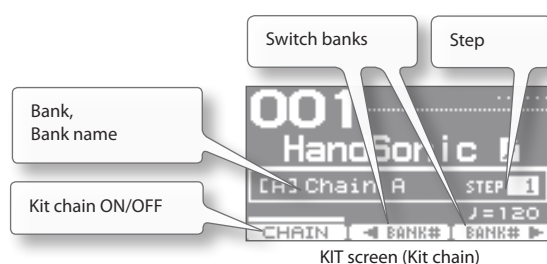
The Kit Chain function lets you successively switch kits in the order you've specified, as needed for the songs in your performance.

You can create 15 kit chains (banks A–O), and each kit chain can contain up to 50 steps.



Using a kit chain

1. In the kit screen, press the [F1] (CHAIN) button to turn kit chain on.
The kit chain screen will appear.
2. Use the [F2] (◀BANK#) [F3] (BANK#▶) buttons to switch the bank.
3. Use the [-]/[+] buttons or the value knob to switch steps.
4. When you're finished, press the [F1] (CHAIN) button to turn kit chain off.



Creating a kit chain

Refer to "Editing a kit chain (Chain)."

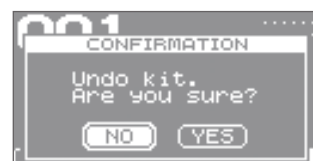
Undo

You can undo a change you've made to a kit or instrument.

1. In the kit screen, hold down the [SHIFT] button and press the [KIT] button.
The CONFIRMATION screen will appear.
2. Use the cursor [◀] [▶] buttons to select "YES," and press the [ENTER] button.

The change will be undone.

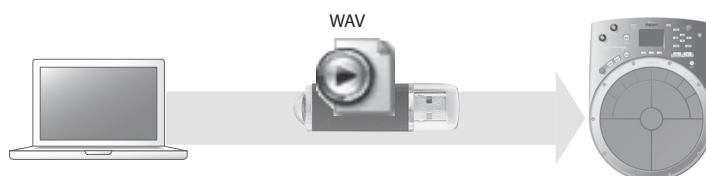
- * The current kit will return to the state in which it was when you selected it. If you switch kits, the preceding changes cannot be undone.
- * The following changes cannot be undone.
 - Loading or changing a user instrument (MENU → USER INST)
 - Copying a kit (MENU → TOOLS → KIT COPY)
 - Changing a kit chain (MENU → TOOLS → CHAIN)
 - Editing a system parameter (MENU → SYS)



CONFIRMATION screen

User Inst

An audio file (WAV) that you created on your computer can be loaded into the HandSonic via a USB flash drive, and played as a user instrument. Just as with the other instruments, you can adjust the tonal character of this user instrument and apply effects to it.



Number of user instruments	Maximum 500
Sound length (total)	Maximum 12 minutes

* The values shown above are the maximum number and length; they will decrease depending on the size and number of audio files that you import.

Importing

Preparations

You'll need the following items.

- **Computer**

A computer that can read and write a USB flash drive, such as a Windows or Mac computer

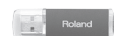
- **USB flash drive**

* Use USB flash drive sold by Roland. We cannot guarantee operation if other products are used.

- **Audio file of the sound that you want to import**

Use your computer to prepare and edit the audio file to the following specifications.

Format	Sampling Frequency	Bit Rate	Channels	Size (Length)
WAV	44.1 kHz	16 bits	Mono, Stereo	Up to 6 minutes



1. Copy the audio file to your USB flash drive.

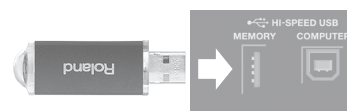
Copy the audio file to the top level (root) of your USB flash drive.

* The HandSonic can recognize up to 1,000 files.

* File names containing multi-byte characters will not be displayed correctly on the HandSonic.

2. Connect the USB flash drive to the HandSonic.

With the HandSonic powered-off, connect the USB flash drive.



"Rear Panel (Connections)" (p. 8)

3. Power-on the HandSonic.

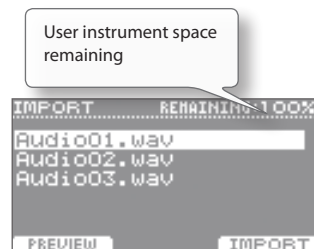
Importing

1. Choose MENU → USER INST → IMPORT.

The IMPORT list screen will appear, showing a list of the audio files on the USB flash drive.

2. Use the cursor [▲] [▼] buttons to select the audio file that you want to import, and press the [F3] (IMPORT) button.

You can audition the sound by pressing the [F1] (PREVIEW) button.

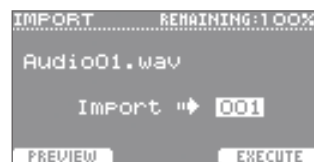


IMPORT list screen

3. Use the value knob to select a user instrument number, and press the [F3] (EXECUTE) button.

The user instrument will be loaded into the number you selected.

When the operation is completed, the screen will indicate “Completed!” and you will return to the IMPORT list screen.



IMPORT screen

- * You can't import into a number that already contains a user instrument.
- * If there is not enough free space left in the HandSonic's user instrument area, the screen will indicate “User Inst Memory Full.” Delete unneeded user instruments (p. 54). In some cases, optimizing the area (p. 55) may allow you to import the sound.

NOTE

Do not strike the HandSonic's pads while data is being imported. The vibration may cause unexpected errors.

4. Repeat steps 2–3 as necessary.

5. Press the [KIT] button to return to the kit screen.

The user instruments you imported will be saved automatically.

Use the procedure described on “Assigning Sounds to Pads (Inst)” (p. 23) to assign the imported user instruments to pads so that you can play them.

If you select the “USER” instrument group, the imported user instruments will be shown.

- * User instruments are not deleted even when you turn off the power.
- * As a precaution against accidentally deleting your user instruments, it's a good idea to keep the loaded audio files on your computer or USB flash drive. It's not possible to load user instruments separately from a HandSonic backup (p. 38).

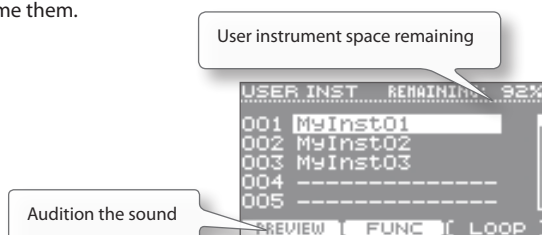
Managing User Instruments

You can view a list of all the user instruments you've imported.
You can also audition the sounds, make loop settings, and rename them.

1. Choose MENU → USER INST → LIST.

The USER INST–LIST screen will appear.

Use the cursor [▲] [▼] buttons to select a user instrument, and press [F2] (FUNC) button to see detailed information.



USER INST–LIST screen

Loop Settings


You can make a user instrument loop (play repeatedly).
By looping it, you can play a short rhythm pattern as a longer phrase.

1. Choose **MENU → USER INST → LIST.**

The USER INST-LIST screen will appear.

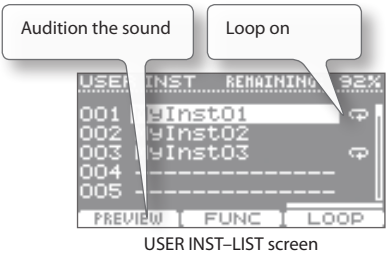
2. Use the cursor [▲] [▼] buttons to select a user instrument.

3. Press the [F3] (LOOP) button to turn loop on.

The  icon will appear.

You can audition the loop by pressing the [F1] (PREVIEW) button.

* Before you import the user instrument, use your computer to edit the audio so that it loops smoothly. The HandSonic cannot edit the looping.



Specifying how the pad will produce sound

To control how the loop phrase will play or stop, you can change the way in which the pad will produce sound.

1. Strike a pad to which you've assigned a user instrument that is set to loop.

2. Choose **MENU → INST → SETUP.**

The INST-SETUP screen will appear.

3. Use the cursor [▲] [▼] buttons to select the "Trigger Mode" parameter.



4. Use the value knob to select "GATE" or "ALT."

Value	Explanation
SHOT	The sound will play each time you strike the pad. It will not loop.
GATE	The sound will continue playing as long as you continue holding down the pad. * This cannot be selected for an external expansion pad or the hi-hat control pedal.
ALT	The sound will alternately play and stop each time you strike the pad.

- * When using loop playback, the following restrictions apply to instrument editing.
 - The "Sweep" parameter (p. 25) will apply only to the first cycle of the loop.
 - The "Muffling" parameter (p. 25) will have no effect.

Stopping all sounds (ALL SOUND OFF)

By holding down the [SHIFT] button and pressing the [EXIT] button, you can stop (silence) all sounds that are currently being produced.
This is a convenient way to stop numerous loop phrases simultaneously.
This also works in the kit screen or while you're editing.

* The effects will not be silenced. The decay of the ambience and delay sound will remain without being silenced.

Deleting

Here's how to delete a user instrument.

1. Choose MENU → USER INST → LIST.

The USER INST–LIST screen will appear.

2. Use the cursor [▲] [▼] buttons to select the user instrument that you want to delete.

3. Press the [F2] (FUNC) button.

The USER INST FUNCTION screen will appear.

If this user instrument is used in any kit, "🔒" is shown for the "Assigned to Kit" field.

NOTE

When "Assigned to Kit" has a "🔒" symbol, if you delete this user instrument, pads to which this instrument is assigned will no longer produce sound.

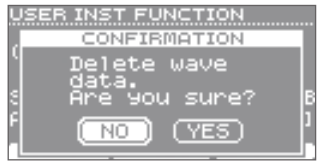


USER INST FUNCTION screen

4. Press the [F2] (DELETE) button.

The CONFIRMATION screen will appear.

5. Use the cursor [◀] [▶] buttons to select "YES," and press the [ENTER] button.



CONFIRMATION screen

Renaming

Here's how to rename a user instrument.

1. Choose MENU → USER INST → LIST.

The USER INST–LIST screen will appear.

2. Use the cursor [▲] [▼] buttons to select the user instrument that you want to rename.

3. Press the [F2] (FUNC) button.

The USER INST FUNCTION screen will appear.

4. Press the [F3] (NAME) button.

The USER INST NAME screen will appear.

Use the following buttons to enter a name. You can enter up to 14 characters.



USER INST NAME screen

Button	Explanation
Value knob [-] [+] buttons	Change the character.
Cursor [◀] [▶] buttons	Move the cursor.
[F1] (DELETE) button	Deletes the character at the cursor location.
[F2] (INSERT) button	Inserts a space at the cursor location.
[F3] (A ▶ a ▶ 1) button	Switches the type of character (uppercase/lowercase/numeral) at the cursor location.

Backing Up (USB Flash Drive)

All settings of the HandSonic can be saved on a USB flash drive.
This lets you make a backup of your important data, or exchange kits with other people.



Saving a Backup

A backup contains all of the HandSonic's settings.
You can choose whether the user instruments will be included in the backup.

1. Connect the USB flash drive to the HandSonic.

"Rear Panel (Connections)" (p. 8)

2. Choose MENU → SYS → USB Memory → Save Backup.

The Save Backup screen will appear.

3. Specify the type of backup that you want to save.



SAVE BACKUP screen

Parameter	Explanation
With User Inst	Specifies whether the audio data imported as user instruments will be () or will not be () included in the backup.
Backup	Indicates the number and name of the backup to which you're saving. Use the value knob to change the backup-destination.
Name	Indicates the name of the backup you're saving. You can enter and edit the name by pressing the [F2] (NAME) button.

* Depending on the size of the user instruments, it may take more than two minutes to save the data if you include the user instruments in the backup.

* If you don't include the user instruments in the backup, the kits will not be reproduced correctly even if you load the backup after deleting or renumbering the user instruments.

4. Press the [F3] (SAVE) button.

The backup will be saved.

