

# LK-S450

# Casiotone

## USER'S GUIDE



Getting Ready to Play



Preparing a Power Supply



Connecting Headphones (Option)



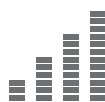
Connecting a Pedal (Option)



Selecting a Musical Instrument Tone



Changing the Pitch in Semitone Units (Transpose)



Fine Tuning (Tuning)



Sustaining Notes After Keyboard Keys Are Released



Saving and Recalling a Setup (MY SETUP)



Playing a Built-in Song



Singing with Karaoke



Using a Lesson to Master Song Play



Linking with a Smart Device (APP Function)



Configuring Settings



Troubleshooting

### **Included and Optional Accessories**

Use only accessories that are specified for use with this Digital Keyboard.

Use of unauthorized accessories creates the risk of fire, electric shock, and personal injury.



- You can get information about accessories that are sold separately for this product from the CASIO catalog available from your retailer, and from the CASIO website.

<https://support.casio.com/global/en/emi/manual/LK-S450/>



### **■ About Music Score data**

You can download music score data as a PDF file from the CASIO website. You will then be able to view music scores on your smart device. You can jump from the PDF file table of contents directly to the music score you want, and you can print out scores as needed.

<https://support.casio.com/global/en/emi/manual/LK-S450/>



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**MIDI Implementation Chart**

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# General Guide

## ■ Front Panel

⏻ (Power) button [EN-25](#)

**SONG** button [EN-71](#)

**VOLUME** knob [EN-28](#)

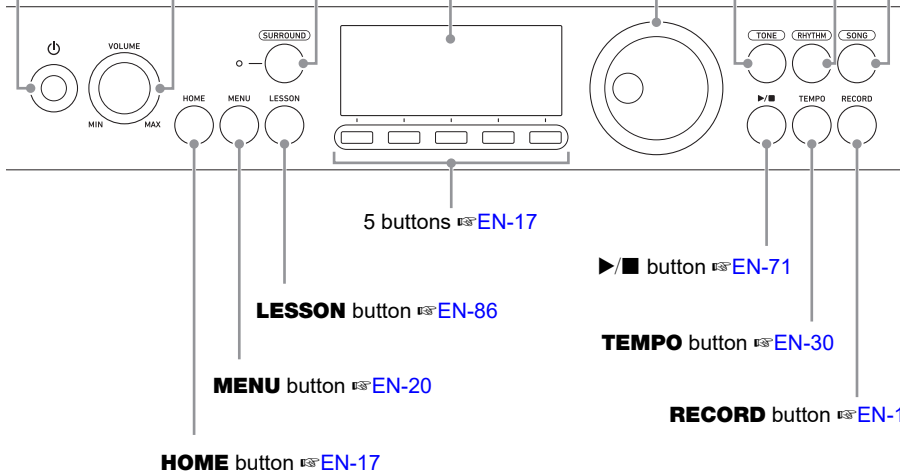
**RHYTHM** button [EN-98](#)

**SURROUND** button [EN-46](#)

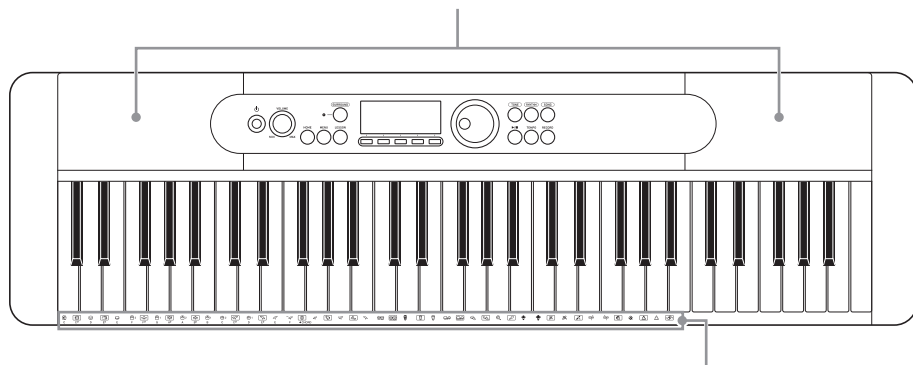
**TONE** button [EN-35](#)

LCD

Dial [EN-20](#)



Speakers



Percussion instrument list  
Chord root names

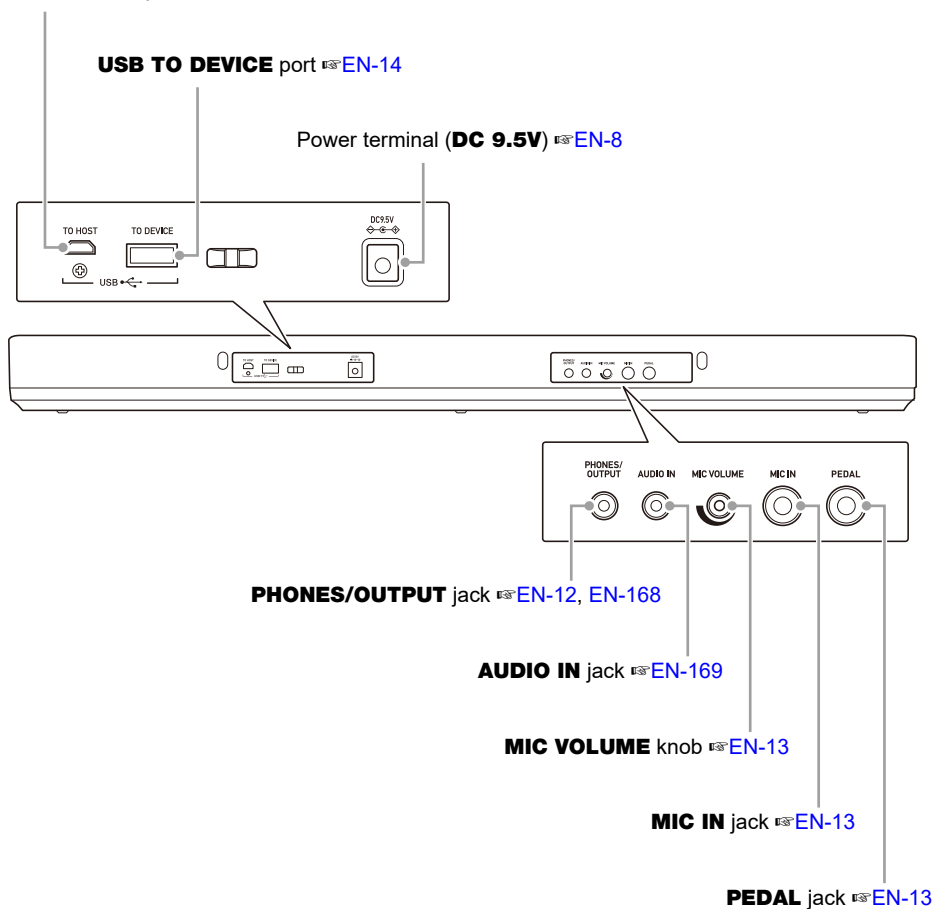
- The numbers to the right of the [EN](#) symbol are reference page numbers.

## ■ Back

**USB TO HOST** port [EN-163](#)

**USB TO DEVICE** port [EN-14](#)

Power terminal (**DC 9.5V**) [EN-8](#)



- The numbers to the right of the [EN](#) symbol are reference page numbers.



# Getting Ready to Play

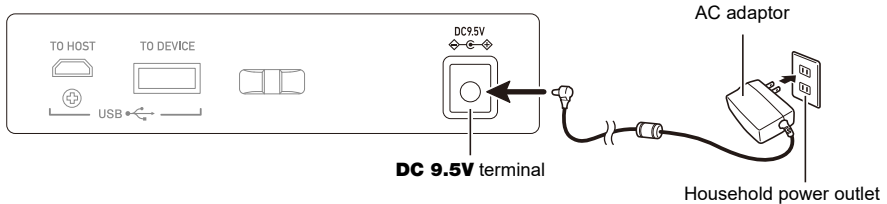
## Preparing a Power Supply

Though either an AC adaptor or batteries can be used for power, use of AC adaptor power is normally recommended.

### Using the AC Adaptor

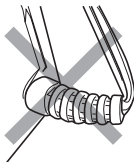
Use only the AC adaptor (JEITA Standard with unified polarity plug) specified for this Digital Keyboard. Use of a different type of AC adaptor can cause malfunction.

**AC Adaptor Type: AD-E95100L (JEITA Standard plug)**

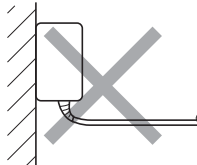


### ! IMPORTANT!

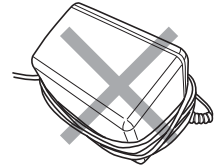
- Be sure to turn off Digital Keyboard power before connecting or disconnecting the AC adaptor.
- The AC adaptor becomes warm to the touch after very long use. This is normal and does not indicate malfunction.
- To prevent breaking of the wire, take care to avoid putting any type of load on the power cord.



No twisting



No pulling



No wrapping

- Never insert metal, pencils, or any other objects into the **DC 9.5V** terminal. Doing so creates the risk of accident.

## Using Batteries for Power

### **!** IMPORTANT!

- Be sure to turn off power before loading batteries.
- Use commercially available AA-size alkaline batteries or AA-size rechargeable nickel metal hydride batteries.
- Low battery power can cause abnormal operation. If this happens, replace batteries with new ones. If you are using rechargeable batteries, charge them.

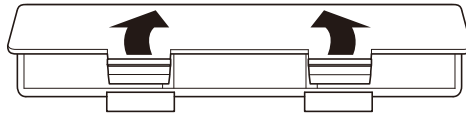
### ■ Batteries

Note the precautions below when using rechargeable batteries.

- Use Panasonic Group AA-size eneloop rechargeable batteries. Do not use any other type of batteries.
- Use only the specified charger to charge batteries.
- Rechargeable batteries must be removed from the product for charging.
- For information about using eneloop batteries or their specified charger, be sure to read the user documentation and precautions that come with each item, and use them only as directed.

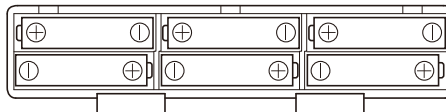
Be sure to replace batteries at least once a year, even if there is no indication of low battery power. Dead rechargeable batteries (eneloop) in particular may deteriorate if they are left in the product. Remove rechargeable batteries from the product as soon as possible after they go dead.

### 1. Open the battery cover on the back of the Digital Keyboard.



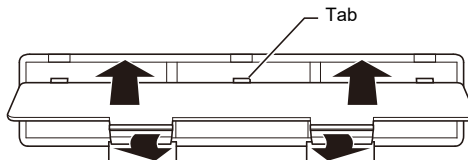
### 2. Load six AA-size batteries into the battery compartment.

- Load batteries with their positive (+) and negative (-) ends facing correctly.



### 3. Insert the tabs of the battery cover into the holes, and close the cover.

- Configure the setting below to specify the type of batteries you loaded.

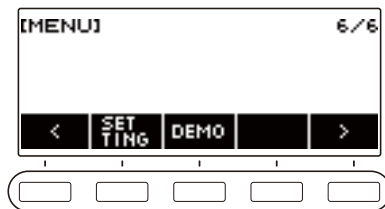


## ■ Specifying the Battery Type

1. Turn on the Digital Keyboard.
  - See “Turning Power On or Off” (page EN-25).
2. Press **MENU**.  
This displays the menu screen.



3. Use **<** and **>** to select the 5 buttons menu (page EN-17) that includes **SETTING**.



4. Press **SETTING**.  
This displays the setting screen.

5. Use **<** and **>** to select “Battery”.



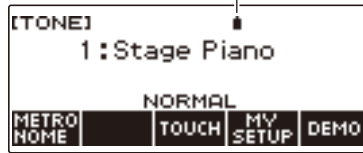
6. Rotate the dial or use **-** and **+** to select “Alkaline” (alkaline batteries) or “Ni-MH” (nickel-metal hydride batteries).
7. To exit the setting operation, press **EXIT**.

## ■ Low Battery Indication

A battery icon appears on the display to let you know when battery power is getting low.

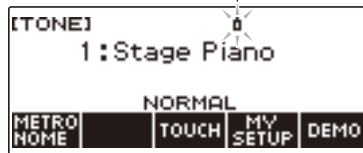
### Declining Battery Power

Black battery icon (not flashing)



### Battery Replacement Required

White battery icon (flashing)



### NOTE

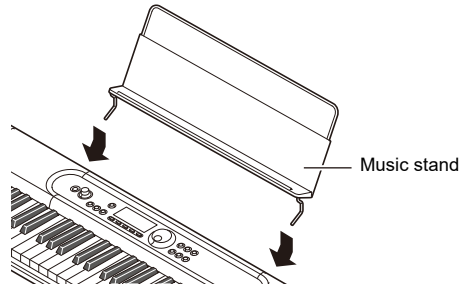
- Low battery power may cause notes to become distorted, or other problems.
- You can conserve battery power by using headphones and by reducing the volume level.

### ! IMPORTANT!

- Continued use with low batteries may cause power to turn off suddenly. This can cause stored data to be corrupted or lost.

## Preparing the Music Stand

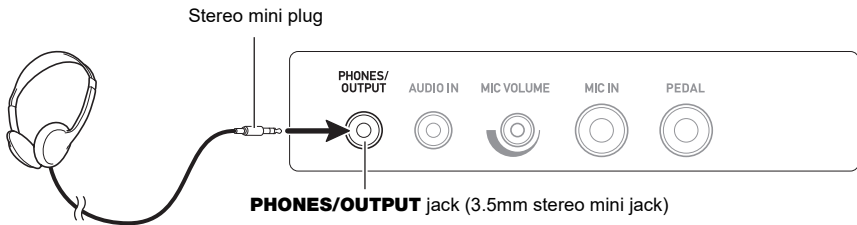
Insert the music stand legs into the back of the Digital Keyboard.



## Connecting Headphones (Option)

Plugging in headphones cuts off output from the built-in speakers, which means you can practice playing even late at night without disturbing others.

- Be sure to turn down the volume level before connecting headphones.



### NOTE

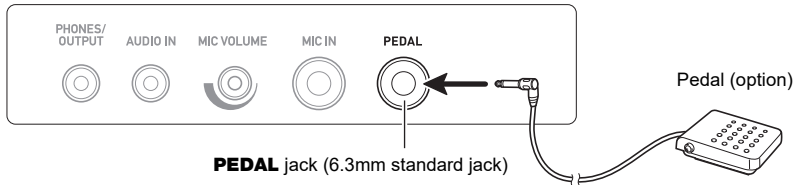
- Headphones do not come with this Digital Keyboard.
- Use the optional (CP-16) or a commercially available headphones.
- The surround effect is not applied while you are listening over headphones.

### IMPORTANT!

- Do not listen to output over headphones at very high volume levels for long periods. Doing so creates the risk of hearing damage.
- The headphones you use must have a 3.5mm 3-pole stereo mini plug. Use of other types of plugs is not supported.
- If the plug of the headphones does not match the **PHONES/OUTPUT** jack, use a commercially available adaptor plug.
- If you are using headphones that require an adaptor plug, make sure you do not leave the adaptor plugged in when removing the headphones.

## Connecting a Pedal (Option)

To use a pedal, connect it to the **PEDAL** jack on the back of the Digital Keyboard.



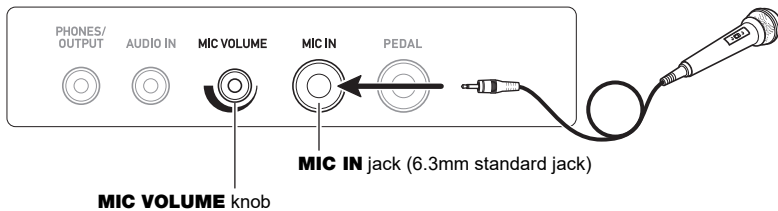
### NOTE

- A pedal unit does not come with this Digital Keyboard.
- Use the optional (SP-3, SP-20) pedal.

## Connecting a Commercially Available Microphone

Connect a commercially available dynamic microphone to the **MIC IN** jack.