* If a backup already exists at the save-destination, the screen will ask "OK to overwrite?"
If you want to overwrite the existing data, select "YES" and press the [ENTER] button.

NOTE

Do not strike the HandSonic's pads while data is being saved. The vibration may cause unexpected errors.

* Backup files are saved in the **Roland/HPD-20/Backup** folder of the USB flash drive.

Loading a Backup

Here's how to load a backup from a USB flash drive into the HandSonic.

NOTE

When you load a backup, all settings in the HandSonic will be erased.

1. Connect the USB flash drive to the HandSonic.

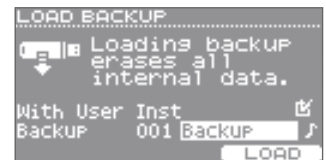
"Rear Panel (Connections)" (p. 8)

2. Choose MENU → SYS → USB Memory → Load Backup.

The LOAD BACKUP screen will appear.

3. Specify the backup that you want to load.

Parameter	Explanation
With User Inst	Specifies whether the user instruments will be loaded (<input checked="" type="checkbox"/>) or will not be loaded (<input type="checkbox"/>) .
Backup	Specifies the backup that will be loaded. Backups that include user instruments are indicated by "U".



LOAD BACKUP screen

* If you load the user instruments, all user instruments in the HandSonic will be deleted.

* Depending on the size of the user instruments, it may take more than 10 minutes to load the backup when loading the user instruments.

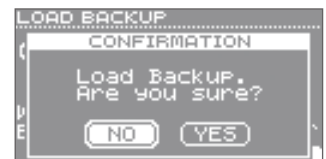
4. Press the [F3] (LOAD) button.

The CONFIRMATION screen will appear.

5. Use the cursor [◀ ▶] buttons to select "YES," and press the [ENTER] button.

The backup will be loaded.

* If you choose "NO," loading will be cancelled.



CONFIRMATION screen

NOTE

Do not strike the HandSonic's pads while data is being loaded. The vibration may cause unexpected errors.

* Backup files are saved in the **Roland/HPD-20/Backup** folder of the USB flash drive.

If you want to load a backup file that you obtained from another person, place the file in this folder.

Connecting External Expansion Pads or Pedals

You can connect an external expansion pad, footswitch, or hi-hat control pedal. This will broaden your performance possibilities, for example by letting you use your feet to play sounds.

Using an External Expansion Pad (TRIG IN)

To the HandSonic's pads and D-BEAM, you can add a kick pad that you play with your foot, or a mesh pad, cymbal pad, or bar trigger pad that you can play with sticks.

By using not just your hands but also sticks or your feet to play sounds, you can obtain an even wider range of performance possibilities.



You can connect one Roland-made pad.

For details on pads that are suitable for expanding the HandSonic, refer to p. 41.

* V-Hi-Hat pads (VH-13, VH-12, VH-11) are not supported.

For the latest information about pads, refer to the Roland website.

<http://www.roland.com/>

Connecting a pad

Please also read the owner's manual of the expansion pad you're using.

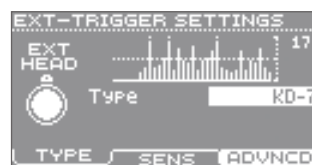
1. Connect the pad to the HandSonic's TRIG IN jack.

Use the cable that was included with your expansion pad.

"Rear Panel (Connections)" (p. 8)

2. Choose MENU → SYS → ExtTrig Settings → TYPE.

The EXT-TRIGGER SETTINGS screen will appear.



EXT-TRIGGER SETTINGS screen

3. Use the value knob to set the "Type" parameter to the model of pad you're connecting.

You must set the "Type" parameter correctly.

If you want to make detailed adjustments to the sensitivity, refer to p. 63.











4. Press the [KIT] button to return to the kit screen, and assign an instrument to the pad that you connected.

"Assigning Sounds to Pads (Inst)" (p. 23)

Pads suitable for external expansion

Here are the pads that are suitable for the HandSonic, and some illustrations of how they can be set up.

* Only one pad can be connected.

Model	Name	Explanation
KD-7	 Kick Trigger Unit	
KD-9	 Kick Pad	Play using your foot. A commercially available kick pedal is required.
BT-1	 Bar Trigger Pad	A compact pad that you can play using sticks.
PD-8	 Pad	A rubber pad that you can play using sticks. The head and rim function as two pads.
PDX-6	 V-Pad	A mesh pad with a rim diameter of 8.5 inches. Play using sticks. The head and rim function as two pads.
PDX-8	 V-Pad	A mesh pad with a rim diameter of 10 inches. Play using sticks. The head and rim function as two pads.
CY-5	 Cymbal Pad	A 10-inch cymbal pad. The bow and edge function as two pads.
CY-8	 Cymbal Pad	A 12-inch cymbal pad. The bow and edge function as two pads.
CY-12C	 V-Cymbal	A 12-inch crash V-cymbal. The bow and edge function as two pads.
FS-5U	 Footswitch	You can play this using your foot. The volume will be fixed. By using the appropriate connection cable (stereo phone plug → two phone plugs; sold separately) you can connect two FS-5U units.



HandSonic + BT-1



HandSonic + KD-7 + FD-8

Using a Footswitch (FOOT SW)

A footswitch let you use your foot to switch kits or turn the D-BEAM on/off. This allows you to control the sound without interrupting your performance.



The following footswitches (separately sold) are supported.

Model		Explanation
FS-5U		One or two units can be connected. In order to connect two, you'll need a connection cable (stereo phone plug → two phone plugs: sold separately).
FS-6		This contains two footswitches in a single unit.
DP-2		Only one unit can be connected.

1. Connect the footswitch to the HandSonic's FOOT SW jack.

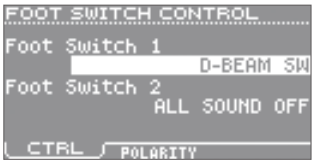
"Rear Panel (Connections)" (p. 8)

2. Choose MENU → SYS → FootSw Control.

The FOOT SWITCH CONTROL screen will appear.

3. Use the cursor [▲] [▼] buttons to select "Foot Switch 1" or "Foot Switch 2."

4. Use the value knob to specify the function of the footswitch.






FOOT SWITCH CONTROL screen

Parameter	Explanation	
Foot Switch 1, Foot Switch 2	OFF	No function is assigned.
	KIT+	Increments the kit number by +1.
	KIT-	Decrements the kit number by -1.
	D-BEAM SW	Turns the D-BEAM on/off.
	RT MODIFY PITCH SW	Turns the realtime modify [PITCH] button on/off.
	RT MODIFY EFFECT SW	Turns the realtime modify [EFFECT] button on/off.
	ROLL SW	Turns the Roll function on/off.
	ALL SOUND OFF	Stops all sound that is currently being produced.

Using a Hi-hat Control Pedal (HH CTRL)

You can use your foot to open/close the hi-hat. You can also press the pedal to play the sound, or vary the sound according to how deeply you press the pedal.

The following hi-hat control pedal and footswitches (sold separately) are supported.

Model		Explanation
FD-8		Controls the hi-hat open-close action in a continuous manner.
FS-5U		You can use a footswitch instead of a hi-hat control pedal. This lets you switch the hi-hat's open/closed state. If you play the sound, the volume will be fixed.
DP-2		

* V-Hi-Hat pads (VH-13, VH-12, VH-11) are not supported.

1. Connect the hi-hat control pedal to the HandSonic's HH CTRL jack.

Use the cable that was included with your hi-hat control pedal.

"Rear Panel (Connections)" (p. 8)

If you want to control the hi-hat's open/close action

2. Assign a hi-hat instrument to the desired pad.

You'll be able to use the hi-hat control pedal to control the open/close action.

- * The instrument that's assigned to the hi-hat control pedal will also sound. If you don't want it to sound, set the hi-hat control pedal's instrument to "OFF".
- * If you've assigned a hi-hat instrument to more than one pad, the foot-close sound can be produced only for the highest priority pad. (Priority order: M1-M5 → S1-S8 → EXT HEAD → EXT RIM → D-BEAM)

If you want to sound an instrument

2. Assign the instrument to the hi-hat control pedal.

The instrument will sound when you press the pedal.

"Assigning Sounds to Pads (Inst)" (p. 23)

If you want to modify the sound

As when you press down on a pad, you can press down on the hi-hat control pedal to modify the sound.

2. Choose MENU → KIT → PAD CTRL → SEND.

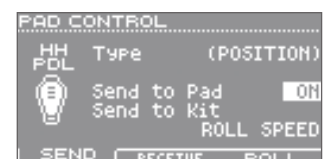
The PAD CONTROL –SEND screen will appear.

3. Press the hi-hat control pedal.

The hi-hat control pedal will be selected.

4. Use the cursor [▲] [▼] buttons to select a parameter, and use the value knob to set the value.

For details, refer to "Modifying the sound by pressing down on a pad."



PAD CONTROL-SEND screen

"Modifying the sound by pressing down on a pad" (p. 48)

Connecting the HandSonic to a Computer

If you connect the HandSonic to a computer, you'll be able to record the HandSonic's performance on your computer as audio or as MIDI, or use the HandSonic to listen to audio that's being played by your computer. This is a convenience when you're using a computer to create rhythm tracks or to record, and you can also enjoy playing the HandSonic along with songs being played back from your computer.

Installing the USB driver

Before connecting the HandSonic to your computer, you must first install the USB driver. You can download the USB driver from the Roland website.

<http://www.roland.com/support/en/>

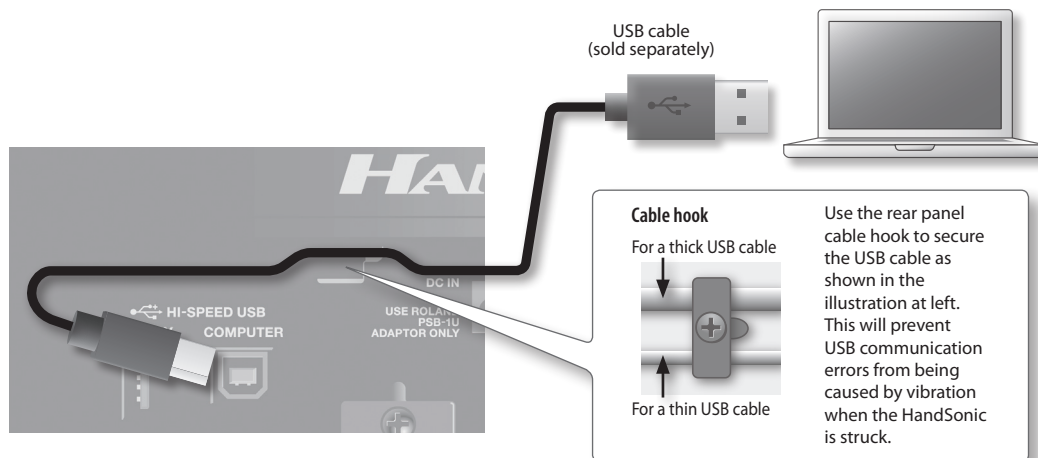
For the operating requirements, refer to the Roland website.
The driver program and installation procedure will differ depending on your system.
For details, refer to the "Readme.htm" included with the downloaded file.

Connecting to your computer

Use a commercially available USB cable to connect the HandSonic's USB COMPUTER port with your computer's USB port.

"Rear Panel (Connections)" (p. 8)

USB audio and USB MIDI are supported.
You can change the volume of the USB audio (p. 65).



- * Power-on the HandSonic before you start up the audio/MIDI application on your computer.
- * Do not power-off the HandSonic while you're using the application.
- * Use a USB cable that supports USB 2.0 Hi-Speed.

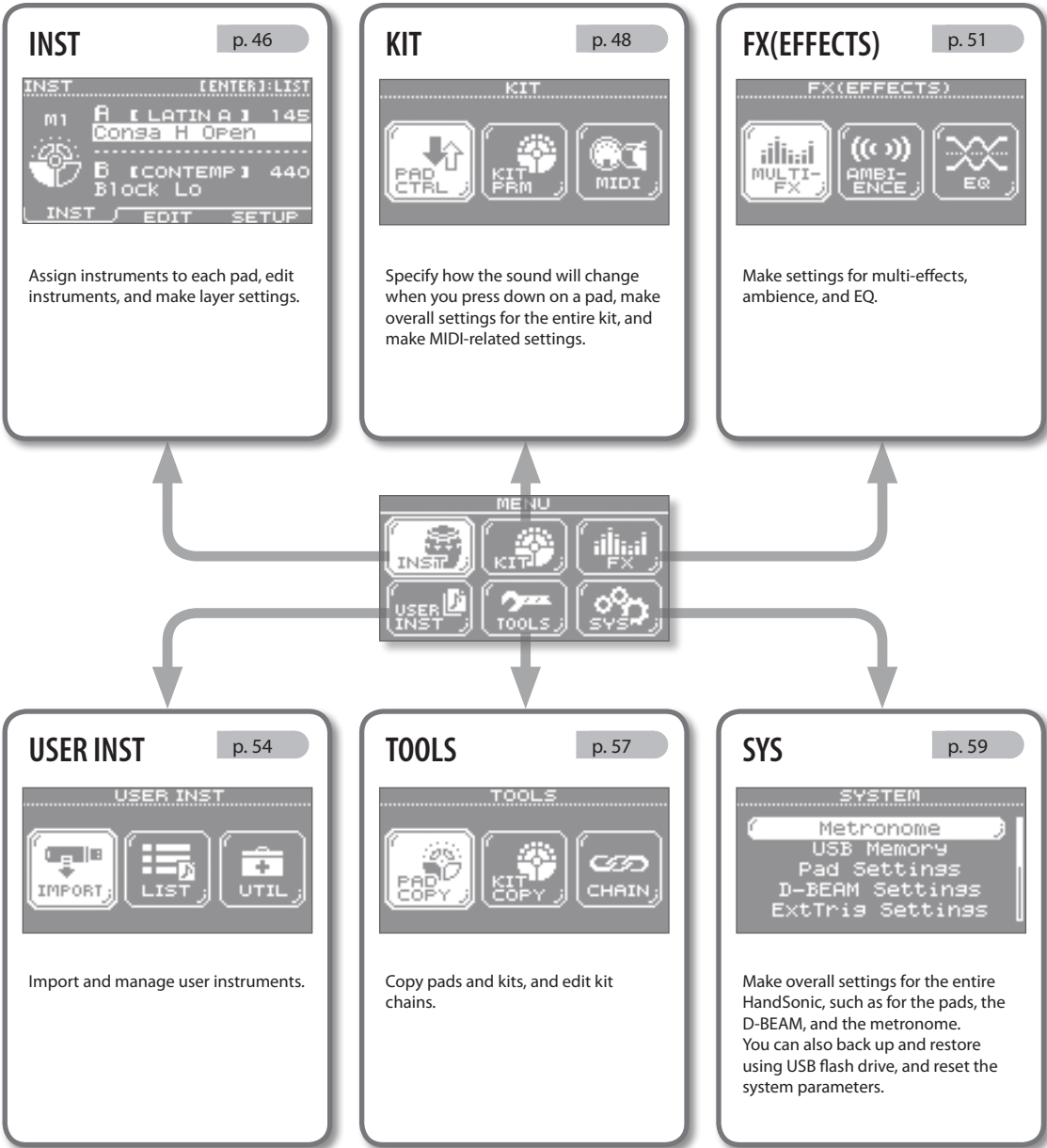
Parameter Guide

This section explains all of the HandSonic's functions and settings in each screen, organized according to the menu structure. For the procedure, refer to "Menu Operations" (p. 22).



MENU

The menu screen contains six items, organized by the content of the settings. For the content of each item, refer to the page indicated by **p. xx**.



* The explanations in this manual include illustrations that depict what should typically be shown by the display. Note, however, that your unit may incorporate a newer, enhanced version of the system (e.g., includes newer sounds), so what you actually see in the display may not always match what appears in the manual.



INST

MENU → INST → INST

These settings are made for each pad.

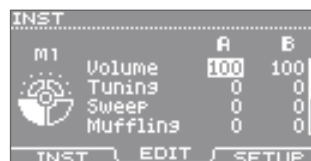


Parameter	Explanation
Assign an instrument (Inst)	
Inst A	Assign instrument A or instrument B. Choose "OFF" if you don't want sound to be produced.
Inst B	Press the [ENTER] button to see the instrument list.

INST-EDIT

MENU → INST → EDIT

These settings are made separately for instruments A and B.



Parameter	Explanation
Adjusting the volume (Volume)	
Volume	Adjusts the volume.
Adjusting the pitch (Tuning)	
Tuning	Adjusts the pitch. Positive ("+") settings raise the pitch, and negative ("-") settings lower the pitch. The units are cents; 100 cents = one semitone.
Varying the pitch (Sweep)	
Sweep	Sweeps the pitch upward (or downward). With positive ("+") settings, the pitch starts high and sweeps down; with negative ("-") settings, the pitch starts low and sweeps up. Greater values produce greater change. * In some cases, large changes in "Tuning" may limit the "Sweep" effect.
Adjusting the length of the sound (Muffling)	
Muffling	Greater values reduce the decay, emphasizing the attack.
Adjusting the tonal character (Color)	
Color	Adjusts the brightness of the sound. Positive ("+") settings brighten the sound, and negative ("-") settings darken the sound.
Adjusting the left/right position of the sound (Pan)	
Pan	Adjusts the left/right position. "CTR" is center.
Applying effects	
Amb Send	This is the same parameter as "AMBIENCE SEND-PAD" (p. 52).
MFX Asgn	This is the same parameter as "MULTI-FX-ASSIGN" (p. 51).

Listening to only instrument A or B

By striking a pad while you hold down the [SHIFT] button, you can listen to only instrument A or B, depending on the position of the cursor. Even if the sound of instruments A and B are being layered, this allows you to make adjustments while listening to them separately.

Applying the same values to all pads (ALL)

If you hold down the [SHIFT] button and press the [ENTER] button, the value of the selected parameter will be copied to all pads.

INST-SETUP

MENU → INST → SETUP

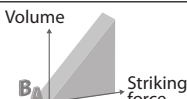
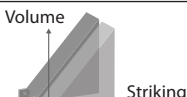
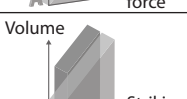
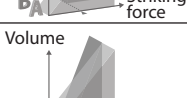
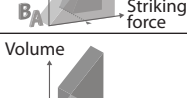
These settings are made for each pad.



Parameter	Explanation
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■ Specifying how instrument B will be sounded (Layer, Fade Point)

For details, refer to p. 24.

Layer	Specifies how instrument B will be sounded.		
	OFF		Only instrument A will sound.
	MIX		Instruments A and B will always sound together.
	VELO MIX		Instrument B will be layered only for strikes stronger than "Fade Point."
	VELO FADE		Instrument B will be layered according to the force of the strike only for strikes stronger than "Fade Point."
	VELO SW		Switches between instrument A for strikes that are weaker than "Fade Point" and instrument B for stronger strikes.
Fade Point	Specifies the striking force at which instrument B will begin to be heard. If this is "0," instrument B will sound for strikes of any force. If this is "127," instrument B will sound only for the strongest strike. * This parameter is unavailable if "Layer" is "OFF" or "MIX."		

■ Specifying how the sound will be produced (Trigger Mode)

This specifies how the sound will be produced when you strike the pad. You can also set this to loop a user instrument.

Trigger Mode	SHOT	The sound will play each time you strike the pad. User instrument loop playback will be unavailable.
	GATE	The sound will continue playing as long as you continue holding down the pad. * This cannot be selected for an external expansion pad or the hi-hat control pedal.
	ALT	The sound will alternately play and stop each time you strike the pad.

■ Fixing the dynamics of the sound (Fixed Velocity)

Fixed Velocity	OFF	The volume will be affected by the force of your strike.
	1-127	The volume will be fixed, regardless of the force of your strike. Specify the volume in the range of 1-127.

■ Preventing sounds from being heard together (Mute Group, Mono/Poly)

Mute Group	For example if you have assigned triangle open and closed sounds to two pads, you can assign them to the "Mute Group" of the same number so that the open sound will stop when you play the closed sound.	
	OFF	No Mute Group will be assigned.
	1-8	Multiple pads assigned to the Mute Group of the same number will not sound simultaneously.
Mono/Poly	With the "POLY" setting, multiple notes will be heard overlapping when you strike the same pad repeatedly. With the "MONO" setting, the previous note will be stopped before the newly played note is sounded; notes will not overlap. This does not affect the sound of other pads.	



PAD CTRL

PAD CONTROL-SEND

MENU → KIT → PAD CTRL → SEND

These settings are made for each pad.

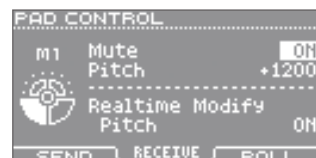


Parameter	Explanation
Modifying the sound by pressing down on a pad * This cannot be set for external expansion pads.	
Type	Specifies how the D-BEAM will modify the sound. With the "POSITION" setting, the sound will change according to the height of your hand above the sensor. With the "SPEED" setting, the sound will change according to the speed at which your hand is moved up or down.
Send to Pad	If this is "ON," pressing down on a pad will modify the sound of that pad. The way in which the sound changes is specified by the following "RECEIVE" parameter.
Send to Kit	You can produce the following effects by pressing down on this pad.
	OFF No effect will be applied.
	RT MODIFY PITCH +/- The same effect as the realtime modify knob (PITCH) will be applied.
	MFx1 CONTROL+/- MFx2 CONTROL+/- MFx3 CONTROL+/- The parameter of a multi-effect (MFx1-3) will be modified. With positive ("+") settings, the value will be increased when you press down on the pad. With negative ("-") settings, the value will be decreased.
	ROLL SPEED The roll speed will change.
	ALL SOUND OFF All sounds that are currently being produced will stop.

PAD CONTROL-RECEIVE

MENU → KIT → PAD CTRL → RECEIVE

These settings are made for each pad.

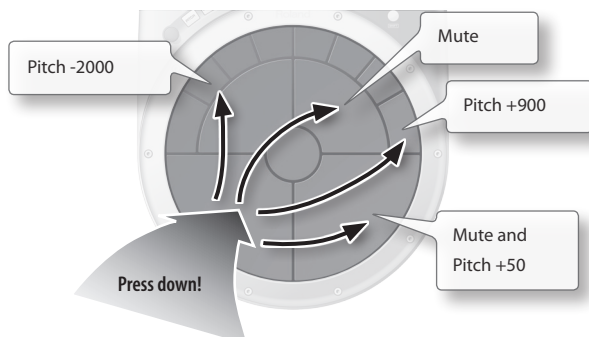


Parameter	Explanation
Specifying how the sound will change when you press down on a pad When you press down on a pad whose "Send to Pad" parameter (see above) is "ON," the effect you specify here for each pad will be produced.	
Mute	If this is "ON," the sound will become shorter as if you played the instrument in a muted (closed) state.
Pitch	The pitch will change according to the pressure that you apply to the pad. With positive ("+") settings, the pitch will rise; with negative ("-") settings, the pitch will fall.
Assigning the realtime modify knob (PITCH)	
Realtime Modify Pitch	If this is "ON," operating "PITCH" with the realtime modify knob will affect the pitch.

SEND and RECEIVE

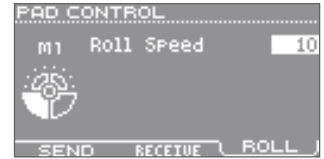
If "Send to Pad" is "ON," pressing down on a pad will send control data to each pad, causing its sound to change as specified by its "PAD CONTROL-RECEIVE" settings. This can also modify the sound of the specific pad that was pressed.