- Before connecting, rotate the **MIC VOLUME** knob to its lowest setting.



### IMPORTANT!

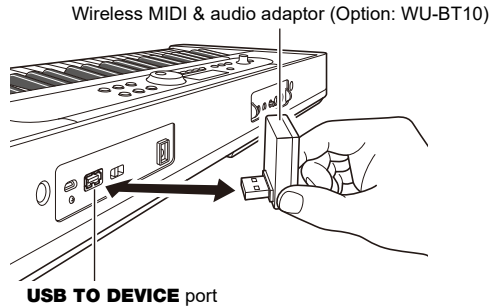
- Before connecting a microphone, make sure that the Digital Keyboard and microphone are turned off.
- It takes a few seconds for the microphone to become enabled after you turn on the Digital Keyboard.

## Connecting the Wireless MIDI & audio adaptor (Option)

To pair this Digital Keyboard with a Bluetooth capable external device, you need to plug the Wireless MIDI & audio adaptor into the Digital Keyboard's **USB TO DEVICE** port.

### **IMPORTANT!**

- Turn off this Digital Keyboard before connecting the Wireless MIDI & audio adaptor.

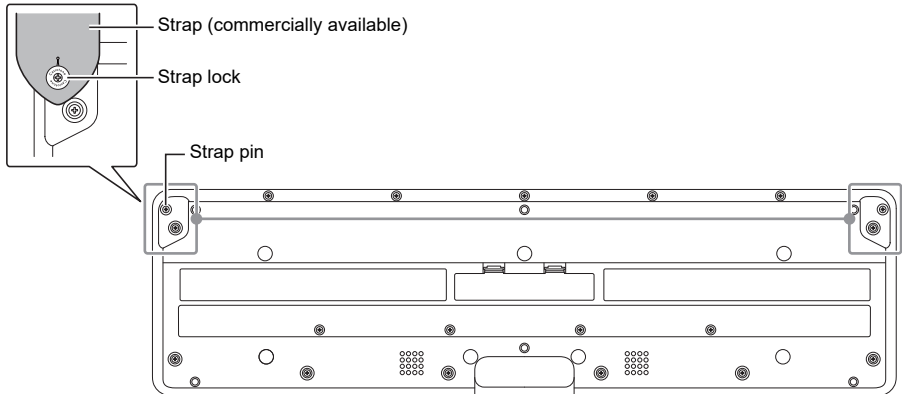


### **NOTE**

- The Wireless MIDI & audio adaptor does not come with this Digital Keyboard.
- When connecting with a Bluetooth capable external device, refer to "[Sounding a Bluetooth Audio Capable Device \(Bluetooth Audio Pairing\)](#)" (page EN-170).
- The Wireless MIDI & audio adaptor may not be sold in certain countries or geographic areas.

## Attaching a Strap (Commercially Available)

1. Attach a strap (commercially available) to the left and right strap pins on the bottom of the Digital Keyboard.
2. Cover the strap pins with the strap locks.



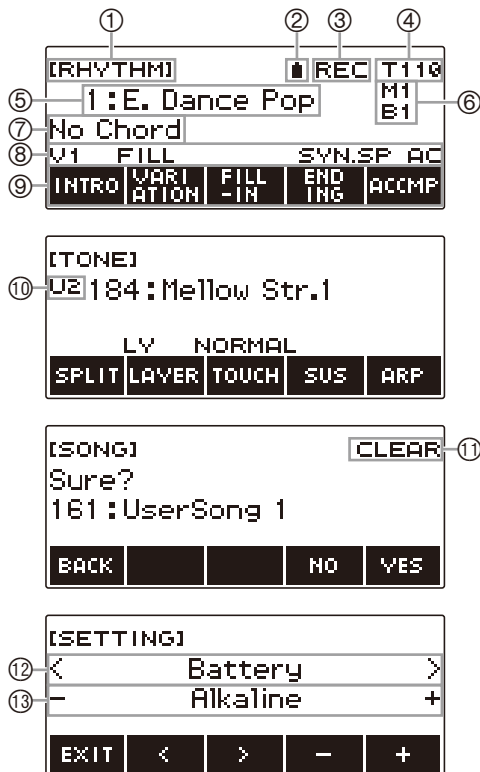
### **IMPORTANT!**

- After attaching the strap, check to make sure that the strap is securely attached to the Digital Keyboard.
- Do not pick up the Digital Keyboard by the strap alone. Doing so creates the risk of the Digital Keyboard detaching from the strap and falling.
- The recessed area on the bottom of the Digital Keyboard IS NOT intended to be used as a handle. Be sure to use both hands when picking up the Digital Keyboard.
- Should a strap lock ever become deformed or damaged, replace it.



# Operations Common to All Modes

## Display Screen Contents



- ① Setting name
- ② Battery icon
- ③ Recording status
- ④ Tempo
- ⑤ Setting
- ⑥ Measure/Beat
- ⑦ Sub-display
- ⑧ Status
- ⑨ 5 buttons menu items
- ⑩ Part
- ⑪ Sub-title
- ⑫ Setting item
- ⑬ Setting

- Display contents may become difficult to read at certain viewing angles.
- For information about how to adjust display contrast, see “[Configuring Settings](#)” (page EN-146).

## Home Screen

Pressing **HOME** causes [TONE] to appear on the screen, which indicates the tone setting screen. This is the Home Screen. You can use the Home Screen to select the instrument tone you want to use, and to configure various settings.



### NOTE

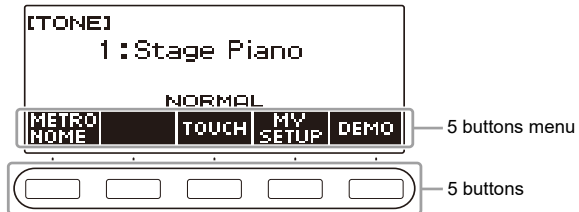
- You can customize the Home Screen to suit your specific needs. For details, see “[Customizing the Home Screen \(Home Customization\)](#)” (page EN-142).

## 5 buttons

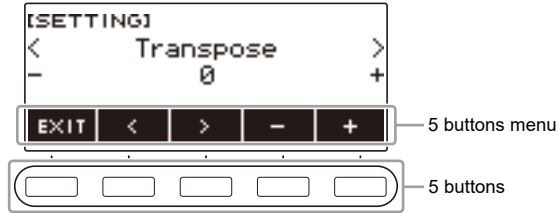
Operations assigned to the 5 buttons along the bottom of the display change according to the setting you are configuring. Operations currently assigned to the display buttons are indicated by labels above the buttons (5 buttons menu).

### 5 buttons Examples

#### ■ Home Screen (Tone Selection Screen)



## ■ Setting Screen (SETTING)



- Long-pressing – or + when selecting a number or value scrolls through settings at high speed.
- To return a number or value to its initial default or recommended setting, press – and + at the same time.
- Long-pressing < or > when changing to another item or page scrolls through items or pages at high speed.

## Changing the Button Long-press Time

You can specify the required button long-press time.

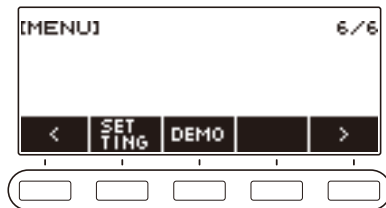
- Note that you cannot change the required long-press time for the power off operation.

### 1. Press **MENU**.

This displays the menu screen.



### 2. Use < and > to select the 5 buttons menu that includes **SETTING**.



**3. Press SETTING.**

This displays the setting screen.

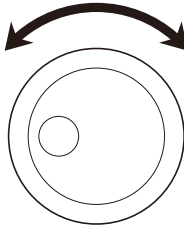
**4. Use < and > to select “Button Long Press Time”.****5. Rotate the dial or use – and + to change the button long-press time value.**

Setting	Display Name
Short	Short
Normal	Normal
Long	Long

**6. To exit the setting operation, press EXIT.**

## Dial Operations

Rotate the dial to change a number (tone number, etc.) or value (tempo value, etc.)



## Selecting a Function from a Menu

You can use the menu screen to select from a variety of different functions.

### 1. Press **MENU**.

This displays the menu screen.



### 2. Use **<** and **>** to select the 5 buttons menu that includes the function you want to select.

- To return to the previous screen or exit the setting operation, press EXIT.

#### Menu Item List

Item	Display Name
MY SETUP	MY SETUP
Karaoke	KARAOKE
Metronome	METRONOME
Balance	BALANCE
Octave shift	OCT SHIFT
Sustain	SUSTAIN
Pedal	PEDAL
Chord Book	CHORD BOOK
System Effects	SYS FX
Equalizer	EQ
Scale Tuning	SCALE
Bluetooth	BLUETOOTH

Item	Display Name
Media	MEDIA
Home Customization	HOME CSTM
Setting	SETTING
Demo	DEMO

### 3. Press the button of the function you want to select.

- This displays the screen of the function you select.
- To exit the menu screen, press **MENU**, or press EXIT on the first page of the menu screen.

## Disabling Keyboard Lighting

Keyboard Lighting causes keyboard keys to light in accordance with the notes of your performance, built-in song playback, etc. You can disable Keyboard Lighting if you want.

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.

### 3. Press **SETTING**.

This displays the setting screen.



### 4. Use **<** and **>** to select "Key Light".



### 5. Rotate the dial or use **-** and **+** to select "Off".

### 6. To exit the setting operation, press **EXIT**.

## Inputting Characters

Use the procedures below to edit MY SETUP data names and USB flash drive file names (user data names).



### NOTE

- USB flash drive (page [EN-155](#)) file names can be up to 231 characters long.
- Up to 22 characters can appear on the display at a time. If you input more than 22 characters, the display will scroll horizontally, and a numeric page indicator (such as 1/11) will appear on the display.



- A file with a name that begins with "." or " " (blank space) cannot be saved.

## Inserting Characters

1. Use < and > to move the cursor to the right of the location where you want to insert a character.
2. Press INSERT.

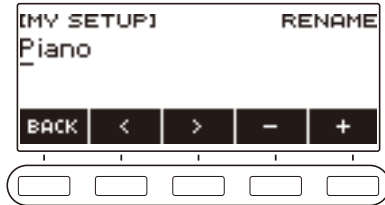
This inserts "A".

- If you positioned the cursor to the right of the end of a character string, you can also rotate the dial or use – and + to insert characters.

## Replacing a Character with a Different One

1. Use < and > to move the cursor to the character you want to replace.
2. Rotate the dial to change the character.

This displays the  $-/+$  screen.



- After you rotate the dial once to select a character, you can change the selection further using – and +.
- To go back to the previous screen, press BACK.
- Repeat steps 1 and 2 as required.
- The characters shown in the table below are supported for USB flash drive file names.

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

(First cell in the above table is blank.)

- The characters shown in the table below are supported for file names on a FAT 32 formatted USB flash drive.

\$	&	'	(	)	-	0	1	2	3	4	5	6
7	8	9	@	A	B	C	D	E	F	G	H	I
J	K	L	M	N	O	P	Q	R	S	T	U	V
W	X	Y	Z	^	_	`	{	}	~			



- The characters shown in the table below are supported for user data (MY SETUP) names.

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

(First cell in the above table is blank.)

## Deleting a Character

- Use < and > to move the cursor to the character you want to delete.
- Press DELETE.

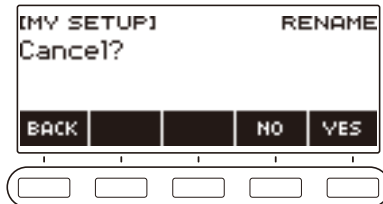
## Exiting a Character Delete or Edit Operation

Perform the step below after you are finished editing characters.

- Press CONFIRM.

This displays a confirmation screen for the character string you edited.

- Next, the message "Cancel?" appears in the following cases.
  - If the current user data or file name has not been changed.
  - If the user data or file name does not contain any characters (0 character count)



- To exit character string editing, press YES.
- To continue with character string editing, press NO or BACK to return to the character string editing screen.

# Playing on the Keyboard

## Turning Power On or Off

### 1. Press (Power) to turn on Digital Keyboard power.

The Digital Keyboard becomes operational after a few seconds.




### 2. To turn off power, long-press (Power) until the display goes blank.

#### IMPORTANT!

- Turning off power normally causes the tone and rhythm number and other settings to return to their initial defaults. However, the settings below are remembered.
  - MIDI OUT Channel (Upper1, Upper2, Lower)
  - MIDI In Navigate
  - MIDI In Navigate Channel (Left hand, right hand)
  - Bluetooth
  - Keyboard Lighting
  - MY SETUP power on recall
  - Auto Power Off
  - Power-On Alert
  - Battery type
  - Display contrast
  - Button long-press time

#### NOTE

- Pressing the  (Power) to turn off power actually puts the Digital Keyboard into a standby state. Minute amounts of current continue to flow within the Digital Keyboard in the standby state. If you do not plan to use the Digital Keyboard for a long time or if there is a lightning storm in your area, be sure to unplug the AC adaptor from the power outlet.
- You can configure Digital Keyboard settings so MY SETUP settings are recalled whenever power is turned on. See “[Enabling MY SETUP Power On Recall](#)” (page [EN-67](#)).

## Auto Power Off

While Auto Power Off is enabled, power turns off automatically after about 30 minutes of non-operation.

### NOTE

- Auto Power Off is disabled while a song is playing and while the APP function is being used.

### ■ Disabling Auto Power Off

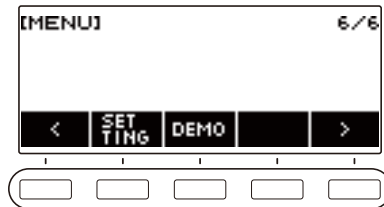
You can disable Auto Power Off to ensure that power does not turn off automatically during a concert, etc.

#### 1. Press **MENU**.

This displays the menu screen.



#### 2. Use < and > to select the 5 buttons menu that includes **SETTING**.

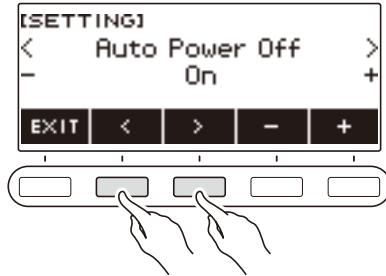


#### 3. Press **SETTING**.

This displays the setting screen.



- 4.** Use < and > to select “Auto Power Off”.



- 5.** Rotate the dial or use – and + to select “Off”.
- 6.** To exit the setting operation, press EXIT.

## Power-On Alert

Keyboard keys light to remind you that power is on if you do not perform any operation for about six minutes.

### NOTE

- Power-On Alert is disabled while a song is playing and while the APP function is being used.

### ■ Disabling Power-On Alert

You can disable Power-On Alert to ensure that keyboard keys do not light during a concert, etc.

#### 1. Press **MENU**.

This displays the menu screen.

#### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.

#### 3. Press **SETTING**.

This displays the setting screen.

#### 4. Use **<** and **>** to select “Power-On Alert”.



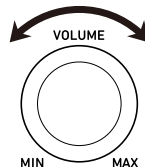
#### 5. Rotate the dial or use **-** and **+** to select “Off”.

#### 6. To exit the setting operation, press **EXIT**.

## Adjusting the Volume Level

#### 1. Rotate the **VOLUME** knob.

This changes the volume level.



## Using the Metronome

The metronome lets you play and practice along with a steady beat to help keep you on tempo. You can also set a tempo that is suitable for your practice.

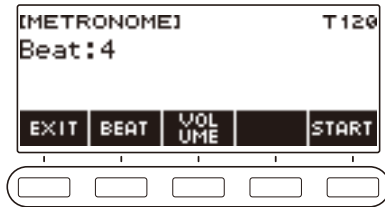
### Start/Stop

#### 1. Press **HOME**.

This displays the Home Screen.

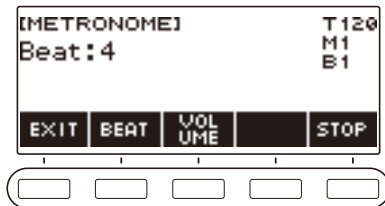
#### 2. Press **METRONOME**.

This displays the metronome screen.



#### 3. Press **START**.

This starts the metronome, and displays measure and beat numbers.



#### 4. To stop the metronome, press the STOP.



#### NOTE

- On the Home Screen, you can also press ►/■ to start the metronome. Pressing ►/■ does not start the metronome if you are using the rhythm function or SONG function.
- The metronome is disabled while a song, lesson, or karaoke song is playing. Trying to display the metronome screen causes "CANNOT USE" to be displayed momentarily.



- Depending on Home Customization settings, the **METRONOME** button may not be shown on the display.
- You can also display the metronome screen from the menu screen.

### Changing the Metronome Tempo

Use the procedure below to change the tempo of the metronome.

#### 1. Press **TEMPO**.

This displays the tempo screen.



#### 2. Rotate the dial or use – and + to change the tempo value.

- You can specify a tempo value in the range of 20 to 255.
- To return the setting to its initial default, press – and + at the same time.

#### 3. To exit the setting operation, press **EXIT**.

## Specifying the Metronome Beats Per Measure

You can use the procedure below to configure a setting that sounds a chime on the first beat of each measure, and a click for the remaining beats.

- Available settings are Off, or a value of 1 to 16 beats.

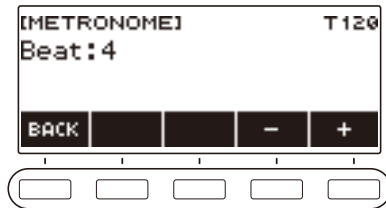
### 1. Press **HOME**.

This displays the Home Screen.

### 2. Press **METRONOME**.

This displays the metronome screen.

### 3. Rotate the dial to change the beat value.



- After you rotate the dial once to select a value, you can change the value further using – and +.
- Selecting "Off" disables the chime. Use this setting when you want to practice without worrying about the first beat of each measure.
- To return the setting to its initial default, press – and + at the same time.
- To go back to the previous screen, press BACK.



## Changing the Metronome Sound Volume Level

### 1. Press **HOME**.

This displays the Home Screen.

### 2. Press **METRONOME**.

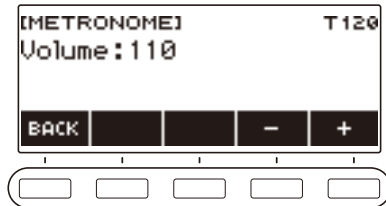
This displays the metronome screen.

### 3. Press the **VOLUME 5** buttons.

This displays the metronome volume level setting screen.



### 4. Rotate the dial to adjust the volume level.



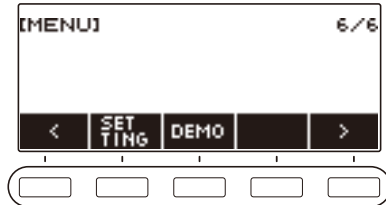
- You can specify a volume level value from 0 to 127.
- After you rotate the dial once to select a value, you can change the selection further using – and +.
- To return the setting to its initial default, press – and + at the same time.
- To go back to the previous screen, press BACK.
- To return to the beat setting screen, press BEAT.

## Changing the Depth of Microphone Reverb (MIC Reverb)

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the 5 buttons menu that includes **SETTING**.



### 3. Press **SETTING**.

This displays the setting screen.



### 4. Use **<** and **>** to select "MIC Reverb".

### 5. Rotate the dial or use **-** and **+** to change the reverb value.

- You can specify a reverb value in the range of 0 to 127.
- To return the setting to its initial default, press **-** and **+** at the same time.

### 6. To exit the setting operation, press **EXIT**.

#### **NOTE**

- The microphone reverb setting is ignored while you are using the karaoke function.

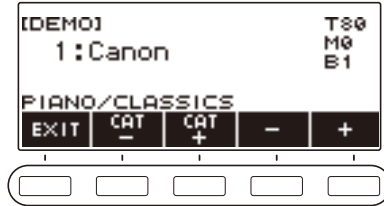
## Listening to Demo Play

### 1. Press **HOME**.

This displays the Home Screen.

### 2. Press **DEMO**.

This displays the demo screen and starts demo song play.



- After playback of one song finishes, playback of the next song starts automatically. Playback returns to the first song after playback of the final song is complete. The DEMO function plays SONG function song 9 “CANON (PACHELBEL)” first. After that, it plays SONG function songs 1 through 8, and then 10 through 110.
- For a list of song titles, see the “[Song List](#)” (page [EN-185](#)).
- The tone of the currently playing demo song is assigned to the keyboard during playback.

### 3. To select a song for demo play, rotate the dial or use **-** and **+**.

- If you want to select a category, use **CAT-**/**CAT+**.

### 4. To stop playback, press **EXIT** or **▶/■**.

- This stops playback and exits the demo screen.

#### **NOTE**

- Depending on Home Customization settings, the DEMO button may not be shown on the display.
- You can also display the demo screen from the menu screen.
- Keyboard Lighting is disabled during demo play.

# Controlling the Sound of a Performance

## Selecting a Musical Instrument Tone

Your Digital Keyboard lets you select tones for a wide variety of musical instrument sounds, including violin, flute, and more. The same song can sound completely different when played with a different instrument type.

### Selecting a Tone

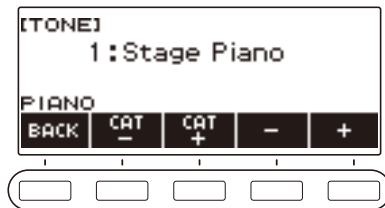
#### 1. Press **TONE**.

This displays the tone screen, which shows the tone number and tone name.



#### 2. Rotate the dial to select a tone.

- For tone information, see the "Tone List" (page EN-187).
- After you rotate the dial once to select a tone, you can change the selection further using – and +.
- To return to the first tone in the Tone List, press – and + at the same time.
- If you want to select a category, use CAT–/CAT+.
- To go back to the previous screen, press BACK.

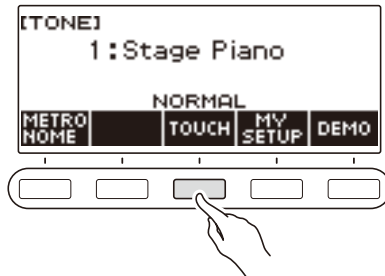


## Playing with Touch Response

Touch Response alters tone volume in accordance with keyboard pressure (press velocity). This provides you some of the same expression capabilities you get on an acoustic piano.

### Changing Touch Response Sensitivity

1. **Press HOME.**  
This displays the Home Screen.
2. **Press TOUCH and then select the Touch Response setting you want.**



Touch Response settings are described in the table below.

Setting (Display Text)	Description
Off (OFF)	Keyboard pressure does not affect volume.
Light (LIGHT)	Easier to produce a louder sound than the Normal setting, for a lighter feel.
Normal (NORMAL)	Normal Touch Response.
Heavy (HEAVY)	More difficult to produce a louder sound, for a heavier feel.

#### **NOTE**

- Depending on Home Customization settings, the TOUCH button may not be shown on the display.
- You can also access touch response settings from the tone screen.

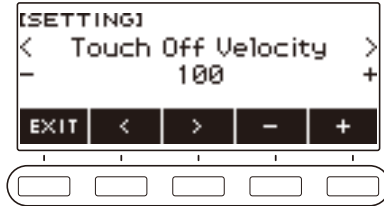
## ■ Adjusting Volume When Touch Response is Disabled (Touch off Velocity)

### 1. Press **HOME**.

This displays the Home Screen.

### 2. Long-press **TOUCH**.

This displays the setting screen, which shows setting items for touch off velocity.



### 3. Rotate the dial or use **-** and **+** to change the setting.

### 4. To exit the setting operation, press **EXIT**.

## Using a Pedal

A pedal can be used to change notes while playing. Under initial default settings, pedal sustain is assigned to the pedal, so it can be used as a damper pedal.

A pedal unit does not come with this Digital Keyboard. Purchase one separately from your retailer.

### Changing Pedal Functions

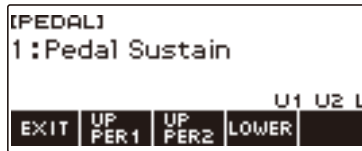
#### 1. Press **MENU**.

This displays the menu screen.

#### 2. Use **<** and **>** to select the **5 buttons** menu that includes **PEDAL**.

#### 3. Press **PEDAL**.

This displays the pedal screen.



#### 4. Rotate the dial to change the pedal function.

The following shows available pedal functions.

Setting (Display Text)	Description
Pedal Sustain (Pedal Sustain)	Playing notes while the pedal is depressed causes the notes to be sustained, even if the keyboard keys are released.
Sostenuto (Sostenuto)	Playing notes and then pressing the pedal before the keyboard keys are released causes the notes to be sustained.
Soft (Soft)	Pressing the pedal and playing notes causes the notes to be slightly softened.
Start/Stop (Start/Stop)	The pedal has the same functions as ►/■. It can be used to start and stop the metronome or rhythm play.
Fill-in (Fill-In)	Plays a fill-in (page <a href="#">EN-107</a> ) when the pedal is depressed while an Auto Accompaniment is playing.

- After you rotate the dial once to select a function, you can change the selection further using – and +.
- To return the setting to its initial default, press – and + at the same time.
- To go back to the previous screen, press **BACK**.

#### 5. To exit the setting operation, press **EXIT**.

## ■ Disabling the Pedal Effect for Individual Parts

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **PEDAL**.

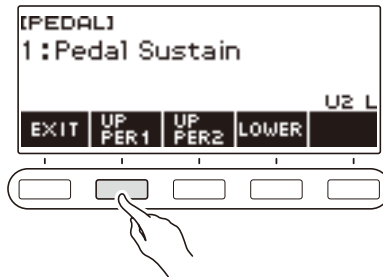
### 3. Press **PEDAL**.

This displays the pedal screen.



### 4. Press **UPPER1**.

- "U1" disappears from the display, indicating that the pedal effect is no longer applied to the UPPER1 part.



### 5. To apply the pedal effect to the **UPPER1** part, press **UPPER1** again.

- In the same way, you can stop the pedal effect from being applied to the UPPER2 part by pressing UPPER2, and to the LOWER part by pressing LOWER. Pressing UPPER2 causes "U2" to disappear from the display. Pressing LOWER causes "L" to disappear.

### 6. To exit the setting operation, press **EXIT**.

#### **NOTE**

- For information about parts, see "[Layering and Splitting Tones](#)" (page EN-47).



## Sustaining Notes After Keyboard Keys Are Released

While sustain is enabled, notes are sustained longer when keyboard keys are released.

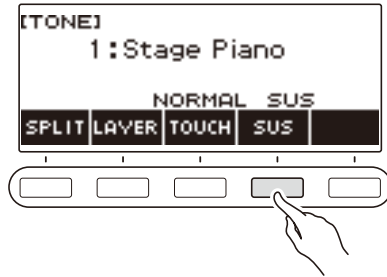
### 1. Press **TONE**.

This displays the tone screen.



### 2. Press **SUS**.

This displays "SUS".



### 3. Press and release keyboard keys.

The notes are sustained for a relatively long time.

### 4. To disable sustain, press **SUS** again.

## ■ Adjusting the Note Sustain Time

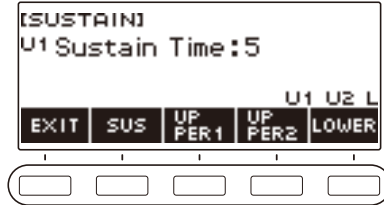
Use the procedure below to change the sustain time when sustain is enabled.

### 1. Press **TONE**.

This displays the tone screen.

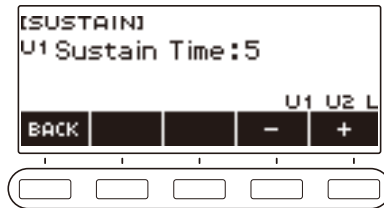
### 2. Long-press **SUS**.

This displays the sustain screen, which shows setting items for the UPPER1 part sustain time.



### 3. If required, press **UPPER1**, **UPPER2**, and **LOWER** to select the part whose setting you want to configure.

### 4. Rotate the dial to change the setting.



- You can set a sustain time within the range of 0 to 9.
- After you rotate the dial once to select a value, you can change the value further using – and +.
- To return the setting to its initial default, press – and + at the same time.
- To go back to the previous screen, press BACK.
- Setting a value of “0” causes the indicator for the applicable part (“U1”, “U2”, “L”) to disappear from the display.



## 5. To exit the setting operation, press EXIT.

### NOTE

- You can also display the sustain screen by pressing **MENU** and then SUSTAIN.
- For details about parts, see “Layering and Splitting Tones” (page EN-47).

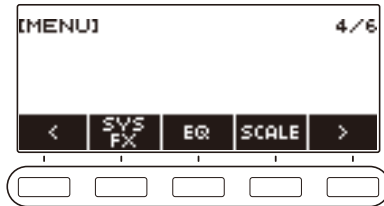
## Playing with Reverb

You can use the procedure below to add reverb to the notes you play.

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the 5 buttons menu that includes **SYS FX**.



### 3. Press **SYS FX**.

This displays the system effect screen.



#### 4. Rotate the dial to select the reverb type.

The following shows the available reverb type settings.

Reverb Type	Display Name
Off	Off
Room 1 to 5	Room 1 to 5
Large Room 1 or 2	Large Room 1 or 2
Hall 1 to 5	Hall 1 to 5
Stadium 1 to 2	Stadium 1 or 2
Plate 1 or 2	Plate 1 or 2
Delay 1 or 2	Delay 1 or 2
Church	Church
Cathedral	Cathedral

- After you rotate the dial once to select a reverb type, you can change the selection further using – and +.
- To return the setting to its initial default, press – and + at the same time.
- To go back to the previous screen, press BACK.

#### 5. To exit the setting operation, press EXIT.

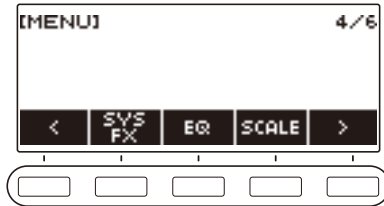
## Changing the Relationship of Keyboard and Song Reverb Effects

You can use this procedure to sync the reverb effect of keyboard play and built-in song playback so they do not clash with each other.

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SYS FX**.



### 3. Press **SYS FX**.

This displays the system effect screen.



### 4. Press **SONG REV** to change the setting.

Available settings are shown in the table below.

Setting (Display Text)	Description
Synchronize (SYNC)	When a reverb setting is configured for the keyboard, the same reverb effect is also applied to songs. Conversely, any change in the reverb effect of a song is also applied to the keyboard reverb.
Keyboard reverb priority (FORCE KEYBOARD)	Song reverb effects are always the same as those of the keyboard reverb settings.
No effect (NOT AFFECT)	There is no change in keyboard reverb settings based on song reverb.

## Adding the Chorus Effect to a Tone

Chorus is a function that adds depth and breadth to notes.

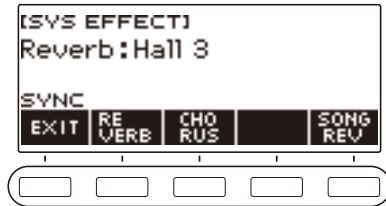
### 1. Press **MENU**.

This displays the menu screen.

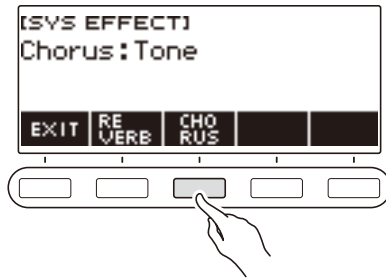
### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SYS FX**.

### 3. Press **SYS FX**.

This displays the system effect screen.



### 4. Press **CHORUS**.



### 5. Rotate the dial to select the chorus type.

Available chorus type settings are shown in the table below.

Setting	Display Name
Chorus setting recommended for each tone	Tone
Chorus 1 to 6	Chorus 1 to 6
Flanger 1 to 4	Flanger 1 to 4

- After you rotate the dial once to select a chorus type, you can change the selection further using – and +.
- To return the setting to its initial default, press – and + at the same time.
- To go back to the previous screen, press BACK.
- To return to the Reverb screen, press REVERB.