You can also modify the sound of the D-BEAM or an external expansion pad.



PAD CONTROL-ROLL

MENU → KIT → PAD CTRL → ROLL



These settings are made for each pad.

Parameter	Explanation
Adjusting the roll speed (Roll Speed) <ul style="list-style-type: none"> * This cannot be set for external expansion pads. * You can also set this by holding down the [SHIFT] button and pressing the [ROLL] button. 	
Roll Speed	If the [ROLL] button is on, pressing down on a pad will change the roll speed. Higher values will make the roll faster. If this is set to a note value, the roll will be synchronized to the tempo. If this is "OFF," a roll will not occur.

KIT PRM

KIT COMMON

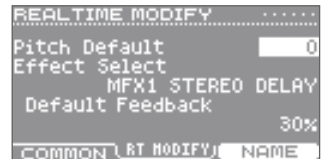
MENU → KIT → KIT PRM → COMMON



Parameter	Explanation
Adjusting the volume of the entire kit (Kit Volume) <p>For details, refer to p. 31.</p>	
Kit Volume	Adjusts the volume of the entire kit.
Adjusting the volume of the hi-hat control pedal (Pedal Hi-Hat Volume)	
Pedal Hi-Hat Volume	Adjusts the volume of the foot-close sound when you press the hi-hat control pedal. * The volume of the instrument assigned to the hi-hat control pedal is adjusted by "Volume" (p. 25).
Adjusting the sensitivity of the pads (Pad Sensitivity) <p>For details, refer to p. 31.</p>	
Pad Sensitivity	Adjusts the sensitivity of all pads (M1–M5, S1–S8) simultaneously. Set this to a lower value if you're using your hand to strike the pads. Set this to a higher value if you're using your fingers, or if a child will be playing the HandSonic.

REALTIME MODIFY

MENU → KIT → KIT PRM → RT MODIFY



Parameter	Explanation
Realtime modify knob settings <p>These parameters specify what the realtime modify knob will do if the [PITCH] or [EFFECT] button is pressed. * You can also make these settings by holding down the [SHIFT] button and pressing the [PITCH] or [EFFECT] button.</p>	
Pitch Default	Specifies the initial amount of pitch change that will be applied when you press the [PITCH] button. The amount of pitch change specified here will be applied even if you don't turn the realtime modify knob.
Effect Select	Selects the multi-effect that will be controlled by the realtime modify knob.
Default ...	Specifies the initial amount of multi-effect parameter change that will be applied when you press the [EFFECT] button. The change you specify here will be applied even if you don't turn the realtime modify knob. * The parameter name will change depending on the multi-effect type.

KIT NAME

MENU → KIT → KIT PRM → NAME



Button	Explanation
Renaming the kit (Kit Name)	
Here you can edit the name of the kit. When you've finished editing, press the [EXIT] button.	
For details, refer to p. 31.	
[F1] (DELETE)	Deletes the character at the cursor location.
[F2] (INSERT)	Inserts a space at the cursor location.
[F3] (A ▶ a ▶ 1)	Switches the type of character (uppercase/lowercase/numerals) at the cursor location.

MIDI

MIDI NOTE NUMBER

MENU → KIT → MIDI → NOTE#

These settings are made for each pad.



Parameter	Explanation
Specifying the note number of each pad (Note#)	
Main 1–5, Sub 1–8, D-BEAM, Ext Head, Ext Rim, HH Pedal	These parameters specify the note number of each pad. When you strike a pad, this note number will be transmitted. When this note number is received, the pad will sound. * If note numbers conflict, an “*” is shown.

MIDI GATE TIME

MENU → KIT → MIDI → GATE

These settings are made for each pad.



Parameter	Explanation
Specifying the gate time of each pad (Gate)	
Main 1–5, Sub 1–8, D-BEAM, Ext Head, Ext Rim, HH Pedal	These parameters specify the gate time of each pad. * This is valid if the “Trigger Mode” parameter is set to “SHOT” (p. 47). * The gate time is the time from when you strike a pad until a note-off message is transmitted.

Playing an external MIDI sound module

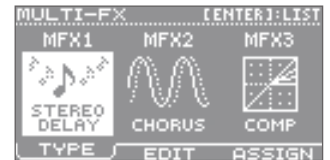
Use a MIDI cable to connect the HandSonic to your external MIDI sound module (p. 8).
Specify the MIDI channel and control change number as described in “MIDI-related settings” (p. 66), and assign a note number to each pad of each kit as described in “Specifying the note number of each pad (Note#)” (p. 50).



MULTI-FX

MULTI-FX-TYPE

MENU → FX → MULTI-FX → TYPE



Parameter	Explanation
Specifying the multi-effect type (MULTI-FX Type)	
For details, refer to p. 27.	
MFX1	Specify the multi-effect type for each unit MFX1–3.
MFX2	Press the [ENTER] button to see the MFX type list.
MFX3	For details on each type, refer to “Sound List” (PDF file).

MULTI-FX-EDIT

MENU → FX → MULTI-FX → EDIT



Parameter	Explanation
Adjusting the multi-effect (MULTI-FX Edit)	
For details, refer to p. 27.	
MFX1/MFX2/MFX3	Use the cursor [◀▶] buttons to select the multi-effect that you want to adjust. Press the [ENTER] button to see the MFX type list.
Parameters that adjust the multi-effect	The parameters will differ depending on the selected effect type. For details on each type, refer to “Sound List” (PDF file).

MULTI-FX-ASSIGN

MENU → FX → MULTI-FX → ASSIGN



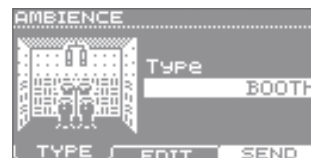
These settings are made for each pad.

Parameter	Explanation
Applying the multi-effect to each pad (MULTI-FX Assign)	
For details, refer to p. 26.	
Main 1–5, Sub 1–8, D-BEAM, Ext Head, Ext Rim, HH Pedal	Select MFX1–3 for each instrument (A and B) of each pad. If this is “OFF,” a multi-effect will not be applied.

AMBIENCE

AMBIENCE-TYPE

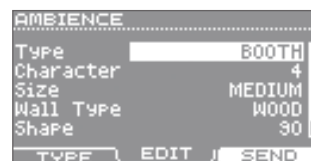
MENU → FX → AMBIENCE → TYPE



Parameter	Explanation
■ Specifying the type of ambience (Ambience Type)	
For details, refer to p. 28.	
Type	Specifies the type of ambience. For details on each type, refer to "Sound List" (PDF file).

AMBIENCE-EDIT

MENU → FX → AMBIENCE → EDIT



Parameter	Explanation
■ Adjusting the ambience (Ambience Edit)	
For details, refer to p. 29.	
Type	This is the same as the preceding item.
Character	Character of the ambience sound
Size	Size of the room
Wall Type	Material of the walls
Shape	Width of the room
Level	Overall amount of ambience

AMBIENCE SEND-PAD

MENU → FX → AMBIENCE → SEND → PAD

These settings are made for each pad.



Parameter	Explanation
■ Applying ambience to each pad (Ambience Send Pad)	
For details, refer to p. 28.	
Main 1–5, Sub 1–8, D-BEAM, Ext Head, Ext Rim, HH Pedal	Specify the amount of ambience that is applied to each instrument (A and B) of each pad.

AMBIENCE SEND-MFX

MENU → FX → AMBIENCE → SEND → MFX



Parameter	Explanation
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■ Applying ambience to the sound of each multi-effect (Ambience Send MFX)

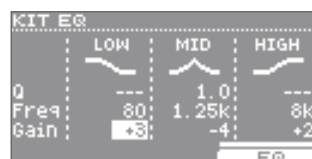
For details, refer to p. 29.

MFX1 → AMB	Specify the amount of ambience that is applied to the sound of each multi-effect.
MFX2 → AMB	
MFX3 → AMB	

EQ

KIT EQ

MENU → FX → EQ



Parameter/Button	Explanation
------------------	-------------

■ Applying EQ to the kit (EQ)

For details, refer to p. 30.

Q	Adjusts the width of the frequency region selected by "Freq." Higher values make the region narrower, producing a more distinctive sound. * This is available only for MID.
Freq	Selects the frequency range at which the volume will be boosted or cut. Lower values affect a lower frequency range; higher values affect a higher frequency range. * The available range differs between LOW/MID/HIGH.
Gain	Specifies the amount by which the volume is boosted or cut. Positive ("+") values boost the frequency region specified by "Freq." Negative ("-") values cut the frequency region specified by "Freq." If you don't want to apply an effect, set this to "0."
[F3] (EQ)	If this is on, EQ will be applied.



USER INST

IMPORT

IMPORT

MENU → USER INST → IMPORT



Button	Explanation
Importing a user instrument (Import)	
Here you can view a list of the audio files on a USB flash drive, and import the selected file. For details, refer to p. 34.	
[F1] (PREVIEW)	Auditions the sound.
[F3] (IMPORT)	Imports the selected file. You'll select a user instrument number in the screen that will appear next.

LIST

USER INST-LIST

MENU → USER INST → LIST



Button	Explanation
Viewing a list of user instruments (USER INST-LIST)	
For details, refer to p. 35.	
[F1] (PREVIEW)	Auditions the sound.
Looping a user instrument (Loop)	
For details, refer to p. 36.	
[F3] (LOOP)	Turns looping on/off for the selected user instrument.

USER INST FUNCTION

MENU → USER INST → LIST → FUNC



Parameter/Button	Explanation
Viewing information about user instruments (Function)	
Size	Indicates the size of the user instrument
Assigned to Kit	Indicates whether this user instrument is used by a kit (📁) or not used (🗑️).
[F1] (PREVIEW)	Auditions the sound.
Deleting a user instrument (Delete)	
For details, refer to p. 37.	
[F2] (DELETE)	Deletes the user instrument. In the confirmation screen, choose "YES" and press the [ENTER] button.

USER INST NAME

MENU → USER INST → LIST → FUNC → NAME



Button	Explanation
Renaming the user instrument (User Inst Name)	
When you've finished editing the name, press the [EXIT] button. For details, refer to p. 37.	
[F1] (DELETE)	Deletes the character at the cursor location.
[F2] (INSERT)	Inserts a space at the cursor location.
[F3] (A ► a ► 1)	Switches the type of character (uppercase/lowercase/numerals) at the cursor location.

UTIL

RENUMBER

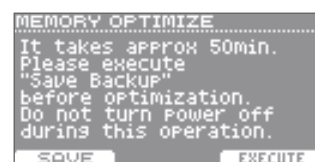
MENU → USER INST → UTIL → Renumber



Button	Explanation
Reassigning the user instrument numbers (Renumber)	
If you repeatedly import and then delete user instruments, their numbers will become discontinuous. By using this Renumber function you can renumber the user instruments so that they will be numbered consecutively from the beginning. The user instruments that are assigned to kits will also be reassigned so that they will sound correctly. * If you execute Renumber, and then subsequently load a previously-saved backup (that does not include user instruments), the user instruments will no longer be correctly assigned to the kits.	
[F3] (EXECUTE)	Executes the Renumber function. In the confirmation screen, choose "YES" and press the [ENTER] button.

MEMORY OPTIMIZE

MENU → USER INST → UTIL → Memory Optimize



Button	Explanation
Optimizing the user instrument area (Memory Optimize)	
If you repeatedly import and then delete user instruments, the user area will become fragmented, possibly decreasing the amount of user instruments that can be imported. This function lets you optimize the user instrument area so that it can be fully utilized.	
NOTE	
<ul style="list-style-type: none"> Back up to a USB flash drive before you execute this function (p. 38). Processing will require approximately 50 minutes. (Depends on the size and length of user instruments.) Never turn off the power while processing is in progress. The user instruments may be lost if you do so. In some cases, optimizing might not have an effect. 	
[F1] (SAVE)	Accesses the SAVE BACKUP screen (p. 38).
[F3] (EXECUTE)	Executes the Memory Optimize function. In the confirmation screen, choose "YES" and press the [ENTER] button.