### 6. To exit the setting operation, press **EXIT**.

## Playing with a More Expanded Sound (Surround)

Enabling surround creates a virtual surround effect.

### 1. Press **SURROUND**.

This enables surround.

- This causes the **SURROUND** LED to light.



- You can also enable surround from the setting screen.

### 2. To disable surround, press **SURROUND** again.

- This causes the **SURROUND** LED to go out.

#### **NOTE**

- The surround effect is not applied while you are listening over headphones.
- Connecting headphones disables the surround effect.

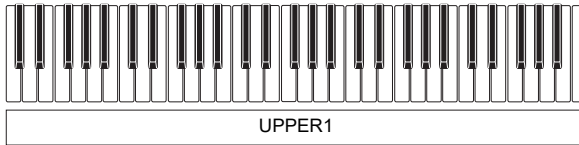
## Layering and Splitting Tones

You can configure the keyboard to play two different tones at the same time (Layer) or to play different tones in the left and right ranges (Split). You can even use Layer and Split in combination with each other and play three different tones at the same time.

The part that is used when playing a single tone is called the UPPER1 part. If you layer two parts, the layered part is the UPPER2 part. If the keyboard is split between two tones, the low-range part is called the LOWER part.

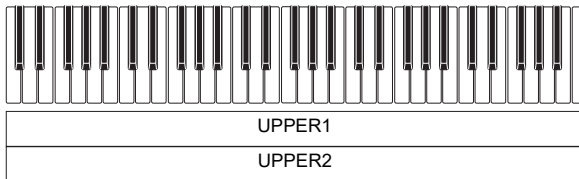
- **Sounding a single tone across the entire keyboard (page EN-35)**

With this configuration, only the UPPER1 part is used (Layer: Off, Split: Off).



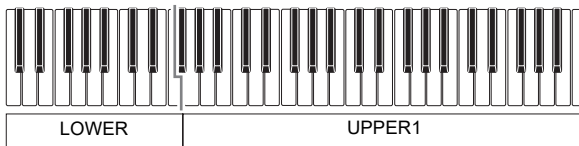
- **Layering two tones across the entire keyboard (page EN-49)**

With this configuration, the UPPER1 and UPPER2 parts are both used (Layer: On, Split: Off).



- **Splitting the keyboard into two ranges (left, right), and assigning different tones to each range (page EN-50)**

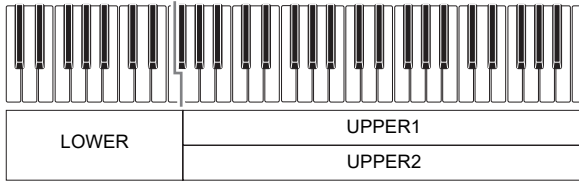
With this configuration, the UPPER1 part and LOWER part are both used (Layer: Off, Split: On).





- **Splitting the keyboard into two ranges (left, right), and assigning two layered tones to the right side and a single tone to the left side (pages EN-49, EN-50)**

With this configuration, the UPPER1, UPPER2, and LOWER parts are all used (Layer: On, Split: On).



#### **NOTE**

- Changing the tone setting affects the UPPER2 part when layer is turned on, and the LOWER part when split is turned on.
- While you are using split and layer together, you can select the tone of the keyboard's LOWER part.

## Layering Two Tones

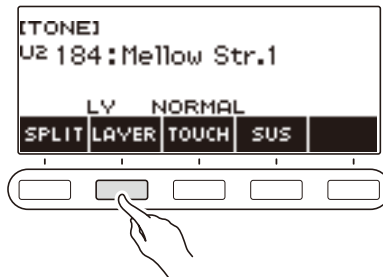
### 1. Press **TONE**.

This displays the tone screen.



### 2. Press **LAYER**.

This displays "U2" to the left of the tone number and "LY" below it. "U2" is short for the UPPER2 part.



### 3. Rotate the dial to select the layer tone.

- For tone information, see the "Tone List" (page EN-187).
- After you rotate the dial once to select a tone, you can change the selection further using – and +.
- To return to the first tone in the Tone List, press – and + at the same time.
- If you want to select a category, use CAT–/CAT+.
- To go back to the previous screen, press BACK.

### 4. Play something on the keyboard.

This layers the tone you select here on the tone you selected in step 3.

- Pressing LAYER again turns layering off.

## Splitting the Keyboard Between Two Different Tones

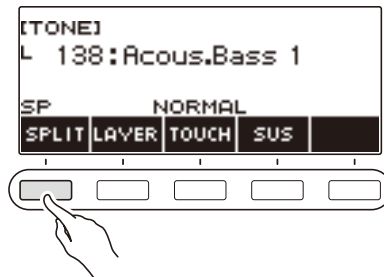
### 1. Press **TONE**.

This displays the tone screen.



### 2. Press **SPLIT**.

This displays "L" to the left of the tone number and "SP" below it. "L" indicates the LOWER part.

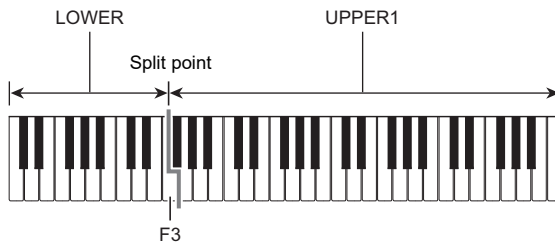


### 3. Rotate the dial to select the tone to be assigned to the low range keyboard.

- For tone information, see the "Tone List" (page EN-187).
- After you rotate the dial once to select a tone, you can change the selection further using – and +.
- To return to the first tone in the Tone List, press – and + at the same time.
- If you want to select a category, use CAT–/CAT+.
- To go back to the previous screen, press BACK.

### 4. Play something on the low range of the keyboard.

This sounds the selected tone.



- To turn off split, press SPLIT again.

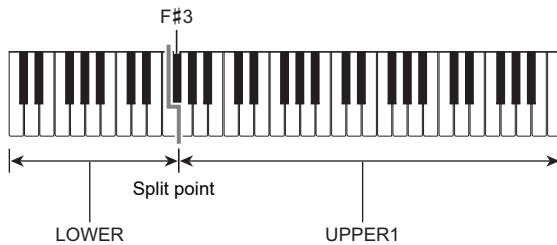
## ■ Changing the Split Point

### 1. Press **TONE**.

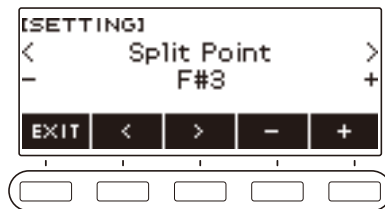
This displays the tone screen.

### 2. Long-press **SPLIT**.

This displays the setting screen, which shows setting items for the split point.



### 3. Rotate the dial or use **-** and **+** to specify the split point.



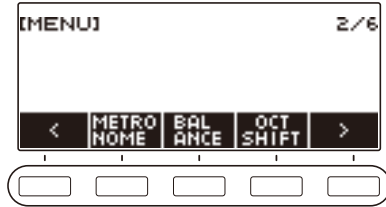
### 4. To exit the setting operation, press **EXIT**.

## Changing the Volume Balance Between Keyboard Play and Rhythm Play (Balance)

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **BALANCE**.



### 3. Press **BALANCE**.

This displays the balance screen, which shows volume level setting items for the UPPER1 part.



### 4. Press **UPPER1**, **UPPER2**, **LOWER**, or **RHYTHM** as required to select the item whose volume level you want to adjust.

### 5. Rotate the dial to change the setting value.

- This displays the **-/+** screen.



- You can specify a value in the range of 0 to 127.
- After you rotate the dial once to select a setting, you can change the setting further using **-** and **+**.
- To go back to the previous screen, press **BACK**.

## 6. To exit the setting operation, press EXIT.

### NOTE

- You can also change the rhythm volume level using the procedure under “[Changing the Volume Level of a Rhythm](#)” (page EN-100).

## Changing the Pitch in Octave Units (Octave Shift)

You can use the procedure below to raise or lower pitch in octave units.

### Shifting the Pitch of the UPPER Tone in Octave Units (Upper Octave Shift)

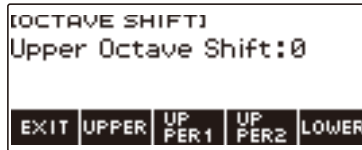
You can use the procedure below to raise or lower the pitch of the UPPER part in octave units.

#### 1. Press TONE.

This displays the tone screen.

#### 2. Long-press LAYER.

This displays the octave shift screen, which shows setting items for the upper octave shift.



#### 3. Rotate the dial to change the shift amount.

- You can specify a value in the range of -3 to +3 octaves.
- After you rotate the dial once to select a shift amount, you can change the shift amount further using - and +.
- To return the setting to its initial default, press - and + at the same time.
- To go back to the previous screen, press BACK.

#### 4. To exit the setting operation, press EXIT.

### NOTE

- You can also display the octave shift screen by pressing **MENU** and then OCT SHIFT.

## Changing the Pitch of Each Part in Octave Units (Part Octave Shift)

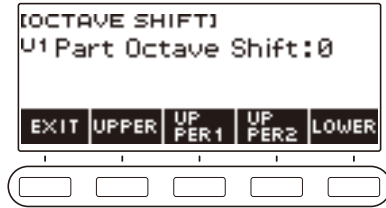
### 1. Press **TONE**.

This displays the tone screen.

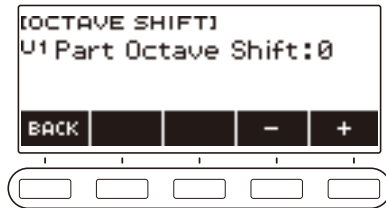
### 2. Long-press **LAYER**.

This displays the octave shift screen.

### 3. Press the button that corresponds to the part whose pitch you want to change.



### 4. Rotate the dial to change the shift amount.



- You can specify a value in the range of -3 to +3 octaves.
- After you rotate the dial once to select a shift amount, you can further change the shift amount using the - and +.
- To return the setting to its initial default, press - and + at the same time.
- To go back to the previous screen, press BACK.

### 5. To exit the setting operation, press **EXIT**.

#### **NOTE**

- If you changed the tone of the part you selected in step 4 of this procedure, the part octave shift value is the recommended value of the newly selected tone. For information about tone recommended values, see the “[Tone List](#)” (page [EN-187](#)).
- You can also display the octave shift screen by pressing **MENU** and then OCT SHIFT.

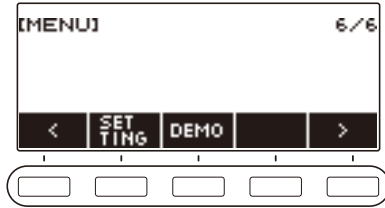
## Changing the Pitch in Semitone Units (Transpose)

You can use the procedure below to raise the overall pitch in semitone steps. You can use this feature to raise or lower the key of the keyboard to make it easier to play a piece written in a difficult key, or to adjust to a key that better matches a vocalist, or another musical instrument.

### 1. Press **MENU**.

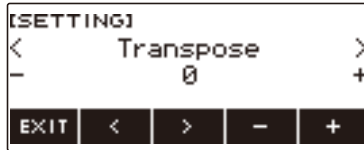
This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.



### 3. Press **SETTING**.

This displays the setting screen.



### 4. Use **<** and **>** to select "Transpose".

### 5. Rotate the dial or use **-** and **+** to change the setting.

- The setting range is from one octave up (+12 semitones) to one octave down (-12 semitones).
- To return the setting to its initial default, press - and + at the same time.

### 6. To exit the setting operation, press **EXIT**.



## Fine Tuning (Tuning)

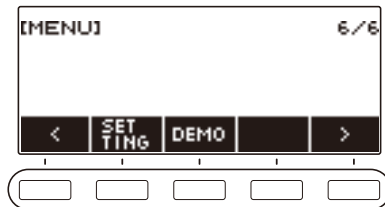
You can use the procedure below to adjust the overall pitch by changing the frequency of A4. (0.1Hz units)



### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the 5 buttons menu that includes **SETTING**.



### 3. Press **SETTING**.

This displays the setting screen.



### 4. Use **<** and **>** to select "Tuning".

### 5. Rotate the dial or use **-** and **+** to adjust the tuning.

- You can specify a frequency in the range of 415.5 to 465.9 Hz.
- To return the setting to its initial default, press **-** and **+** at the same time.

### 6. To exit the setting operation, press **EXIT**.

## Changing the Keyboard Scale Tuning

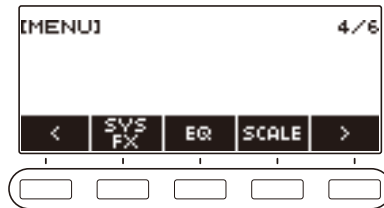
You can change the scale tuning of the keyboard from the standard equal temperament to another tuning that is more suitable for playing Indian music, Arabic music, classical music, etc. You can select from among 17 preset scale tunings.

### ■ Changing the Scale Tuning

#### 1. Press **MENU**.

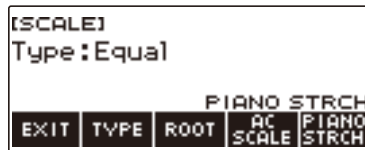
This displays the menu screen.

#### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SCALE**.



#### 3. Press **SCALE**.

This displays the scale tuning screen.



#### 4. Rotate the dial to select the scale.

Scale settings you can select are shown in the table below.

Setting (Displayed Setting Name)	Scale Tuning Name
Equal	Equal temperament
Pure Major	Just major intonation
Pure Minor	Just minor intonation
Pythagorean	Pythagorean tuning
Kirnberger 3	Kirnberger III
Werckmeister	Werckmeister 1-3(III)
Mean-Tone	Mean-tone tuning
Rast	Rast
Bayati	Bayati
Hijaz	Hijaz
Saba	Saba
Dashti	Dashti
Chahargah	Chahargah
Segah	Segah
Gurjari Todi	Gurjari Todi
Chandrakauns	Chandrakauns
Charukeshi	Charukeshi

- After you rotate the dial once to select a scale, you can change the selection further using – and +.
- To return the setting to its initial default, press – and + at the same time.
- To go back to the previous screen, press BACK.

#### 5. To exit the setting operation, press EXIT.

## ■ Specifying the Base Note of the Scale Tuning

### 1. Press **MENU**.

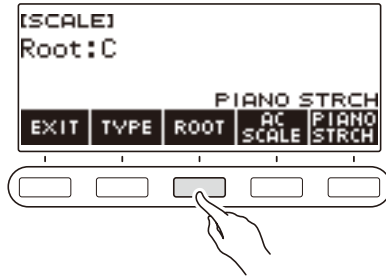
This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SCALE**.

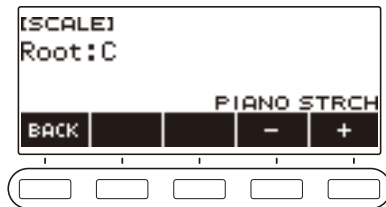
### 3. Press **SCALE**.

This displays the scale tuning screen.

### 4. Press **ROOT**.



### 5. Rotate the dial to change the setting.



- You can specify a base note in the range of C to B.
- After you specify a base note, you can change the selection further using – and +.
- To return the setting to its initial default, press – and + at the same time.
- To go back to the previous screen, press BACK.

### 6. To exit the setting operation, press **EXIT**.

## ■ Reflecting the Scale Setting in the Rhythm Accompaniment as Well

### 1. Press **MENU**.

This displays the menu screen.

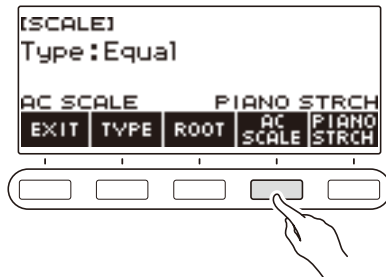
### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SCALE**.

### 3. Press **SCALE**.

This displays the scale tuning screen.

### 4. Press **AC SCALE**.

This displays "AC SCALE", and reflects the scale setting in rhythm accompaniment as well.



### 5. To cancel the scale setting for rhythm accompaniment, press **AC SCALE** again.

This causes "AC SCALE" to disappear from the display.

### 6. To exit the setting operation, press **EXIT**.

## ■ Disabling Piano Stretch Tuning

Stretch tuning makes high notes relatively higher and low notes relatively lower than equal temperament tuning for a wider frequency differential between high and low notes.

### 1. Press **MENU**.

This displays the menu screen.

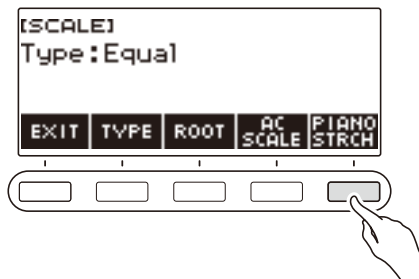
### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SCALE**.

### 3. Press **SCALE**.

This displays the scale tuning screen.

### 4. Press **PIANO STRCH**.

“PIANO STRCH” disappears from the display and piano stretch tuning is disabled.



### 5. To enable piano stretch tuning, press **PIANO STRCH** again.

This displays “PIANO STRCH”.

### 6. To exit the setting operation, press **EXIT**.

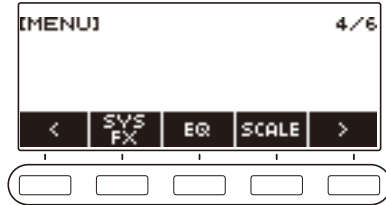
## Using the Equalizer

You can use the equalizer to configure settings that boost or cut specific frequency components.

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **EQ**.



### 3. Press **EQ**.

This displays the equalizer screen.



### 4. Rotate the dial or use **-** and **+** to change the setting.

The table below shows available equalizer settings.

Setting (Display Text)	Description
Standard (Standard)	Standard setting
Loudness (Loudness)	Boosts all ranges.
Treble + (Treble +)	Boosts the high range.
Bass + (Bass +)	Boosts the low range.
Mellow (Mellow)	Produces a mellow sound.
Bright (Bright)	Produces a bright sound.
Rock (Rock)	Produces a sound optimized for rock music.
Jazz (Jazz)	Produces a sound optimized for jazz music.
Dance (Dance)	Produces a sound optimized for dance music.
Classic (Classic)	Produces a sound optimized for classical music.

### 5. To exit the setting operation, press **EXIT**.

# Saving and Recalling a Setup (MY SETUP)

You can up to four setups (tone, rhythm, and other settings) of the Digital Keyboard. You can recall a saved setup when you need it to perform a particular song, etc.

## NOTE

- Four setups are pre-stored in MY SETUP by default. If you store setups, they replace the pre-stored setups.

## Saving to MY SETUP

### 1. Press **MENU**.

This displays the menu screen.

### 2. Press **MY SETUP**.

This displays the MY SETUP screen.

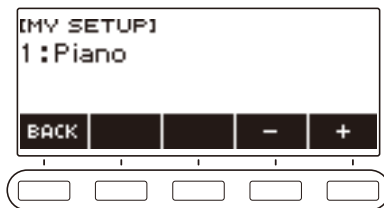


## NOTE

- You can also display the MY SETUP screen from the Home Screen.
- Depending on Home Customization settings, the MY SETUP button may not be shown on the display.

### 3. Rotate the dial to select the setup number you want to specify as the storage destination.

This displays the -/+ screen.

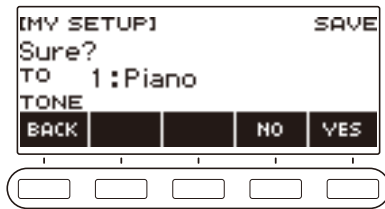


- You can select a setup number from 1 to 4.
- After you rotate the dial once to select a setup number, you can change the selection further using - and +.
- To go back to the previous screen, press BACK.



#### 4. Press SAVE.

This displays “Sure?” The name of the main setting (TONE, RHYTHM, SONG) you are using also appears.



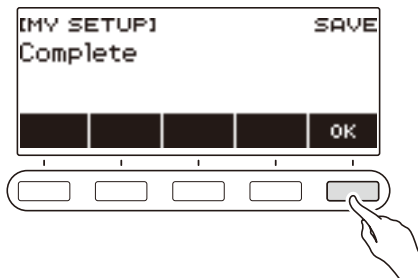
#### 5. Press YES.

This saves the current setup to MY SETUP.

- To cancel, press NO. This returns to the MY SETUP screen at the beginning of the procedure.

#### 6. When “Complete” appears on the display, press OK.

This exits the save operation.



## Savable Settings

The settings listed below can be saved with MY SETUP.

- Functions currently in use (TONE, RHYTHM, SONG, LESSON, KARAOKE)
- Tones (UPPER1, UPPER2, LOWER)
- Touch Response
- Touch off velocity
- Pedal
- Pedal effect part (UPPER1, UPPER2, LOWER)
- Sustain
- Sustain times (UPPER1, UPPER2, LOWER)
- Layer
- Split
- Split point
- Balance (UPPER1, UPPER2, LOWER, Rhythm)
- Upper octave shift
- Part Octave Shift (UPPER1, UPPER2, LOWER)
- Transpose
- Surround
- Reverb
- Song Reverb
- Chorus
- Equalizer
- Scale tuning type
- Scale tuning base note
- Accompaniment scale
- Piano Stretch Tuning
- Tuning
- Metronome beat
- Metronome volume level
- Tempo
- Tempo tap start
- MIC Reverb
- AUDIO IN center cancel
- Rhythm (number, pattern, fill, accompaniment, chord mode, Synchro Start, Synchro Stop, volume level, auto setting, operation type)
- Song (number, count, part off, tone sync, volume level, SMF part)
- Lesson (step/EASY Mode/Challenge, Hand, AB setting, fingering guide, note sound guide, evaluation)
- Karaoke (key, microphone fx, karaoke part)
- Multi-track recording settings (track mute, mixing)
- Recording settings (beat, count, part off, track)
- Home Customization

## Recalling a MY SETUP

### 1. Press **MENU**.

This displays the menu screen.

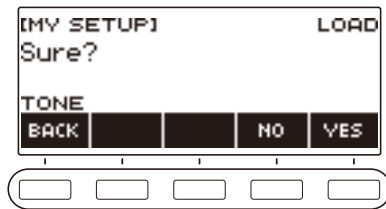
### 2. Press **MY SETUP**.

This displays the MY SETUP screen.

### 3. Rotate the dial to select the setup number you want to recall.

### 4. Press **LOAD**.

This displays "Sure?" and the main setting's name (TONE, RHYTHM, SONG, LESSON, KARAOKE) saved to the setup.



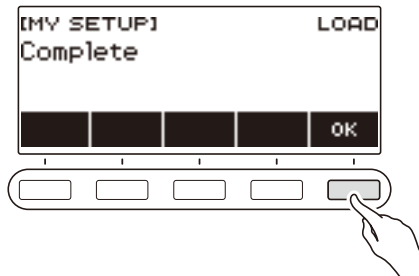
### 5. Press **YES**.

This recalls the saved settings.

- To cancel, press NO. This returns to the MY SETUP screen at the beginning of the procedure.

### 6. When "Complete" appears on the display, press **OK**.

This exits the recall operation.



## Enabling MY SETUP Power On Recall

Use the procedure below to enable MY SETUP power on recall, which causes MY SETUP settings to be recalled whenever power is turned on.

**1. Press MENU.**

This displays the menu screen.

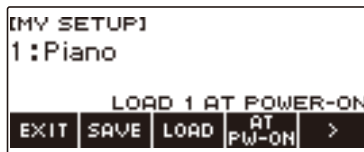
**2. Press MY SETUP.**

This displays the MY SETUP screen.

**3. Rotate the dial to select the setup number you want to recall at startup.**

**4. Press AT PW-ON.**

This specifies that the MY SETUP number you selected in step 3 of this procedure should be recalled and applied when the Digital Keyboard is turned on.



**5. To cancel MY SETUP power on recall, select the currently set MY SETUP setup number and then press AT PW-ON again.**

**6. To exit the setting operation, press EXIT.**

## Renaming a MY SETUP

### 1. Press **MENU**.

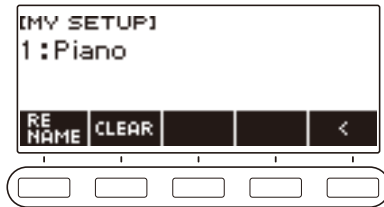
This displays the menu screen.

### 2. Press **MY SETUP**.

This displays the MY SETUP screen.

### 3. Rotate the dial to select the setup number you want to rename.

### 4. Use **>** to select the 5 buttons menu that includes **RENAME**.



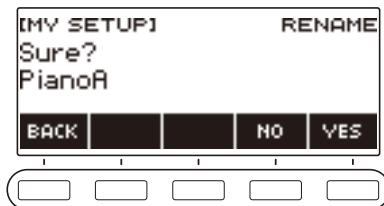
### 5. Press **RENAME**.

### 6. Edit the data name.

- For information about viewing and editing text, see [“Inputting Characters”](#) (page EN-22).

### 7. To confirm the data name, press **CONFIRM**.

This displays “Sure?”.



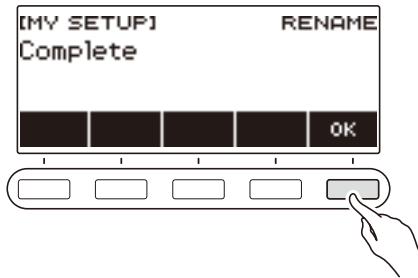
### 8. Press **YES**.

This changes the name.

- To return to the data name editing screen, press NO.

## 9. When “Complete” appears on the display, press OK.

This exits the rename operation.



### **NOTE**

- A MY SETUP name can have up to 12 characters.

## Deleting a MY SETUP

### 1. Press **MENU**.

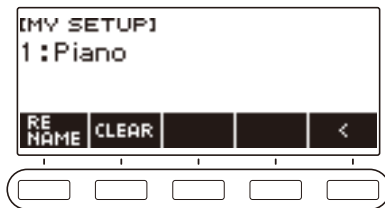
This displays the menu screen.

### 2. Press **MY SETUP**.

This displays the MY SETUP screen.

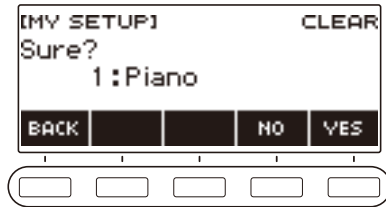
### 3. Rotate the dial to select the setup number you want to delete.

### 4. Use **>** to select the 5 buttons menu that includes **CLEAR**.



## 5. Press CLEAR.

This displays "Sure?".



- You can also delete a MY SETUP by long-pressing **MENU**.

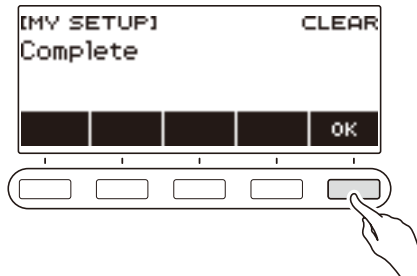
## 6. Press YES.

This deletes the currently selected MY SETUP.

- To cancel, press NO.

## 7. When "Complete" appears on the display, press OK.

This exits the MY SETUP delete operation.



# Playing a Built-in Song

## Songs

With this Digital Keyboard, the term “song” (SONG) is used to refer to a set of musical data (tune, song, performance, etc.) You can use your Digital Keyboard to play or listen to songs, or you can practice playing along with a song as it plays.

## Using the SONG Function

### 1. Press **SONG**.

This displays the song screen.



### 2. To exit the **SONG** function, press **HOME** or long-press **TONE**.

## Playing Songs

### Starting or Stopping Song Play

#### 1. Press **SONG**.

This displays the song screen.

#### 2. Rotate the dial to select a song.

This displays the category name of the selected song.



- For a list of song titles, see the “[Song List](#)” (page [EN-185](#)).
- After you rotate the dial once to select a song, you can change the selection further using – and +.
- If you want to select a category, use CAT–/CAT+.
- To go back to the previous screen, press BACK.



### 3. Press to start playback.

This displays current measure and beat numbers.

- If the song includes chord information, a chord also appears on the display.



### 4. To stop playback, press again.

#### NOTE

- Starting to use the SONG function while the metronome is sounding stops the metronome. Or you can sound a count in time with a song. See “[Sounding a Count in Time with a Song](#)” (page EN-79).
- If you don't want the keyboard reverb type to be automatically matched to the recommended reverb type setting of the song you choose, select “NOT AFFECT” for the reverb setting. See “[Changing the Relationship of Keyboard and Song Reverb Effects](#)” (page EN-44).
- Keyboard lighting is disabled while song playback is in progress.
- Keyboard lighting is also disabled while a recording (page EN-122) is playing.

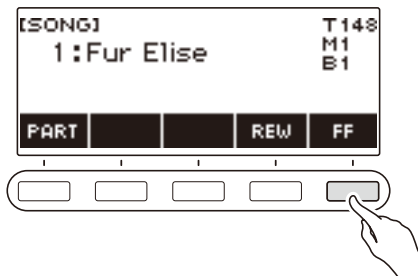
## Skip Forward and Skip Back

Use the operations in this section to skip forward and skip back.

### ■ Skip Forward

While a song is playing, press FF to skip forward.

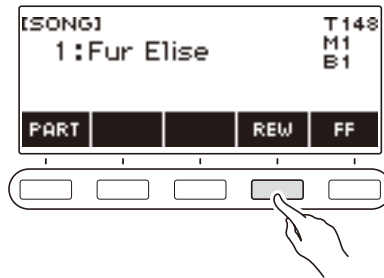
- Pressing FF once skips forward one measure, while long-pressing it skips until the button is released.



## ■ Skip Back

While a song is playing, press REW button to skip back.

- Pressing REW once skips back one measure, while long-pressing it skips back until the button is released.



## Changing a Song's Tempo (Speed)

You can use the procedure below to change the tempo (speed) for your practice.

### 1. Press **SONG**.

This displays the song screen.

### 2. Rotate the dial to select the song whose tempo you want to change.

### 3. Press **TEMPO**.

This displays the tempo screen.



### 4. Rotate the dial or use **-** and **+** to change the tempo value.

- You can specify a tempo value in the range of 20 to 255.
- To return to the recommended setting for the current song, press **-** and **+** at the same time.

### 5. To exit the setting operation, press **EXIT**.

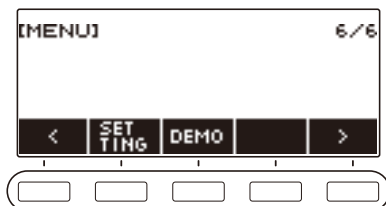
## Adjusting the Song Volume Level

Use the procedure below to adjust the balance between the volume levels of song play and what you play on the keyboard.

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.



### 3. Press **SETTING**.

This displays the setting screen.



### 4. Use **<** and **>** to select "Song Volume".

### 5. Rotate the dial or use **-** and **+** to change the **SONG** volume level.

- You can specify a volume value from 0 to 127.
- To return the setting to its initial default, press **-** and **+** at the same time.

### 6. To exit the setting operation, press **EXIT**.

## Changing the Keyboard Tone While a Song Playing

### 1. While a song is playing, press **TONE**.

The selected tone number and instrument name appears on the display.

### 2. Rotate the dial to select a tone.

- For tone information, see the “Tone List” (page EN-187).
- After you rotate the dial once to select an option, you can change the selection further using – and +.
- To return to the first tone in the Tone List, press – and + at the same time.
- To go back to the previous screen, press BACK.

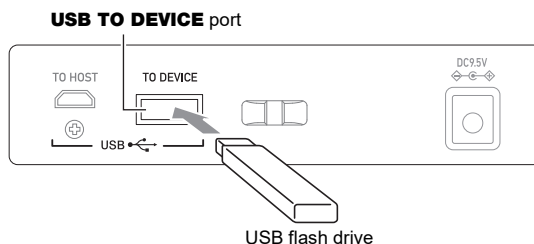


## Selecting a Song on a USB Flash Drive

You can use the same operations as those for built-in songs to play back MIDI files\* stored in the “MUSICDAT” folder on a USB flash drive. For information about the procedure for saving a MIDI file to a USB flash drive, see “Saving Digital Keyboard Data to a USB Flash Drive” (page EN-156).