USER INST

ALL DELETE

MENU → USER INST → UTIL → All Delete



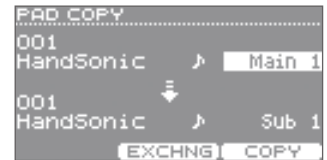
Button	Explanation
<div><div></div>Delete all user instruments (All Delete)</div>	This deletes all of the user instruments that you’ve imported.
<div><div>NOTE</div>User instruments used in kits will also be deleted. Pads to which user instruments are assigned will no longer produce sound.</div>	
[F3] (EXECUTE)	Executes the All Delete function. In the confirmation screen, choose “YES” and press the [ENTER] button.



PAD COPY

PAD COPY

MENU → TOOLS → PAD COPY



Parameter/Button	Explanation
Copying a pad (Pad Copy)	
	This copies a pad to a different pad. You can use this to create another pad with the same sound. Specify the copy-source and copy-destination pads, and press the [F3] (COPY) button.
Exchanging the sounds of pads (Pad Exchange)	
	This exchanges the sounds of two pads. Specify the two pads that will be exchanged, and press the [F2] (EXCHNG) button.
Upper line	Specifies the copy-source (exchange-source) kit number and pad.
Lower line	Specifies the copy-destination (exchange-destination) kit number and pad.
[F2] (EXCHNG)	Exchanges the pads. In the confirmation screen, choose "YES" and press the [ENTER] button.
[F3] (COPY)	Copies the pad. In the confirmation screen, choose "YES" and press the [ENTER] button.

KIT COPY

KIT COPY

MENU → TOOLS → KIT COPY



Parameter/Button	Explanation
Copying a kit (Kit Copy)	
	This copies a kit to a different kit number. You can use this to create another identical kit. Specify the copy-source and copy-destination kit number, and press the [F3] (COPY) button. For details, refer to p. 32.
Exchanging kits (Kit Exchange)	
	This exchanges the kit numbers of two kits. You can use this to change the order of kits. Specify the two kits that you want to exchange, and press the [F2] (EXCHNG) button.
Returning a Kit to the Factory Settings	
	You can select one of the factory-set kits and copy it to the desired kit. Select the copy-source kit from "PRESET," and copy it. For details, refer to p. 32.
Creating an empty kit	
	You can use an empty kit to create a kit from scratch. Specify "EMPTY" as the copy-source kit, and copy it to the desired kit.
USER/PRESET/EMPTY	USER: A conventional kit that you can select in the kit screen PRESET: Factory-set kit data EMPTY: A kit with no sounds, whose settings are all initialized
Upper line	Specify the copy-source (exchange-source) kit number. * This is unavailable if you've selected "EMPTY."
Lower line	Specify the copy-destination (exchange-destination) kit number.
[F2] (EXCHNG)	Exchanges the kits. * This cannot be executed if you've selected "PRESET" or "EMPTY."
[F3] (COPY)	Copies the kit.

CHAIN

CHAIN

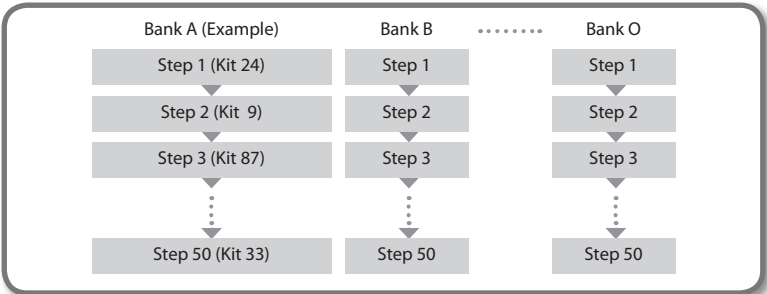
MENU → TOOLS → CHAIN



Parameter/Button	Explanation
------------------	-------------

Editing a kit chain (Chain)

The Kit Chain function lets you successively switch kits in the order you’ve specified, as needed for the songs in your performance. You can create 15 kit chains (banks A–O), and each kit chain can contain up to 50 steps.



To use the kit chain, press the [F1] (CHAIN) button in the kit screen. For details, refer to p. 33.

Chain (Bank)	Selects the bank (A–O) that you want to edit. Press the [F3] (EDIT) button to access the edit screen. Refer to the next section.
[F1] (MOVE UP)	Moves the bank selected by the cursor upward.
[F2] (MOVE DOWN)	Moves the bank selected by the cursor downward.

CHAIN EDIT

MENU → TOOLS → CHAIN → EDIT



Button	Explanation
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Specifying the order of kits (Chain Edit)

In each bank, you can specify a sequence of up to 50 steps by selecting a kit for each step.

01–50 (Step)	Specify the kit number for each step.
[F1] (DELETE)	Deletes the step at the cursor location.
[F2] (INSERT)	Inserts a step at the cursor location.
[F3] (NAME)	Edits the name of the bank. For details on editing a name, refer to step 4 of “Renaming” (p. 37).



Metronome

METRONOME SETUP-TIMSIG

MENU → SYS → Metronome → TIMSIG
From the kit screen, TEMPO → SETUP



Parameter/Button	Explanation
Specifying the metronome time signature	
Beat	Time signature
Rhythm Type	Type of rhythm

METRONOME SETUP-SOUND

MENU → SYS → Metronome → SOUND



Parameter	Explanation
Specifying the sound and volume of the metronome	
Sound	Sound
Volume	Volume
Pan	Panning

USB Memory

SAVE BACKUP

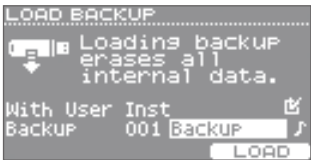
MENU → SYS → USB Memory → Save Backup



Parameter/Button	Explanation
Backing up to a USB flash drive (Save Backup)	
This will save all of the HandSonic's settings to a USB flash drive. For details, refer to p. 38.	
With User Inst	Specifies whether the sounds that you've imported as user instruments will be backed up (☑) or not backed up (☐). * Depending on the size of the user instruments, it may take more than two minutes to save the data if you include the user instruments in the backup.
Backup	Specifies the backup number (001–100).
Name	Shows the name of the backup.
[F2] (NAME)	Edits the name of the backup. For details on editing a name, refer to step 4 of "Renaming" (p. 37).
[F3] (SAVE)	Executes the backup operation.

LOAD BACKUP

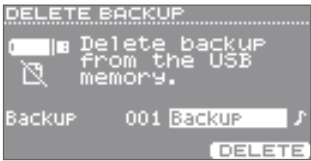
MENU → SYS → USB Memory → Load Backup



Parameter/Button	Explanation
Loading a backup from a USB flash drive (Load Backup)	
For details, refer to p. 39.	
NOTE	
Loading a backup will erase all data that is currently in the HandSonic.	
With User Inst	Specifies whether user instruments will be loaded (☑) or not loaded (☐). * Depending on the size of the user instruments, it will take more than 10 minutes to load the backup when loading the user instruments. * If you don't load user instruments, the user instruments currently in the HandSonic will not be erased.
Backup	Specifies the backup number. Backups that include user instruments are indicated by "i".
[F3] (LOAD)	Loads the backup. In the confirmation screen, choose "YES" and press the [ENTER] button.

DELETE BACKUP

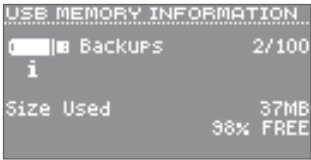
MENU → SYS → USB Memory → Delete Backup



Parameter/Button	Explanation
Deleting a backup from the USB flash drive (Delete Backup)	
Backup	Specifies the number of the backup that will be deleted.
[F3] (DELETE)	Executes the delete operation. In the confirmation screen, choose "YES" and press the [ENTER] button.

USB MEMORY INFORMATION

MENU → SYS → USB Memory → Information



Parameter	Explanation
Viewing information about the USB flash drive (USB Memory Information)	
Backups	The number of backups that have been saved.
Size Used	The size used, and the amount of free space (%).

FORMAT USB MEMORY

MENU → SYS → USB Memory → Format



Button	Explanation
Formatting a USB flash drive (Format USB Memory)	
NOTE	
Formatting a USB flash drive will erase all data on that USB flash drive.	
[F3] (FORMAT)	Executes the format operation. In the confirmation screen, choose "YES" and press the [ENTER] button.

Pad Settings

PAD SETTINGS–SENS

MENU → SYS → Pad Settings → SENS

These settings are made for each pad.

Strength at which you strike the pad



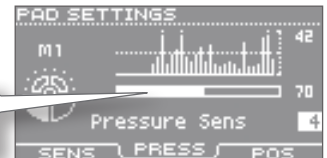
Parameter	Explanation
Adjusting the sensitivity etc. for each pad	
Sensitivity	You can adjust the sensitivity of the pads to accommodate your personal playing style. This allows you to have more dynamic control over the sound volume, based on how hard you play. Higher sensitivity allows the pad to produce a loud volume even when played softly. Lower sensitivity will keep the pad producing a low volume even when played forcefully. The default value is "4."
Threshold	With higher values, no sound will be produced by soft strikes. With lower values, even soft strikes will produce sound. The default value is "2."
Curve	This setting allows you to control the relation between playing velocity (striking force) and changes in volume.
	<div>LINEAR</div> <div>LINEAR</div> <p>The standard setting. This produces the most natural correspondence between playing dynamics and volume change.</p>
	<div>EXP1, EXP2</div> <div>EXP1 EXP2</div> <p>Compared to LINEAR, strong dynamics produce a greater change.</p>
	<div>LOG1, LOG2</div> <div>LOG1 LOG2</div> <p>Compared to LINEAR, a soft playing produces a greater change.</p>
	<div>SPLINE</div> <div>SPLINE</div> <p>Extreme changes are made in response to playing dynamics.</p>
	<div>LOUD1, LOUD2</div> <div>LOUD1 LOUD2</div> <p>Very little dynamic response, making it easy to maintain strong volume levels.</p>

PAD SETTINGS–PRESS

MENU → SYS → Pad Settings → PRESS

These settings are made for each pad.

Strength at which you press the pad



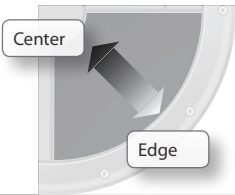
Parameter	Explanation
Adjusting the pad's pressure sensitivity	
Pressure Sens	Adjusts the sensitivity of the pad to pressure. With higher values, even slight pressure applied to the pad will produce a significant response. The default value is "5."

PAD SETTINGS-POSI

MENU → SYS → Pad Settings → POSI



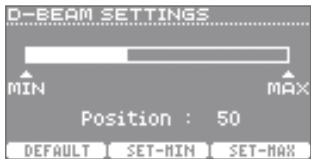
Parameter	Explanation
Adjusting how the sound will respond to strike position	
Position Area	<p>Adjusts how the tonal character (p. 14) will be affected by the position at which you strike the M1 or M2 pads.</p> <p>As you increase this value, it will become easier to produce tonal change by striking the edge.</p> <p>If this is "OFF," striking the edge will not produce tonal change.</p> <p>The default value is "2."</p> <p>* This setting is common to M1 and M2.</p>



D-BEAM Settings

D-BEAM SETTINGS

MENU → SYS → D-BEAM Settings
In the kit screen, [SHIFT] + [D-BEAM]

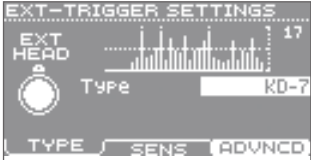


Button	Explanation
Calibrating the D-BEAM	
The D-BEAM's sensitivity and response curve will be affected by the brightness of the location. You can adjust these to obtain the desired performance.	
[F1] (DEFAULT)	Sets the calibration parameters to the default values.
[F2] (SET-MIN)	Position the palm of your hand above the D-BEAM at the highest position that you want to use, and press the [F2] (SET-MIN) button. The high position will be set.
[F3] (SET-MAX)	Position the palm of your hand above the D-BEAM at the lowest position that you want to use, and press the [F3] (SET-MAX) button. The low position will be set.