\* Standard MIDI files (SMF format 0/1) and CASIO MIDI files (CMF format)

### 1. Insert the USB flash drive into the Digital Keyboard’s **USB TO DEVICE** port.



- When you perform a USB flash drive operation or turn on the Digital Keyboard while a USB flash drive is plugged in, the Digital Keyboard initially needs to perform a “mounting” process to prepare for data exchange with the USB flash drive. Digital Keyboard operations are momentarily disabled while a mounting process is being performed.
- “MOUNTING” is shown on the display while the USB flash drive mounting process is being performed.
- Do not attempt to perform any operation on the Digital Keyboard while a mounting process is in progress.
- After the mounting process is complete, it may take up to 10 or 20 seconds or even longer before you can perform any operation on the Digital Keyboard. “LISTING” is shown on the display during this period of non-operation.
- The USB flash drive mounting process needs to be performed each time it is connected to the Digital Keyboard.

## 2. Rotate the dial to select a song.

- Song numbers are assigned automatically in sequence to MIDI files on the USB flash drive. The files are sorted in file name sequence. The first MIDI file (file name sequence) is assigned song number 369.

### NOTE

- Certain songs can take time to load. During a load operation, the message “LOADING” is displayed along with a progress percentage.



- Only numbers that are allocated to the USB flash drive can be selected.
- Only songs that can be displayed in the USB flash drive song category can be selected.

## Matching the Keyboard Tone and Song Tone (Tone Sync)

Use the procedure below to assign the song tone to the keyboard so you can play along.

### 1. Press **SONG**.

This displays the song screen.

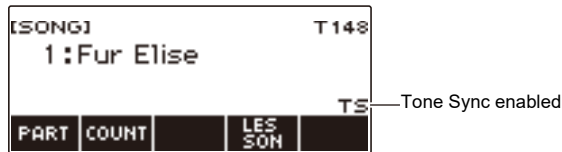
### 2. Rotate the dial to select a song.

### 3. Long-press **SONG**.

This momentarily displays "TONE SYNC ON".



- "TS" is displayed while tone sync is enabled.



### 4. To disable tone sync, long-press **SONG** again.

This momentarily displays "TONE SYNC OFF".

#### **NOTE**

- Selecting a song while tone sync is enabled automatically changes to the recommended tone setting for the song.
- If there is a tone change within a song, enabling Tone Sync causes the keyboard tone also to change automatically when the playback melody changes.
- The reverb setting is also the one recommended for the song.
- Changing the tone or reverb setting automatically disables tone sync.
- Enabling tone sync automatically causes the upper octave shift setting and the upper1 octave shift setting to become 0.
- Turning on tone sync automatically resets the chorus type to its initial default setting.

## Practicing a Song Part (Part Off)

You can turn off the right-hand part or the left-hand part of a song you are playing and practice along with the remaining part. Use this when you feel that a song is initially too difficult for you to play with both hands at the same time.

### 1. While a song is playing or stopped, press PART.

Each press of PART cycles between the lesson parts.

Setting	Display Name	Description
Normal		Normal playback. Keyboard Lighting shows play of both hand parts.
Right-hand part off	RIGHT OFF	Inserts one blank measure at the beginning of the song and mutes the right-hand part. Keyboard Lighting shows play of the right-hand part.
Left-hand part off	LEFT OFF	Inserts one blank measure at the beginning of the song and mutes the left-hand part. Keyboard Lighting shows play of the left-hand part.
Both off	BOTH OFF	Inserts one blank measure at the beginning of the song, and mutes both hand parts. Keyboard Lighting shows play of both hand parts.

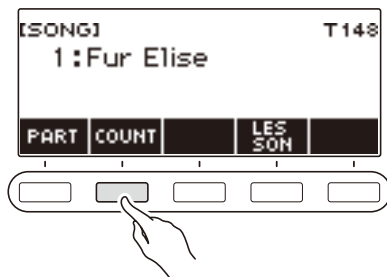
## Sounding a Count in Time with a Song

You can configure count settings to sound a count in time with a song and to sound a pre-count before a song starts.

If pre-count is enabled, a pre-count sounds to help you determine when to start playing along.

### 1. While the song stopped, press COUNT.

This displays a count setting item.



Each press of COUNT changes the setting.

Setting (Displayed Setting Name)	Description
Off	Count does not sound.
Count (COUNT)	Inserts one blank measure at the beginning of the song and sounds a count.
Pre-count (PRECOUNT)	Inserts one blank measure at the beginning of the song and sounds a count for that measure only.

### 2. Press ►/■ to start playback.

If you selected the COUNT option, a count sounds as the song plays.

#### NOTE

- When PRE-COUNT is selected as the count setting for built-in songs and CMF (CASIO MIDI file) songs, the count sounds for the first measure, and it continues to sound for any rests in the measure after that.
- When COUNT or PRE-COUNT is selected for Tone recordings, Rhythm recordings or Multi-track recordings, a blank measure is not inserted as the first measure.
- When PRE-COUNT is selected as the count setting for SMF (standard MIDI files), tone recordings, rhythm recordings, and multi-track recordings, the count sounds for the rests in the first measure.
- When PRE-COUNT is selected as the count setting for Part-off Recording, the count operation depends on the sound.



## Increasing the Selection of Songs (User Songs)

Song data transferred to Digital Keyboard memory using a USB flash drive is saved to Song Bank songs numbered 161 to 360. Such songs can be recalled as user songs for playback. See [“Loading Data From a USB Flash Drive to Digital Keyboard Memory”](#) (page EN-158). CMF (CASIO MIDI files, file name extension CMF) and SMF (standard MIDI files, file name extension MID) can be loaded. Supported formats for SMF songs are 0 and 1.

### Specifying a Channel for an SMF User Song Part

#### 1. Press **SONG**.

This displays the song screen.

#### 2. Rotate the dial to select an SMF user song.

#### 3. Press **BACK**.



#### 4. Press **CHANNEL**.

This displays channel setting items for the right-hand part.



#### 5. Rotate the dial or use **-** and **+** to change the setting.

- You can specify a value from 1 to 16.
- To return the setting to its initial default, press **-** and **+** at the same time.
- To specify a channel for the left-hand part, press **LEFT** and then repeat the same operation as above.

## Deleting a User Song

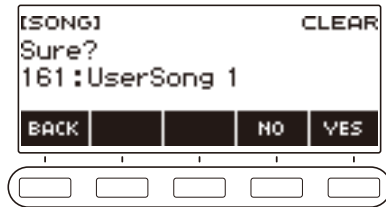
### 1. Press **SONG**.

This displays the song screen.

### 2. Rotate the dial to select the user song you want to delete.

### 3. Long-press **MENU**.

This displays "Sure?".



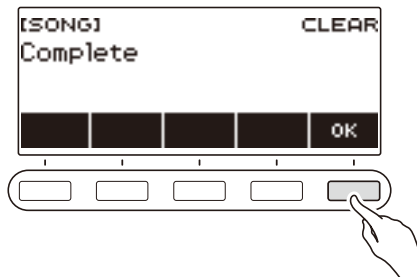
### 4. Press **YES**.

This deletes the user song.

- To cancel, press NO.

### 5. When "Complete" appears on the display, press **OK**.

This exits the user song delete operation.



# Singing with Karaoke

## Using a Microphone to Sing Along with a Song

The karaoke feature of your Digital Keyboard lowers the volume level of the melody part of Song Bank built-in song, user song, and USB memory song playback so you can sing along using a connected microphone.

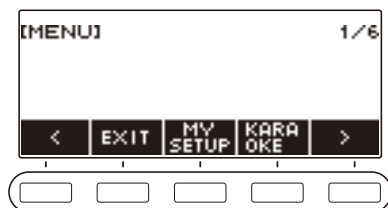
### PREPARATION

- For details about how to connect a microphone, see “[Connecting a Commercially Available Microphone](#)” (page EN-13).
- Before singing, you can use the **MIC VOLUME** knob on the back of the Digital Keyboard to adjust the microphone volume.

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **KARAOKE**.



### 3. Press **KARAOKE**.

This displays the karaoke screen.



- You can also access the karaoke function by long-pressing the **LESSON** button on the song screen.
- You can also access the karaoke function by displaying the song screen, selecting the song you want to use for karaoke, and then pressing the **KARAOKE** button. The **KARAOKE** button is not displayed in the case of a song that cannot be used for karaoke.

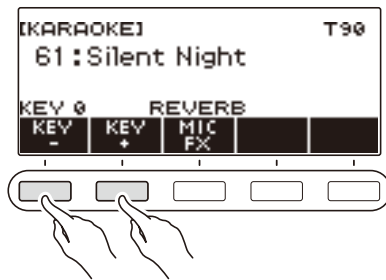
#### 4. Rotate the dial to select the song you want to use for karaoke.

- This displays the -/+ screen.

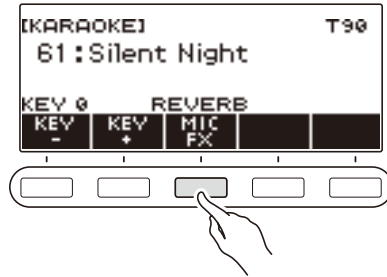


- After you rotate the dial once to select a song, you can change the selection further using - and +.
- If you want to select a category, use CAT-/CAT+.
- To go back to the previous screen, press BACK.

#### 5. If you want, use KEY- and KEY+ to change the key of the song.



## 6. If you want, use MIC FX to change the microphone effect.



Available microphone effect settings are shown in the table below.

Setting	Display Name	Description
Off	FX OFF	No effect applied.
Echo	ECHO	Adds echo to your voice.
Reverb	REVERB	Adds a natural reverb to your voice.
Chorus	CHORUS	Adds depth to your voice.

## 7. Press ►/■ to start playback.

Use a microphone to sing along with the song.

## 8. To stop playback, press ►/■ again.

## 9. To exit the Karaoke function, press **HOME** or long-press **TONE**.

### NOTE

- You can use built-in songs, user songs, and USB memory songs for the karaoke function.
- Keyboard Lighting is disabled while karaoke playback is in progress.
- You cannot change system effect settings while singing a karaoke song.

## Specifying a Channel for an SMF User Song Karaoke Part

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **KARAOKE**.

### 3. Press **KARAOKE**.

This displays the karaoke screen.

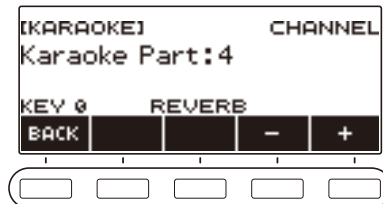
### 4. Rotate the dial to select an **SMF user song**.

### 5. Press **BACK**.



### 6. Press **CHANNEL**.

This displays the **-/+** screen.



### 7. Rotate the dial or use **-** and **+** to set a channel for the karaoke part.

- You can specify a channel in the range of 1 to 16.
- To go back to the previous screen, press **BACK**.

# Using a Lesson to Master Song Play

Your Digital Keyboard provides you with the lessons below, which help make it easier to master the songs you want to play.

- EASY Mode (page [EN-87](#))
- Step Lesson (page [EN-89](#))
- Using the Challenge Mode to Check Your Results (page [EN-92](#))

If you want, you can disable Fingering Voice Guide and Note Sound Guide that sounds during lessons. For information about how to disable guidance, see “[Disabling Lesson Fingering Voice Guide](#)” (page [EN-94](#)) and “[Disabling Note Sound Guide](#)” (page [EN-95](#)).

## Using the LESSON Function

### 1. Press **LESSON**.

This displays the lesson screen.



### 2. To exit the LESSON function, press **HOME** or long-press **TONE**.

#### **NOTE**

- The LESSON function can use built-in songs, user songs, and USB memory songs.
- Keyboard lighting is disabled while lesson playback is in progress.

## EASY Mode

With the EASY Mode, you can play along by pressing any keyboard keys you want, even if they do not match the music.

Play on the keyboard by following the timing of the keys that light. With this type of lesson, playback progresses even if you press the wrong keyboard key. If you do not press any keyboard key, playback stands by until you do.

If you press keys before the corresponding key lighting, accompaniment will speed up to adjust the timing.

### 1. Press **LESSON**.

This displays the lesson screen.

### 2. Rotate the dial to select the song you want to play.

### 3. Press **EASY**.

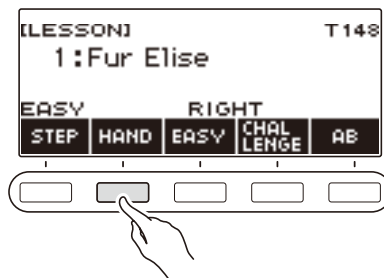
This displays "EASY", indicating the EASY Mode.



### 4. Use **HAND** to select the playing hand you want.

Depending on the playing hand you select, one of the following indicators appears on the display: "RIGHT" (right hand), "LEFT" (left hand), "BOTH" (both hands).

- Each press of HAND cycles between the hand settings.





## 5. You can enable tone sync, if you want, by long-pressing **SONG**.



## 6. Press **▶/■**.

This starts EASY Mode play. The current measure and beat numbers are shown on the display.



- Inserts one measure at the beginning and sounds a pre-count.
- In the case of a song that starts with a pickup, the pre-count sounds for the rests at the beginning, before the pickup.
- If a chord name appears on the display while you have left hand or both hands selected as the playing hand, the “play this chord next” indicator (>) is displayed next to the chord name.



- Playing a lesson song resets the following settings: split, layer, octave shift.
- Performing a chord song with your left hand or both hands resets the split point and chord mode settings.

## 7. The song continues to play until the end is reached or when you press **▶/■** again to stop the lesson.

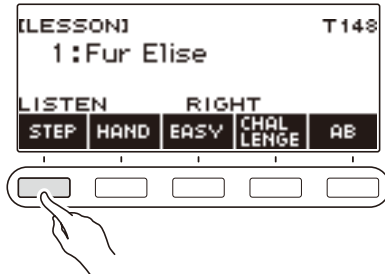
## Doing a Lesson Step-by-step

### 1. Press **LESSON**.

This displays the lesson screen.

### 2. Rotate the dial to select the song you want to use for the lesson.

### 3. Use **STEP** to select the lesson step you want.



- Each press of STEP cycles between the lesson parts.
- The table below explains each of the steps.

Display Name	Description
LISTEN	Listen to the example until you remember the song. Keyboard Lighting shows you the timing when you need to press keyboard keys.
WATCH	Play while watching the keys that light. The next key you need to press flashes to guide you. If you do not play the correct note in time, accompaniment stands by until you do. While accompaniment is standing by, the key you need to press lights and a tone sounds to guide you.
REMEMBER	Play without Keyboard Lighting. If you do not play the correct note in time, accompaniment stands by until you do. If you do not press the correct keyboard key, after a while the key you need to press remains lit and a tone sounds to guide you.

#### 4. Use **HAND** to select the playing hand you want.

Depending on the playing hand you select, one of the following indicators appears on the display: “RIGHT” (right hand), “LEFT” (left hand), “BOTH” (both hands).

- Each press of **HAND** cycles between the playing hand settings.



#### 5. You can enable tone sync, if you want, by long-pressing **SONG**.



#### 6. Press **▶/■**.

This starts the currently selected lesson and displays the current measure and beat numbers.



- Inserts one measure at the beginning and sounds a pre-count.
- In the case of a song that starts with a pickup, the pre-count sounds for the rests at the beginning, before the pickup.
- Playing a lesson song resets the following settings: split, layer, octave shift.
- Performing a chord song with your left hand or both hands resets the split point and chord mode settings.

**7. The song continues to play until the end is reached or when you press ►/■ again to stop the lesson.**

- If the lesson type is WATCH or REMEMBER, a performance evaluation score appears when the end of the song is reached.
- To return to the Home Screen from the performance evaluation screen, press OK.



The table below shows the evaluation result levels.

Display Name	Performance Evaluation	Points
Perfect!	Perfect	100
Great!	Great	99 to 80
Good!	Good	79 to 60
Nice try!	Nice try	59 to 20
Keep trying!	Keep trying	19 to 0

**NOTE**

- Fingering Guide does not sound during Both Hand Lessons.
- If you press FF, REW, or AB or display another screen other than the lesson screen during a lesson, no performance evaluation is displayed for that lesson.
- If a chord name appears on the display while you have left hand or both hands selected as the playing hand for WATCH or REMEMBER, the “play this chord next” indicator (>) is displayed next to the chord name.

## Using the Challenge Mode to Check Your Results

With the Challenge Mode, the song plays without guidance and without stopping, and then the Digital Keyboard evaluates your performance.

### 1. Press **LESSON**.

This displays the lesson screen.

### 2. Rotate the dial to select the song you want to challenge.

### 3. Press **CHALLENGE**.

This displays “CHALLENGE”, which indicates the Challenge Mode.



### 4. Use **HAND** to select the playing hand you want.

Depending on the playing hand you select, one of the following indicators appears on the display: “RIGHT” (right hand), “LEFT” (left hand), “BOTH” (both hands).

### 5. You can enable tone sync, if you want, by long-pressing **SONG**.

### 6. Press **▶/■**.

This starts Challenge Mode play. The current measure and beat numbers are shown on the display.

- Inserts one measure at the beginning and sounds a pre-count.
- In the case of a song that starts with a pickup, the pre-count sounds for the rests at the beginning, before the pickup.

### 7. The song continues to play until the end is reached or when you press **▶/■** again to stop the challenge.

- If you complete the performance to the end, a score that rates your play appears on the screen.
- To exit the Challenge Mode while the performance evaluation screen is displayed, press OK.
- To restart the challenge, press **▶/■**.

## Looping Part of a Song as a Lesson (Loop Lesson)

You can loop a specific section of a song for practice.

### 1. While using the EASY Mode or standard lesson is in progress, press AB to specify the starting measure of the Loop Lesson.

This causes "A" to appear on the display, indicating that the beginning of the measure where you pressed AB is the start point of the loop.



### 2. When playback reaches the measure you want to specify as the end of the Loop Lesson, press AB again.

This causes "AB" to appear on the display, indicating that the end of the measure where you pressed AB is the end point of the loop.

- Loop lesson starts automatically.
- The loop continues to play until you press ►/■.



### 3. To stop loop lesson play, press ►/■.

- Even if you stop loop lesson play, the current loop setting is retained.
- If the lesson step is WATCH or REMEMBER, or if you are using the Challenge Mode, a performance evaluation score appears after you play the loop.



- To restart the lesson from the performance evaluation screen, press OK. To exit a loop lesson, press FINISH.

#### 4. To clear the loop setting, press **AB** again.

This causes “AB” to disappear from the display.

#### **NOTE**

- If you do not create a loop, pressing AB while EASY Mode or lesson play is stopped causes lesson play of the entire current song to repeat.
- Changing the song being used for a lesson after creating a loop causes the loop to be cleared.

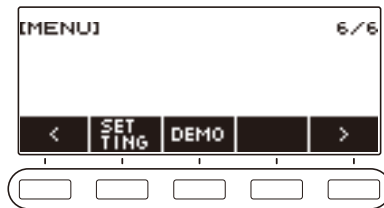
## Disabling Lesson Fingering Voice Guide

Use the procedure below to disable Lesson Fingering Voice Guide.

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.



### 3. Press **SETTING**.

This displays the setting screen.



### 4. Use **<** and **>** to select “Fingering Voice Guide”.

### 5. Rotate the dial or use **-** and **+** to select “Off”.

### 6. To exit the setting operation, press **EXIT**.

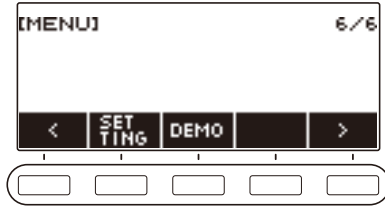
## Disabling Note Sound Guide

You can use the procedure below to disable note guide.

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.



### 3. Press **SETTING**.

This displays the setting screen.



### 4. Use **<** and **>** to select "Note Sound Guide".

### 5. Rotate the dial or use **-** and **+** to select "Off".

### 6. To exit the setting operation, press **EXIT**.



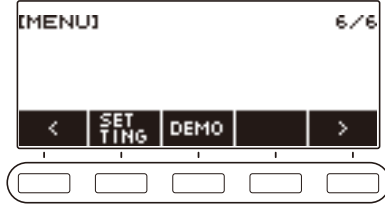
## Disabling Performance Evaluation

You can use the procedure below to disable performance evaluation at the end of a lesson.

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.



### 3. Press **SETTING**.

This displays the setting screen.



### 4. Use **<** and **>** to select "Lesson Evaluation".

### 5. Rotate the dial or use **-** and **+** to select "Off".

### 6. To exit the setting operation, press **EXIT**.

# Playing with a Rhythm Backing

You can use the procedures in this section to select the rhythm you want, and then automatically play accompaniments to suit it simply by playing chords with your left hand. It's like having a personal backup group along with you wherever you go.

## NOTE

- Auto Accompaniments are made up of the parts (instruments) below.
  - Rhythm (percussion instruments)
  - Bass (bass instruments)
  - Harmony (other instruments)

You can have only the rhythm part play, or you can have all three parts play at the same time.

## Rhythm

The rhythm part is the foundation of each Auto Accompaniment.

Your Digital Keyboard comes with a variety of built-in rhythms, including 8-beat and waltz. Use the procedure below to play the basic rhythm part.

## Using the Rhythms

### 1. Press **RHYTHM**.

This displays the currently selected rhythm number and name, indicating that the rhythm function is enabled.



### 2. To exit the rhythm function, press **HOME** or long-press **TONE**.

## Playing a Rhythm

### 1. Press **RHYTHM**.

This displays the currently selected rhythm number and name.

### 2. Rotate the dial to select a rhythm.

This displays the category name of the selected rhythm.

- For information about rhythm types, see the "Rhythm List" (page EN-200).
- After you rotate the dial once to select an option, you can change the selection further using – and +.
- If you want to select a category, use CAT–/CAT+.
- To go back to the previous screen, press BACK.



### 3. Press **▶/■**.

This starts the rhythm and displays the beat number.



### 4. To stop playback, press **▶/■** again.

## Changing the Tempo

Use the procedure below to change tempo to a speed that suits you.

### 1. Press **RHYTHM**.

This displays the currently selected rhythm number and name.

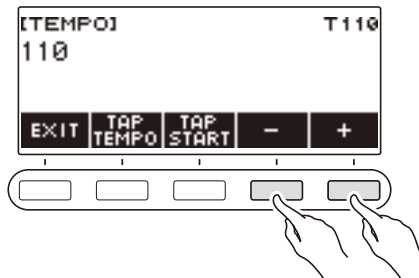
### 2. Rotate the dial to select the name of the rhythm whose tempo you want to change.

### 3. Press **TEMPO**.

This displays the tempo screen.

### 4. Rotate the dial or use **-** and **+** to change the tempo value.

- You can specify a tempo value in the range of 20 to 255.
- To return to the recommended setting, press **-** and **+** at the same time.



### 5. To exit the setting operation, press **EXIT**.

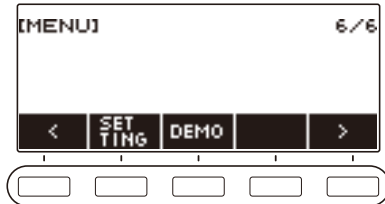
## Changing the Volume Level of a Rhythm

Use the procedure below to adjust the balance between the volume levels of keyboard play and the rhythm.

### 1. Press **MENU**.

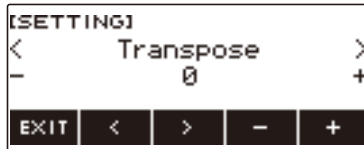
This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.



### 3. Press **SETTING**.

This displays the setting screen.



### 4. Use **<** and **>** to select "Rhythm Volume".

### 5. Rotate the dial or use **-** and **+** to change the rhythm volume level.

- You can specify a volume value from 0 to 127.

### 6. To exit the setting operation, press **EXIT**.

#### **NOTE**

- You can also adjust the volume level of the rhythm using the procedure under "[Changing the Volume Balance Between Keyboard Play and Rhythm Play \(Balance\)](#)" (page EN-52).

## Changing the Keyboard Tone While a Rhythm is Playing

### 1. While a rhythm is playing, press **TONE**.

The selected tone number and instrument name appears on the display.



### 2. Rotate the dial to select a tone.

- For tone information, see the “[Tone List](#)” (page [EN-187](#)).
- After you rotate the dial once to select an option, you can change the selection further using – and +.
- To return the setting to its initial default, press – and + at the same time.
- To go back to the previous screen, press **BACK**.

## Using Recommended Rhythm Settings (One Touch Presets)

You can use the procedure below to configure tone and tempo settings that are most suitable for a particular rhythm pattern.

### 1. Press **RHYTHM**.

This displays the currently selected rhythm number and name.

### 2. Rotate the dial to select the name of the rhythm whose setting you want to configure.

### 3. Long-press **RHYTHM**.

This momentarily displays "RECOMMENDED", which indicates the recommended rhythm settings are configured.



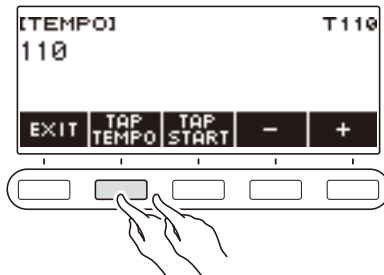
## Adjusting the Tempo by Tapping (Tap Tempo)

### 1. Press **TEMPO**.

This displays the tempo screen.

### 2. Tap the **TAP TEMPO** button at least twice at a steady pace.

This sets the tempo in accordance with your tapping.



## Sounding Rhythm as You Use Tap Tempo

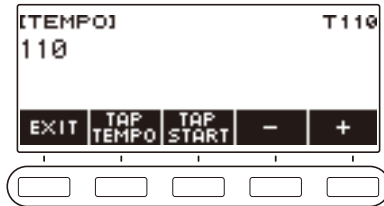
### 1. Press **RHYTHM**.

This displays the currently selected rhythm number and name.

### 2. Rotate the dial to select the name of the rhythm whose setting you want to configure.

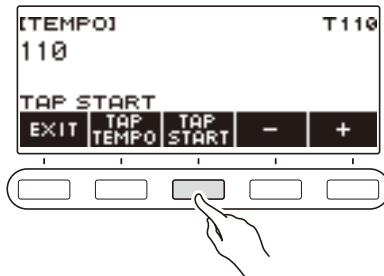
### 3. Press **TEMPO**.

This displays TAP START above one of the 5 buttons.



### 4. Press **TAP START**.

This displays "TAP START".



### 5. Tap the **TAP TEMPO** button at least twice at a steady pace that matches the rhythm beat.

The rhythm starts playing from the first beat of the next measure.



## Changing the Rhythm Pattern

You can use the procedure below to add liveliness to your rhythm pattern. Use the procedure below to play intro and ending patterns, to play fill-in patterns, and to play variations of basic rhythm patterns.

### Switching Between the Basic Pattern and Variation Pattern

Each rhythm number has a basic pattern (V1) and a variation pattern (V2). You can switch to the variation pattern to add a bit of variation to your performances.

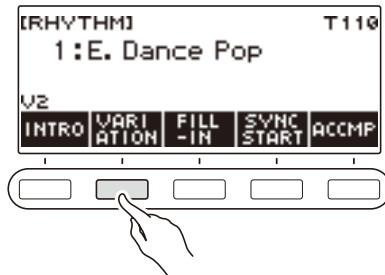
#### 1. Press **RHYTHM**.

This displays the currently selected rhythm number and name.

#### 2. Rotate the dial to select the name of the rhythm whose setting you want to configure.

#### 3. Press **VARIATION**.

This displays "V2".



- To return to "V1", press VARIATION again.
- Pressing VARIATION while a rhythm is playing, the rhythm toggles between V1 and V2 from the next measure.

#### 4. Press **▶/■**.

This starts the currently selected rhythm pattern.

## Inserting an Intro

The intro you insert at the beginning of a song is followed by the basic pattern (V1) or variation pattern (V2).

### 1. Press **RHYTHM**.

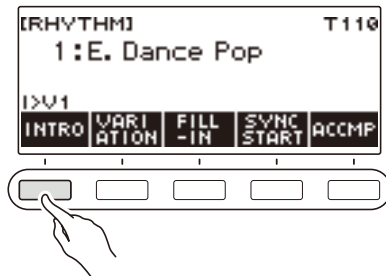
This displays the currently selected rhythm number and name.

### 2. Rotate the dial to select the name of the rhythm whose setting you want to configure.

### 3. Press **INTRO**.

This displays "I >V1".

- "I >V1" indicates that "V1" starts to play following the introduction.



- To remove an intro, press **VARIATION**.
- If you press **INTRO** while a rhythm is playing, the rhythm changes to the intro from the next measure.

### 4. To change the rhythm pattern that is played after the intro from the basic pattern (V1) to the variation pattern (V2), press **INTRO** again.

This displays "I >V2".

- Press **INTRO** again to return to "I >V1".

### 5. Press **▶/■**.

This plays the intro. After the intro is complete, the rhythm pattern you selected in step 4 starts to play.

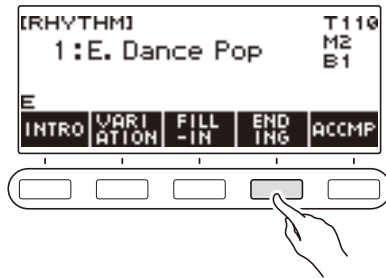
- Pressing **VARIATION** while an intro is playing interrupts the intro play up to the current measure and then plays the rhythm pattern you specified in step 4.
- To play the other rhythm pattern while the intro is playing, press **VARIATION** twice in quick succession.

## Inserting an Ending

Inserting an ending causes it to play for the final measures of a song.

### 1. While a rhythm is playing, press **ENDING**.

This displays "E". The ending plays from the next measure and then the rhythm stops.



- Pressing **VARIATION** while an ending is playing interrupts the ending play up to the current measure and then plays the current rhythm pattern (V1 or V2).
- To play the other rhythm pattern while the ending is playing, press **VARIATION** twice in quick succession.

## Inserting a Fill-in Phrase

A “fill-in” is a short phrase played where you want to change the mood of a song. A fill-in pattern can be used to create a link between two melodies or as an accent.

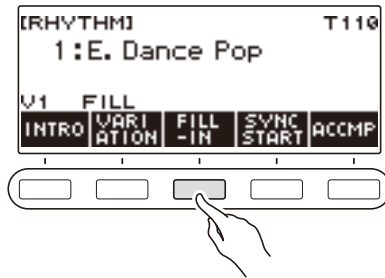
**1. While a rhythm is playing, press VARIATION and then select a rhythm pattern (V1 or V2).**

**2. Press FILL-IN.**

This inserts a fill-in phrase that matches the current rhythm pattern (V1 or V2). The phrase continues to the end of the measure, and “FILL” is displayed at the bottom of the screen while the fill-in is playing.

- To extend the fill-in into the next measure, keep FILL-IN depressed until rhythm play enters the next measure.
- Pressing FILL-IN while a rhythm is stopped inserts the fill-in and causes it to be played when rhythm play is started.

To cancel the inserted fill-in before starting rhythm play, press FILL-IN again.



## Fingering a Chord to Play a Rhythm Accompaniment

Playing a chord with your left hand automatically adds bass and harmony accompaniment parts to the currently selected rhythm. It is just like having a personal back up group on call.

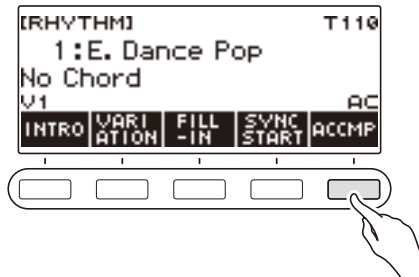
### 1. Press **RHYTHM**.