ExtTrig Settings

EXT-TRIGGER SETTINGS-TYPE

MENU → SYS → ExtTrig Settings → TYPE



Parameter	Explanation
Specifying the type of external expansion pad	
By specifying the type of external expansion pad that's connected, the optimal settings for sensitivity and other parameters for that pad can be set in a single step.	
Type	<p>Specifies the type of external expansion pad that's connected.</p> <p>* If "Type" is "FOOT SW," the parameters in [F2] (SENS) and [F3] (ADVNCD) will have no effect.</p>

EXT-TRIGGER SETTINGS–SENS

MENU → SYS → ExtTrig Settings → SENS



Parameter	Explanation
Adjusting the external expansion pad	
If you've specified the correct "Type," and would like to make additional adjustments, you can edit the following parameters.	
* If you change the "Type" setting, the following parameters will be changed to the recommended values for the type of pad you specified.	
Sensitivity	You can adjust the sensitivity of the pads to accommodate your personal playing style. This allows you to have more dynamic control over the sound volume, based on how hard you play. Higher sensitivity allows the pad to produce a loud volume even when played softly. Lower sensitivity will keep the pad producing a low volume even when played forcefully.
Threshold	Increase this value if the pad is unwantedly triggered by ambient vibration. If this value is too high, soft strikes will fail to produce sound; set this value as low as possible without allowing unwanted triggering to occur.
Curve	This setting allows you to control the relation between playing velocity (striking force) and changes in volume. For details, refer to p. 61.

EXT-TRIGGER ADVANCED–SCAN

MENU → SYS → ExtTrig Settings → ADVNCD → SCAN



Parameter	Explanation
Making detailed adjustments for the external expansion pad	
If you've specified the correct "Type," and would like make even more detailed adjustments, you can edit the following parameters.	
* If you change the "Type" setting, the following parameters will be changed to the recommended values for the type of pad you specified.	
Scan Time	Specifies the length of time used to detect the strike signal. While you continue striking the pad at the same force, gradually increase this value to the point where you obtain reliable triggering at the highest volume. Excessively high settings of this parameter will lengthen the time from the strike until sound is heard, impairing the performance response.
Retrigger Cancel	This parameter prevents a single strike from triggering two notes (retriggering). This is a particularly effective way to prevent retriggering when you're using a drum trigger. While you continue striking the pad, gradually raise this value until retriggering no longer occurs. Excessively high settings of this parameter will cause missed notes during rolls.
Mask Time	If the stick or beater rebounds against the striking surface immediately after the strike, a second note will be triggered. This parameter prevents such false triggering by causing additional strikes to be ignored for a certain time following a strike. While you continue striking the pad, gradually raise this value until double triggering no longer occurs. Excessively high settings of this parameter will cause missed notes during rolls.

EXT-TRIGGER ADVANCED–RIM

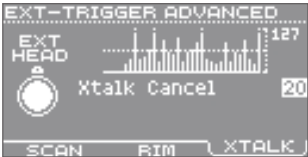
MENU → SYS → ExtTrig Settings → ADVNCD → RIM



Parameter	Explanation
Making adjustments for the rim of an external expansion pad	
If you've specified the correct "Type," and would like make even more detailed adjustments, you can edit the following parameters.	
* If you change the "Type" setting, the following parameters will be changed to the recommended values for the type of pad you specified.	
Rim Gain	Adjusts the rim sensitivity of the following pads. Higher value allows the rim to produce a loud volume even when played softly. PD series, PDX series, CY series, RT-10S
Head/Rim Adjust	Adjusts the reference for distinguishing head shots from rim shots for the following pads. Increasing this parameter will prevent the rim sound from being triggered when you make a head shot. Excessively high settings will make it harder to play the rim sound. PD series (except the PD-8), PDX series, RT-10S

EXT-TRIGGER ADVANCED–XTALK

MENU → SYS → ExtTrig Settings → ADVNCD → XTALK

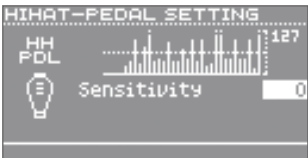


Parameter	Explanation
Reducing crosstalk with an external expansion pad	
XTalk Cancel	If the HandSonic and an external expansion pad are both attached to the same stand, the vibrations produced when you strike the HandSonic may cause unwanted triggering (crosstalk) on the external expansion pad; this parameter can prevent this problem. While you continue striking the HandSonic, raise the value of the external expansion pad until crosstalk no longer occurs. If this value is too high, notes struck on the external expansion pad might fail to be triggered if they are played simultaneously with a note on the HandSonic.

HHPedal Setting

HIHAT-PEDAL SETTING

MENU → SYS → HHPedal Setting

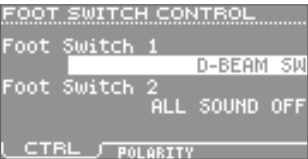


Parameter	Explanation
Hi-hat control pedal sensitivity	
Sensitivity	Adjusts the sensitivity for foot-close or foot-splash performance. With positive ("+") settings, a loud sound will be produced even if you step lightly on the pedal. The default value is "0."

FootSw Control

FOOT SWITCH CONTROL–CTRL

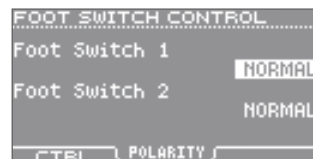
MENU → SYS → FootSw Control → CTRL



Parameter	Explanation	
Footswitch function assignments		
Here you can assign the function of footswitches 1 and 2. For details, refer to p. 42.		
* If only one footswitch is connected, set “Foot Switch 1.”		
Foot Switch 1, Foot Switch 2	OFF	No function will be assigned.
	KIT+	Increment the kit number by +1.
	KIT-	Decrement the kit number by -1.
	D-BEAM SW	Turn the D-BEAM on/off.
	RT MODIFY PITCH SW	Turn the realtime modify [PITCH] button on/off.
	RT MODIFY EFFECT SW	Turn the realtime modify [EFFECT] button on/off.
	ROLL SW	Turn the Roll function on/off.
	ALL SOUND OFF	Stop all sounds that are currently being produced.

FOOT SWITCH CONTROL-POLARITY

MENU → SYS → FootSw Control → POLARITY



Parameter	Explanation	
<div><div></div><div>Footswitch polarity settings</div></div> <p>Here you can set the polarity of footswitches 1 and 2.</p> <p>If the function operates when you take your foot off the footswitch, change this setting.</p> <p>* If only one footswitch is connected, set "Foot Switch 1."</p>		
Foot Switch 1,	NORMAL	Normal setting.
Foot Switch 2	INVERSE	Inverted polarity.

Options

OPTIONS

MENU → SYS → Options



Parameter	Explanation	
Overall settings for the entire HandSonic Here you can make settings such as display brightness and auto-off.		
Display Contrast	Adjust the contrast of the display. The default value is "5." * In the kit screen, you can adjust this by holding down the [KIT] button and press the [-][+] buttons.	
Display Brightness	Adjust the brightness of the display. The default value is "8."	
Illumination -/+ Buttons	If this is "ON," the [-][+] buttons will be lit. The default value is "ON."	
Pad Chase	If this is "ON," striking a pad will select it for editing. If this is "OFF," hold down the [SHIFT] button and use the [◀▶] buttons to select a pad for editing. The default value is "ON."	
Auto Off	When shipped from the factory, the HandSonic is set to automatically power-off when 4 hours have elapsed since it was last played or operated. * Approximately five minutes before the power turns off, a message will appear in the screen.	
	OFF	The power will not turn off automatically.
	4 HOURS	The power will turn off automatically when 4 hours have elapsed.
USB Audio Volume	When the HandSonic is connected to a computer via USB, this parameter adjusts the volume of the sound from the computer that is heard through the HandSonic. The default value is "80." For details, refer to p. 44.	
System Gain	Adjusts the output level of the OUTPUT jacks, PHONES jack, and USB audio. Positive ("+") settings increase the output level. The default value is "0dB."	
Value Knob Lock	By turning this "ON," you can disable the value knob. Even if the value knob is disabled, you can use the [-][+] buttons to edit a value.	
Write Protect	If this is "ON," the current settings will be preserved, and any changes made subsequently will all be discarded when you turn off the power. Also, it will no longer be possible to import or delete user instruments, or to execute a System Reset. The default value is "OFF"	

MIDI

MIDI

MENU → SYS → MIDI → MIDI

```

MIDI.....
MIDI Channel      10
Local Control     ON
Note Chase        ON
D-BEAM CC#        GENERAL6(81)
Realtime Modify
MIDI / VISUAL

```

Parameter	Explanation
MIDI-related settings	
Here you can make settings such as MIDI channel and control change numbers.	
MIDI Channel	Specifies the transmit and receive channels. The default value is "10."
Local Control	If this is "OFF," the HandSonic's pads will be disconnected from its internal sound generator. Normally you'll leave this "ON." The default value is "ON."
Note Chase	If this is "ON," note messages received via MIDI or USB MIDI will switch the pad selected for editing. The default value is "ON."
D-BEAM CC#	Specifies the control change number that is transmitted when you position your hand above the D-BEAM. The default value is "GENERAL6(81)."
Realtime Modify Pitch CC#	Specifies the control change number that is transmitted when you press the [PITCH] button and turn the realtime modify knob. The default value is "PITCH BEND."
Realtime Modify Effect CC#	Specifies the control change number that is transmitted when you press the [EFFECT] button and turn the realtime modify knob. The default value is "GENERAL7(82)."
Program Change Tx	If this is "ON," a program change message will be transmitted when you switch kits. The default value is "OFF."
Program Change Rx	If this is "ON," incoming program change messages will switch kits. The default value is "OFF."
Control Change Tx	If this is "ON," control change messages will be transmitted. The default value is "ON."
Control Change Rx	If this is "ON," control change messages will be received to modify the sound. The default value is "ON."
Pressure Tx	If this is "ON," polyphonic aftertouch messages will be transmitted when you press down on a pad. The default value is "ON."
Pressure Rx	If this is "ON," polyphonic aftertouch messages will be received to modify the sound. The default value is "ON."

MIDI VISUAL CONTROL

MENU → SYS → MIDI → VISUAL

```

MIDI VISUAL CONTROL.....
MIDI Visual Control OFF
Control Mode        MVC
MIDI Channel        16
Knob CC#            0
MIDI / VISUAL

```

Parameter	Explanation
Visual control settings	
MIDI Visual Control is a function that lets you control images along with your performance (p. 67). If you've set Control Mode to "MVC" or "V-LINK," playing pads of the HandSonic will control the images produced by the Visual device connected to the HandSonic.	
MIDI Visual Control	Turn this "ON" if you want to control a video device (sold separately) in synchronization with your performance. When you turn the power on, this will always be "OFF."
Control Mode	Set this as appropriate for the video device that's connected.
MIDI Channel	Specifies the MIDI channel used to switch images. The default value is "16."
Knob CC#	Specifies the control change number that is transmitted when you turn the realtime modify knob. The default value is "74."

Information

INFORMATION

MENU → SYS → Information



Parameter	Explanation
■ Viewing version information about the HandSonic unit	
Program Version	Program version

System Reset

System RESET

MENU → SYS → System Reset



Button	Explanation
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■ Initializing the system parameters

Here you can return the system parameters of the HandSonic unit (the settings located in MENU → SYS) to their factory-set state.

* Kits and user instruments will not be deleted.

* If you want to return the kits and user instruments to their factory-set state, refer to "Returning all kits and user instruments to the factory-set state" (p. 32).

NOTE

All of the system parameters in the HandSonic unit will be deleted.

If there are settings that you want to keep, backup them to a USB flash drive before you continue (p. 38).

[F3] (EXECUTE)	Executes the reset. In the confirmation screen, choose "YES" and press the [ENTER] button.
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What is MIDI Visual Control?



MIDI Visual Control is an internationally-used recommended practice that was added to the MIDI specification so that visual expression could be linked with musical performance. Video equipment that is compatible with MIDI Visual Control can be connected to electronic musical instruments via MIDI in order to control video equipment in tandem with a performance.

What is V-LINK?



V-LINK is Roland's proprietary specification that allows visual expression to be linked with musical performance. Video equipment that is compatible with V-LINK can be connected to electronic musical instruments via MIDI, making it easy to enjoy a variety of visual effects that are linked with the performance.

Appendix

Error Messages

If an error message appears in the HandSonic's screen, refer to this list of messages and take the appropriate action.

Message	Meaning	Action
Messages about the HandSonic itself		
Internal memory full.	The QUICK REC storage capacity is full.	—
User Inst memory full.	The user instrument memory is full.	Delete unneeded user instruments (p. 37). In some cases, optimizing the area may allow you to import the sound (p. 55).
MIDI buffer full.	The HandSonic attempted to transmit or receive more MIDI messages in a short time than could be processed.	Decrease the amount of MIDI messages.
Data memory was damaged.	There is a problem with internal memory.	A system reset will be executed automatically.
Device error.	There is a problem with the internal system.	Contact your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.
Write Protect is ON.	The operation cannot be executed because "Write Protect" is ON.	If you want to execute this operation, turn Write Protect off (p. 65).
The module will turn off soon.	The power will soon turn off because of the "Auto Off" setting.	If you don't want the power to turn off, press any button or strike a pad. You can also disable the "Auto Off" setting so that the power does not turn off automatically (p. 65).
USB-related messages		
USB memory full.	The USB flash drive does not have enough free space.	Either delete unneeded data, or use another USB flash drive.
Check the USB memory.	The USB flash drive is not working correctly.	Check the USB flash drive.
Could not read this file.	The specified data does not exist on the USB flash drive. Alternatively, the saved data has been damaged.	Check the file on the USB flash drive.
Unsupported format.	This file format is not supported.	
USB device error.	A USB device not supported by the HandSonic is connected.	Immediately disconnect the USB device. Check whether there might be a problem with the USB MEMORY connector.
USB memory busy.	Data could not be read/written fast enough from/to the USB flash drive.	Use a different USB flash drive. Use USB flash drive sold by Roland. We cannot guarantee operation if other products are used.
USB memory is not connected here.	A USB flash drive is not connected to the HandSonic.	Connect a USB flash drive.

Shortcuts

Action	Function
[SHIFT] + [-] [+] or value knob	Change the value in larger steps.
[SHIFT] + [◀ ▶]	Switch the pad that you're editing.
[SHIFT] + [EXIT]	Silence all sounding notes (p. 36).
[SHIFT] + [PITCH]/[EFFECT]	Access the realtime modify setting window.
[SHIFT] + [ROLL]	Access the roll speed setting screen.
[KIT] + [-] [+]	In the kit screen, adjust the display contrast.
[SHIFT] + [D-BEAM]	From the kit screen, jump to the D-BEAM Settings screen.
[SHIFT] + strike a pad	In the kit screen, check the instrument that's assigned to a pad.
	In the INST or INST-EDIT screen, sound only the layer (instrument A or B) that's selected by the cursor.
[SHIFT]+[ENTER]	In the INST or INST-EDIT screen, copy the value of the selected parameter to all pads (p. 23).

Troubleshooting

If the system does not operate as you expect, please check the following points first.
If you are still unable to resolve the problem, contact your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

Problem	Items to check	Action	Page
Problems with sound			
No sound	Is the HandSonic correctly connected to the external devices?	Check the connections.	p. 8
	Could an audio cable be broken?	Try using a different cable.	–
	Could you be using a connection cable that contains a resistor?	Use a connection cable that does not contain a resistor.	–
	Could the volume of the connected amp or speaker be lowered?	Adjust the volume to an appropriate level.	p. 10
	Could the HandSonic's volume be lowered?		
	Check whether you hear sound through headphones.	If you hear sound in the headphones, there is a problem with the connection cables or with the connected amp or speaker. Check the connected devices and the connections.	–
	Could the volume be lowered on the device connected to the MIX IN jack?	Adjust the volume to an appropriate level.	–
	Could "Local Control" be "OFF"?	Set Local Control to "ON."	p. 66
A specific pad does not sound	Could the instrument be "OFF"?	Assign an instrument.	p. 23
	Could the instrument's "Volume" be lowered?	Adjust the instrument's "Volume."	p. 25
	Could the user instrument have been deleted?	If you delete the user instrument that's assigned to a pad, that pad will not produce sound. Import the user instrument once again, or assign another instrument.	p. 37
	Could the pad's "Sensitivity" be lowered?	Adjust the pad's "Sensitivity."	p. 61
External expansion pad does not respond correctly	Is the pad's "Type" set correctly?	Set the pad's "Type."	p. 62
Problems with USB			
USB flash drive is connected but not recognized / Data is not visible	Is the USB flash drive inserted correctly?	Make sure that the USB flash drive is correctly connected.	p. 8
	Check the type of USB flash drive.	Use a USB flash drive sold by Roland. We cannot guarantee correct operation if any other product is used.	–
	Is it formatted correctly?	Format the USB flash drive on the HandSonic.	p. 60
	Is the file in the correct location?	When importing user instruments, place the files in the top level (root) of the USB flash drive.	p. 34
Can't connect with a computer	Is the USB cable connected correctly?	Make sure that the USB cable is correctly connected.	p. 44
	Is the USB driver installed?	Install the USB driver on your computer.	
Can't import an audio file	Is the audio file format correct?	Check the audio file's format, file name, and file name extension.	p. 34
Can't save data	Is there enough free space on the USB flash drive?	Either delete unneeded files, or use a different USB flash drive.	p. 60
Can't load or save successfully	Could you have struck the pads while loading or saving?	Do not strike the pad surface while accessing USB flash drive. The vibration may cause errors.	–
Problems with MIDI			
No sound	Are the MIDI cables connected correctly?	Check the connections.	–
	Is the MIDI channel set correctly?	Set the MIDI channels of the HandSonic and external MIDI device to the same setting.	p. 66
	Has the note number been set properly?	Set the pad's "Note#".	p. 50

What is the HandSonic?

Quick Guide

Frequently Used Functions

Parameter Guide

Appendix

Main Specifications

Roland HandSonic HPD-20: Percussion Pad

Pad	10 inches, 13 sections, Pressure-Sensitive * An external trigger input is provided, allowing you to connect a pad (sold separately).	
Kits	200	
Instruments	850	
Kit Chains	15 chains (50 steps per chain)	
User Instrument	Maximum User Instrument Storage: 500 (includes factory preloaded user instruments)	
	Sound Length (total): 12 minutes in mono, 6 minutes in stereo	
	File Format: .WAV (44.1 kHz, 16 bits)	
Effects	Multi-Effects: 3 systems, 25 types	
	Ambience: 10 types	
	3-band Kit EQ	
Quick Rec	Resolution: 480 ticks per quarter note	
	Recording Method: Realtime	
	Maximum Note Storage: approx. 30,000 notes	
	Export File Format: WAV (44.1 kHz, 16 bits)	
Controllers	D-BEAM Realtime Modify knob	
Display	Graphic LCD 64 x 128 dots	
Connectors	OUTPUT (L/MONO, R) jacks: 1/4-inch phone type PHONES jack: Stereo 1/4-inch phone type MIX IN jack: Stereo 1/4-inch phone type TRIG IN jack: 1/4-inch TRS phone type HH CTRL jack: 1/4-inch TRS phone type	FOOT SW jack: 1/4-inch TRS phone type MIDI (IN, OUT) connectors USB COMPUTER port: USB Type B (Audio, MIDI) USB MEMORY port: USB Type A DC IN jack
Interface	Hi-Speed USB (USB Audio, USB MIDI, USB Flash Memory)	
Power Supply	AC Adaptor	
Current Draw	700 mA	
Dimensions	311 (W) x 404 (D) x 102 (H) mm 12-1/4 (W) x 15-15/16 (D) x 4-1/16 (H) inches	
Weight (excluding AC adaptor)	2.4 kg 5 lbs 5 oz	
Accessories	Owner's manual AC adaptor	
Options (sold separately)	Kicks: KD series Pads: PD series, PDX series, BT-1 Cymbals: CY series Hi-Hat Control Pedal: FD series Pad Stand: PDS-10 Carrying Bag: CB-HPD	Footswitch: BOSS: FS-5U, FS-6 Pedal Switch: DP-2 Personal Drum Monitor: PM-10 USB Flash Memory * Use USB Flash Memory sold by Roland. We cannot guarantee operation if other products are used.

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

Copyrights

- It is forbidden by law to make an audio recording, video recording, copy or revision of a third party's copyrighted work (musical work, video work, broadcast, live performance, or other work), whether in whole or in part, and distribute, sell, lease, perform, or broadcast it without the permission of the copyright owner.
- Do not use this product for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this product.
- The copyright of content in this product (the sound waveform data, style data, accompaniment patterns, phrase data, audio loops and image data) is reserved by Roland Corporation.
- Purchasers of this product are permitted to utilize said content (except song data such as Demo Songs) for the creating, performing, recording and distributing original musical works.
- Purchasers of this product are NOT permitted to extract said content in original or modified form, for the purpose of distributing recorded medium of said content or making them available on a computer network.

Licenses/Trademarks

- MMP (Moore Microprocessor Portfolio) refers to a patent portfolio concerned with microprocessor architecture, which was developed by Technology Properties Limited (TPL). Roland has licensed this technology from the TPL Group.
- ASIO is a trademark and software of Steinberg Media Technologies GmbH.
- Company names and product names appearing in this document are registered trademarks or trademarks of their respective owners.
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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

To completely turn off power to the unit, pull out the plug from the outlet

Even with the power switch turned off, this unit is not completely separated from its main source of power. When the power needs to be completely turned off, turn off the power switch on the unit, then pull out the plug from the outlet. For this reason, the outlet into which you choose to connect the power cord's plug should be one that is within easy reach and readily accessible.



Concerning the Auto Off function

The power to this unit will be turned off automatically after a predetermined amount of time has passed since it was last used for playing music, or its buttons or controls were operated (Auto Off function). If you do not want the power to be turned off automatically, disengage the Auto Off function (p. 65).



Do not disassemble or modify by yourself

Do not open (or modify in any way) the unit or its AC adaptor.



Do not repair or replace parts by yourself

Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.



Do not use or store in the following types of locations

- Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
- Damp (e.g., baths, washrooms, on wet floors); or are
- Exposed to steam or smoke; or are
- Subject to salt exposure; or are
- Humid; or are
- Exposed to rain; or are
- Dusty or sandy; or are
- Subject to high levels of vibration and shakiness.



Use only the stand that is recommended

This unit should be used only with a stand that is recommended by Roland.



⚠ WARNING

Do not place in a location that is unstable

When using the unit with a stand recommended by Roland, the stand must be carefully placed so it is level and sure to remain stable. If not using a stand, you still need to make sure that any location you choose for placing the unit provides a level surface that will properly support the unit, and keep it from wobbling.



Precautions regarding placement of this unit on a stand

Be sure to follow the instructions in the Owner's Manual carefully when placing this unit on a stand (p. 11).



If it is not set up properly, you risk creating an unstable situation which could lead to the unit falling or the stand toppling, and may result in injury.

Use only the supplied AC adaptor and the correct voltage

Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.



Use only the supplied power cord

Use only the attached power-supply cord. Also, the supplied power cord must not be used with any other device.



Do not bend the power cord or place heavy objects on it

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!



Avoid extended use at high volume

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.



⚠ WARNING

Don't allow foreign objects or liquids to enter unit; never place containers with liquid on unit

Do not place containers containing liquid (e.g., flower vases) on this product. Never allow foreign objects (e.g., flammable objects, coins, wires) or liquids (e.g., water or juice) to enter this product. Doing so may cause short circuits, faulty operation, or other malfunctions.



Turn off the unit if an abnormality or malfunction occurs

Immediately turn the unit off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:



- The AC adaptor, the power-supply cord, or the plug has been damaged; or
- If smoke or unusual odor occurs; or
- 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.

Adults must provide supervision in places where children are present

Always make sure that an adult is on hand to provide supervision and guidance when using the unit in places where children are present.



Do not drop or subject to strong impact

Protect the unit from strong impact. (Do not drop it!)



Do not share an outlet with an unreasonable number of other devices

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.



Do not use overseas

Before using the unit in overseas, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.



⚠ CAUTION

Place in a well ventilated location

The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation.



Use only the specified stand(s)

This unit is designed to be used in combination with specific stands (PDS-10) manufactured by Roland. If used in combination with other stands, you risk sustaining injuries as the result of this product falling down or toppling over due to a lack of stability.



Evaluate safety issues before using stands

Even if you observe the cautions given in the owner's manual, certain types of handling may allow this product to fall from the stand, or cause the stand to overturn. Please be mindful of any safety issues before using this product.



When disconnecting an AC adaptor, grasp it by the plug

To prevent conductor damage, always grasp the AC adaptor by its plug when disconnecting it from this unit or from a power outlet.



⚠ CAUTION

Periodically clean the AC adaptor's plug

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.



Manage cables for safety

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.



Avoid climbing on top of the unit, or placing heavy objects on it

Never climb on top of, nor place heavy objects on the unit.



Do not connect or disconnect the AC adaptor with wet hands

Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.



⚠ CAUTION

Disconnect everything before moving the unit

Before moving the unit, disconnect the AC adaptor and all cords coming from external devices.



Unplug the AC adaptor from the outlet before cleaning

Before cleaning the unit, turn it off and unplug the AC adaptor from the outlet (p. 8).



If there is a possibility of lightning strike, disconnect the AC adaptor from the outlet

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



Keep small items out of the reach of children

To prevent accidental ingestion of the parts listed below, always keep them out of the reach of small children.



- Removable Parts
- Screws (p. 11)

IMPORTANT NOTES

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 or a motor (such as a refrigerator, washing machine, microwave oven, or air conditioner). 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.
- To prevent malfunction and equipment failure, always make sure to turn off the power on all your equipment before you make any connections.

Placement

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

- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface. You can place a piece of felt or cloth under the rubber feet to prevent this from happening. If you do so, please make sure that the unit will not slip or move accidentally.
- Do not place containers or anything else containing liquid on top of this unit. Also, whenever any liquid has been spilled on the surface of this unit, be sure to promptly wipe it away using a soft, dry cloth.

Maintenance

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

Repairs and Data

- Before sending the unit away for repairs, be sure to make a backup of the data stored within it; or you may prefer to write down the needed information. Although we will do our utmost to preserve the data stored in your unit when we carry out repairs, in some cases, such as when the memory section is physically damaged, restoration of the stored content may be impossible. Roland assumes no liability concerning the restoration of any stored content that has been lost.

Additional Precautions

- Any data stored within the unit can be lost as the result of equipment failure, incorrect operation, etc. To protect yourself against the irretrievable loss of data, try to make a habit of creating regular backups of the data you've stored in the unit.
- Roland assumes no liability concerning the restoration of any stored content that has been lost.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.

- Never strike or apply strong pressure to the display.
- When 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 others nearby, try to keep the unit's volume at reasonable levels.
- This instrument is designed to minimize the extraneous sounds produced when it's played. However, since sound vibrations can be transmitted through floors and walls to a greater degree than expected, take care not to allow these sounds to become a nuisance others nearby.
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.
- The usable range of D-BEAM controller will become extremely small when used under strong direct sunlight. Please be aware of this when using the D-BEAM controller outside.
- The sensitivity of the D-BEAM controller will change depending on the amount of light in the vicinity of the unit. If it does not function as you expect, adjust the sensitivity as appropriate for the brightness of your location.

Using External Memories

- Please observe the following precautions when handling external memory devices. Also, make sure to carefully observe all the precautions that were supplied with the external memory device.
 - Do not remove the device while reading/writing is in progress.
 - To prevent damage from static electricity, discharge all static electricity from your person before handling the device.



This product complies with the requirements of EMC Directive 2004/108/EC.

For EU Countries

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.

This equipment requires shielded interface cables in order to meet FCC class B limit.

Any unauthorized changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For Canada

CAN ICES-3 (B)/NMB-3 (B)

For Korea

사용자 안내문

기종별	사용자 안내문
B 급 기기 (가정용 방송통신기자재)	이 기기는 가정용(B 급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든지역에서 사용할 수 있습니다.

For C.A. US (Proposition 65)

WARNING

This product contains chemicals known to cause cancer, birth defects and other reproductive harm, including lead.

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 the USA

DECLARATION OF CONFORMITY Compliance Information Statement

Model Name : HPD-20
Type of Equipment : Electronic Drum
Responsible Party : Roland Corporation U.S.
Address : 5100 S. Eastern Avenue Los Angeles, CA 90040-2938
Telephone : (323) 890-3700

For EU Countries



- UK** This symbol indicates that in EU countries, this product must be collected separately from household waste, as defined in each region. Products bearing this symbol must not be discarded together with household waste.
- DE** Dieses Symbol bedeutet, dass dieses Produkt in EU-Ländern getrennt vom Hausmüll gesammelt werden muss gemäß den regionalen Bestimmungen. Mit diesem Symbol gekennzeichnete Produkte dürfen nicht zusammen mit den Hausmüll entsorgt werden.
- FR** Ce symbole indique que dans les pays de l'Union européenne, ce produit doit être collecté séparément des ordures ménagères selon les directives en vigueur dans chacun de ces pays. Les produits portant ce symbole ne doivent pas être mis au rebut avec les ordures ménagères.
- IT** Questo simbolo indica che nei paesi della Comunità europea questo prodotto deve essere smaltito separatamente dai normali rifiuti domestici, secondo la legislazione in vigore in ciascun paese. I prodotti che riportano questo simbolo non devono essere smaltiti insieme ai rifiuti domestici. Ai sensi dell'art. 13 del D.Lgs. 25 luglio 2005 n. 151.
- ES** Este símbolo indica que en los países de la Unión Europea este producto debe recogerse aparte de los residuos domésticos, tal como esté regulado en cada zona. Los productos con este símbolo no se deben depositar con los residuos domésticos.
- PT** Este símbolo indica que nos países da UE, a recolha deste produto deverá ser feita separadamente do lixo doméstico, de acordo com os regulamentos de cada região. Os produtos que apresentem este símbolo não deverão ser eliminados juntamente com o lixo doméstico.
- NL** Dit symbool geeft aan dat in landen van de EU dit product gescheiden van huishoudelijk afval moet worden aangeboden, zoals bepaald per gemeente of regio. Producten die van dit symbool zijn voorzien, mogen niet samen met huishoudelijk afval worden verwijderd.
- DK** Dette symbol angiver, at i EU-lande skal dette produkt opsamles adskilt fra husholdningsaffald, som defineret i hver enkelt region. Produkter med dette symbol må ikke smides ud sammen med husholdningsaffald.
- NO** Dette symbolet indikerer at produktet må behandles som spesialavfall i EU-land, iht. til retningslinjer for den enkelte regionen, og ikke kastes sammen med vanlig husholdningsavfall. Produkter som er merket med dette symbolet, må ikke kastes sammen med vanlig husholdningsavfall.

- SE** Symbolen anger att i EU-länder måste den här produkten kasseras separat från hushållsavfall, i enlighet med varje regions bestämmelser. Produkter med den här symbolen får inte kasseras tillsammans med hushållsavfall.
- FI** Tämä merkintä ilmaisee, että tuote on EU-maissa kerättävä erillään kotitalousjätteistä kunkin alueen voimassa olevien määräysten mukaisesti. Tällä merkinnällä varustettuja tuotteita ei saa hävittää kotitalousjätteiden mukana.
- HU** Ez a szimbólum azt jelenti, hogy az Európai Unióban ezt a terméket a háztartási hulladéktól elkülönítve, az adott régióban érvényes szabályozás szerint kell gyűjteni. Az ezzel a szimbólummal ellátott termékeket nem szabad a háztartási hulladék közé dobni.
- PL** Symbol oznacza, że zgodnie z regulacjami w odpowiednim regionie, w krajach UE produktu nie należy wyrzucać z odpadami domowymi. Produktów opatrzonych tym symbolem nie można utylizować razem z odpadami domowymi.
- CZ** Tento symbol udává, že v zemích EU musí být tento výrobek sbírán odděleně od domácího odpadu, jak je určeno pro každý region. Výrobky nesoucí tento symbol se nesmí vyhazovat spolu s domácím odpadem.
- SK** Tento symbol vyjadruje, že v krajinách EÚ sa musí zber tohto produktu vykonávať oddelene od domového odpadu, podľa nariadení platných v konkrétnej krajine. Produkty s týmto symbolom sa nesmú vyhazovať spolu s domovým odpadom.
- EE** See sümbol näitab, et EL-i maades tuleb see toode olemprügist eraldi koguda, nii nagu on igas piirkonnas määratletud. Selle sümboliga märgitud tooteid ei tohi ära visata koos olmeprügiga.
- LT** Šis simbolis rodo, kad ES šalyse šis produktas turi būti surenkamas atskirai nuo buitinių atliekų, kaip nustatyta kiekviename regione. Šiuo simboliu paženklinoti produktai neturi būti išmetami kartu su buitiniems atliekomis.
- LV** Šis simbols norāda, ka ES valstīs šo produktu jāievāc atsevišķi no mājsaimniecības atkritumiem, kā noteikts katrā reģionā. Produkta ar šo simbolu nedrīkst izmest kopā ar mājsaimniecības atkritumiem.
- SI** Ta simbol označuje, da je treba proizvod v državah EU zbirati ločeno od gospodinskih odpadkov, tako kot je določeno v vsaki regiji. Proizvoda s tem znakom ni dovoljeno odlagati skupaj z gospodinskimi odpadki.
- GR** Το σύμβολο αυτό υποδηλώνει ότι στις χώρες της Ε.Ε. το συγκεκριμένο προϊόν πρέπει να συλλέγεται χωριστά από τα υπόλοιπα οικιακά απορρίμματα, σύμφωνα με όσα προβλέπονται σε κάθε περιοχή. Τα προϊόντα που φέρουν το συγκεκριμένο σύμβολο δεν πρέπει να απορρίπτονται μαζί με τα οικιακά απορρίμματα.

For China

有关产品中所含有害物质的说明

本资料就本公司产品中所含的特定有害物质及其安全性予以说明。

本资料适用于 2007 年 3 月 1 日以后本公司所制造的产品。

环保使用期限



此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定的期限内，产品中所含的有害物质不致引起环境污染，不会对人体、财产造成严重的不良影响。环保使用期限仅在遵照产品使用说明书，正确使用产品的条件下才有效。不当的使用，将会导致有害物质泄漏的危险。

产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
外壳(壳体)	×	○	○	○	○	○
电子部件(印刷电路板等)	×	○	×	○	○	○
附件(电源线、交流适配器等)	×	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。

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