This displays the currently selected rhythm number and name.

### 2. Rotate the dial to select the name of the rhythm whose chords you want to input.

### 3. Press **ACCMP**.

“AC” and “No Chord” appear on the display, indicating that the accompaniment keyboard is enabled for accompaniment play.



Accompaniment keyboard

### 4. Press **▶/■** to start the rhythm.

### 5. Play a chord on the accompaniment keyboard.

This sounds the bass, harmony, and other non-rhythm part instruments.

#### **NOTE**

- The accompaniment keyboard range is the same as the split keyboard range (page [EN-50](#)).
- Playing a chord while rhythm play is stopped sounds the chord only as long as the keyboard keys are pressed.
- You can use Synchro Start (page [EN-112](#)) to start rhythm play when you play a chord.

### 6. Press **ACCMP** again to stop the accompaniment.

## Selecting a Chord Fingering Mode

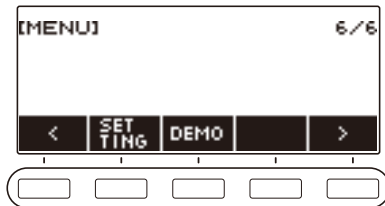
You can select from among the six chord fingering modes below.

- CASIO CHORD
- FINGERED 1
- FINGERED 2
- FINGERED ON BASS
- FINGERED ASSIST
- FULL RANGE CHORD

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.



### 3. Press **SETTING**.

This displays the setting screen.



### 4. Use **<** and **>** to select "Chord Mode".

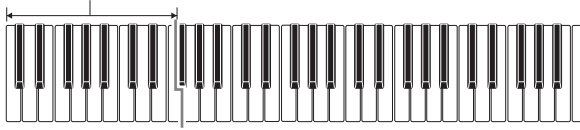
### 5. Rotate the dial or use **-** and **+** to select the chord fingering mode.




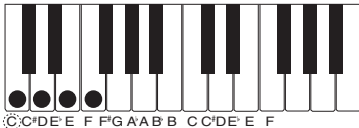
### 6. To exit the setting operation, press **EXIT**.

## ■ CASIO CHORD

With CASIO CHORD, you can use simplified fingerings to play the four types of chords described below

Accompaniment keyboard



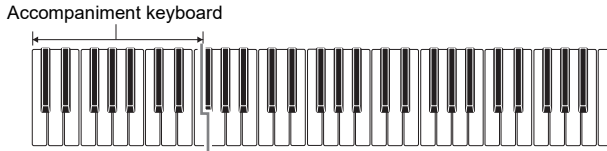
Chord Type	Example
<p><b>Major Chords</b> Letters below the accompaniment keyboard indicate the name of the chord assigned to each key. Accompaniment keyboard keys marked with the same chord name play exactly the same chord.</p>	<p>C (C Major)</p> 
<p><b>Minor Chords</b> Press the key that corresponds to the major chord, while also pressing one other accompaniment area key to the right.</p>	<p>Cm (C Minor)</p> 
<p><b>Seventh Chords</b> Press the key that corresponds to the major chord, while also pressing two other accompaniment area keys to the right.</p>	<p>C7 (C Seventh)</p> 
<p><b>Minor Seventh Chords</b> Press the key that corresponds to the major chord, while also pressing three other accompaniment area keys to the right.</p>	<p>Cm7 (C Minor Seventh)</p> 

### NOTE

- When playing a minor, seventh, or minor seventh chord on the accompaniment keyboard, it makes no difference whether the additional keys you press are black or white.

## ■ FINGERED

With this chord fingering mode, you play chords on the accompaniment keyboard using their normal chord fingerings. Note that some chords can also be formed using abbreviated fingerings of one or two keys. For information about the types of chords you can finger and their fingerings, see the “[Fingering Guide](#)” (page EN-212).



### ● FINGERED 1

Play the component notes of the chord on the keyboard.

### ● FINGERED 2

Unlike Fingered 1, 6th input is not possible with this mode.

### ● FINGERED ON BASS

Play the component notes of the chord on the keyboard. This mode allows input of fraction chords with the lowest keyboard note as the base note.

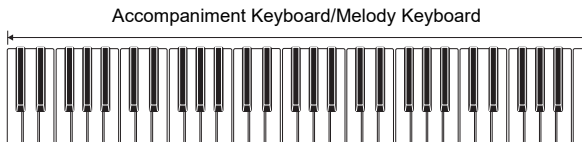
### ● FINGERED ASSIST

In addition to FINGERED 1 input, you can also use the fingerings below to play the three chord types.

<b>Minor Chords (Cm)</b>	One keyboard key for the base note and the nearest black key to the left.
<b>Seventh Chords (C7)</b>	One keyboard key for the base note and the nearest white key to the left.
<b>Minor Seventh Chords (Cm7)</b>	One keyboard key for the base note and the nearest black key and white key to the left.

## ■ FULL RANGE CHORD

With this chord fingering mode, you can use the full range of the keyboard to play chords and the melody.





## Starting Rhythm Play when a Chord is Played (Synchro Start)

Synchro Start automatically starts the rhythm when something is played on the keyboard.

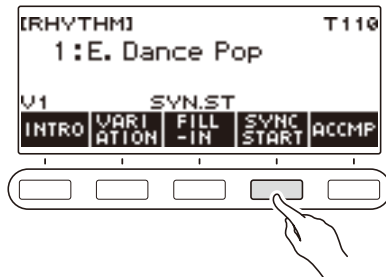
### 1. Press **RHYTHM**.

This displays the currently selected rhythm number and name.

### 2. Rotate the dial to select the name of the rhythm you want to synchro start with.

### 3. Press **SYNC START**.

This enters the synchro start standby state, with “SYN.ST” flashing on the display in time with the currently set tempo.



### 4. Play a chord on the accompaniment keyboard.

This causes “SYN.ST” to disappear from the display and starts rhythm play.

- Pressing ACCMP to display “AC” causes rhythm and accompaniment to sound simultaneously.

## Configuring Rhythm Play to Stop Automatically when Chord Play is Stopped (Synchro Stop)

With synchro stop, rhythm play stops and Synchro Start standby is entered automatically when the accompaniment keyboard keys are released.

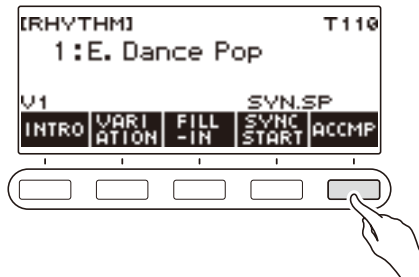
### 1. Press **RHYTHM**.

This displays the currently selected rhythm number and name.

### 2. Rotate the dial to select the name of the rhythm you want to synchro stop with.

### 3. Long-press **ACCMP**

This displays "SYN.SP", which indicates Synchro Stop is enabled.



### 4. Press **ACCMP** to enable chord input.

### 5. Press **SYNC START** to enter synchro start playback standby.

### 6. Hold down a chord on the accompaniment keyboard.

This starts the rhythm.

### 7. Remove your fingers from the keyboard keys.

This stops the rhythm and enters synchro start standby.

### 8. The rhythm pattern repeats as long as accompaniment keyboard keys are depressed.

## Changing the Rhythm Pattern and the Fill-in Operation Type

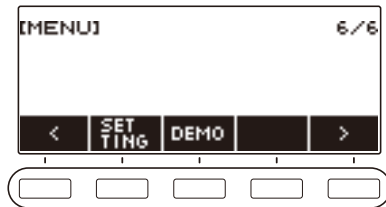
You can use the procedure below to change the rhythm pattern change operation method and fill-in operation method.

### ■ Changing the rhythm operation type to Type 2

#### 1. Press **MENU**.

This displays the menu screen.

#### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.



#### 3. Press **SETTING**.

This displays the setting screen.



#### 4. Use **<** and **>** to select "Rhythm Controller Type".

#### 5. Rotate the dial or use **-** and **+** to select the rhythm operation type.

- You can change the rhythm operation type to Type 2.

#### 6. To exit the setting operation, press **EXIT**.

## NOTE

- Changing the rhythm operation type to Type 2 causes the 5 buttons menu on the rhythm screen to appear as shown below.



- Changing the rhythm operation type can cause the rhythm to stop and/or the rhythm to be reset to its initial default setting.
- In the case of rhythm operation Type 2, the rhythm pattern is not set when a rhythm is selected, even if rhythm auto setting (page EN-117) is enabled.

## ■ Switching Between the Basic Pattern and Variation Pattern

### 1. Press ►/■ to start rhythm play.

This plays the "V1" rhythm.

- While rhythm play is stopped, pressing VAR1 plays "V1", while pressing VAR2 plays "V2"
- Pressing VAR2 while "V1" is being played changes to the "V2" rhythm pattern from the next measure. Pressing VAR1 while "V2" is being played changes to the "V1" rhythm pattern.

## ■ Fill-in

### 1. While "V1" is playing press VAR1, or while "V2" is playing press VAR2.

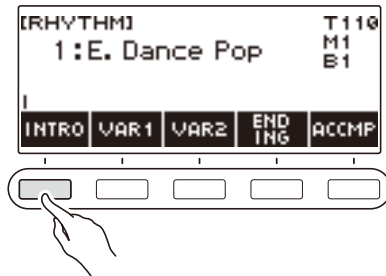
This displays "FILL" and inserts a fill-in at the end of the current measure.

- To extend the fill-in into the next measure, keep VAR1 or VAR2 depressed until rhythm play enters the next measure.

## ■ Intro

### 1. While rhythm play is stopped, press INTRO.

This displays "I" and plays the intro.



- Pressing VAR1 while an intro is playing displays "I >V1". Pressing VAR2 displays "I >V2".
- If "I" is left on the display without changing it, "V1" starts to play following the introduction.
- After you press VAR1 ("I >V1" displayed) or VAR2 ("I >V2" displayed), pressing the same button (VAR1 or VAR2) again interrupts the intro play up to the current measure and then plays the current rhythm pattern (V1 or V2).
- If you press INTRO while a rhythm is playing, the rhythm changes to the intro from the beginning of the next measure, and "I" appears on the display.

## ■ Ending

### 1. While a rhythm is playing, press ENDING.

When rhythm play enters the next measure, "E" appears on the display to indicate that an ending is being played. After the ending, rhythm play stops.

- Pressing VAR1 while an ending is playing switches to "V1" from the next measure. Pressing VAR2 switches to "V2".

## ■ Synchro Start

While in Synchro Start standby, you can preset the pattern that plays when rhythm play starts by pressing INTRO ("I" flashes), VAR1 ("V1" flashes), or VAR2 ("V2" flashes).

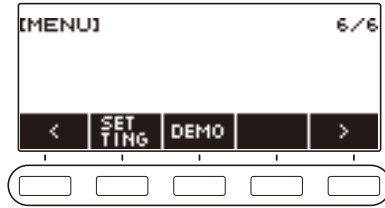
## Disabling Automatic Setting of the Tempo and Pattern when a Rhythm is Selected

Selecting a rhythm causes its recommended tempo and pattern to be automatically applied. You can disable auto setting, if you want.

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.



### 3. Press **SETTING**.

This displays the setting screen.



### 4. Use **<** and **>** to select “Rhythm Auto Set”.

### 5. Rotate the dial or use **-** and **+** to select “Off”.

- To enable auto setting, select “On” for this setting.

### 6. To exit the setting operation, press **EXIT**.

#### **NOTE**

- When Type 2 is selected as the rhythm operation type (page [EN-114](#)), selecting a rhythm will not automatically set the pattern to the recommended value when the rhythm is selected, even if rhythm auto setting is enabled.

## Increasing the Number of Rhythms (User Rhythms)

A USB flash drive song can be loaded as a user rhythm. (Rhythm number: 201 to 210)  
The file name extensions for loaded rhythms are AC7, CKF, and Z00.

- For information about loading a USB flash drive song as a user rhythm, see “[USB Flash Drive Operations](#)” on page [EN-155](#).

## Deleting User Rhythm Data Stored in Digital Keyboard Memory

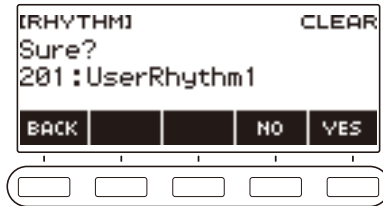
### 1. Press **RHYTHM**.

This displays the currently selected rhythm number and name.

### 2. Rotate the dial to select the user rhythm you want to delete.

### 3. Long-press **MENU**.

This displays “Sure?”.

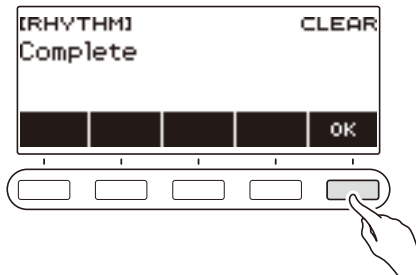


### 4. Press **YES**.

This deletes the user rhythm.

- To cancel, press NO.

### 5. When “Complete” appears on the display, press **OK**.



# Chord Lookup (Chord Book)

You can use the Chord Book to look up chords you do not know how to play. Specifying root, chord type, and inversion settings displays the chord form and sounds the chord. You can also sound Auto Accompaniment based on the looked up chord, or play Auto Accompaniment and have the chords that are played displayed by the chord book.

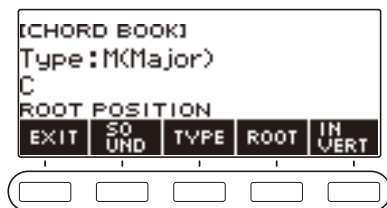
## 1. Press **MENU**.

This displays the menu screen.

## 2. Use **<** and **>** to select the **5 buttons** menu that includes **CHORD BOOK**.

## 3. Press **CHORD BOOK**.

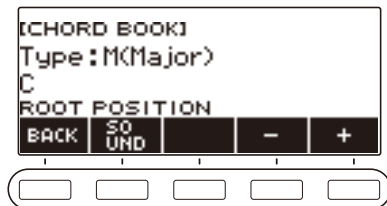
This displays the chord book screen, and keyboard keys light to show the form of the displayed chord.



## 4. To check the sound of the chord form, press **SOUND**.

## 5. Rotate the dial to select a chord type.

This displays the  $-/+$  screen.



- For information about chord types, see “[Fingering Guide](#)” (page [EN-212](#)).
- After you rotate the dial once to select a chord type, you can change the selection further using  $-$  and  $+$ .
- To go back to the previous screen, press **BACK**.

## 6. To exit the setting operation, press **EXIT**.

### **NOTE**

- Keyboard Lighting is disabled while the Chord Book is being used.
- Displaying the Chord Book screen resets the UPPER1 part volume level and transpose settings.
- If a drum tone or some other special tone is selected, re-select the top tone number before using the Chord Book function.



## ■ Changing the Root Note to Look Up a Chord

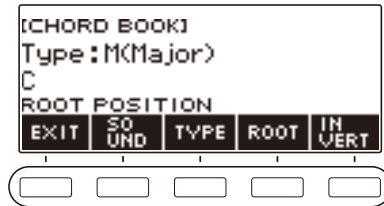
### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **CHORD BOOK**.

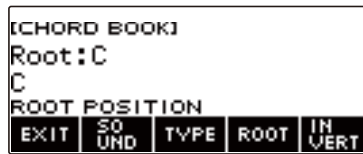
### 3. Press **CHORD BOOK**.

This displays the chord book screen, and keyboard keys light to show the form of the displayed chord.



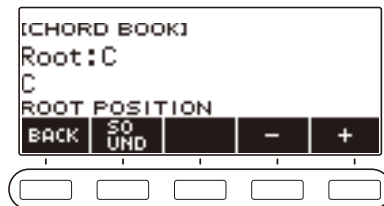
### 4. Press **ROOT**.

This displays the root note of the chord.



### 5. Rotate the dial to select a chord root note.

- This displays the **-/+** screen.



- After you rotate the dial once to select a root note, you can change the selection further using **-** and **+**.
- To go back to the previous screen, press **BACK**.

## ■ Looking Up Chord Inversions

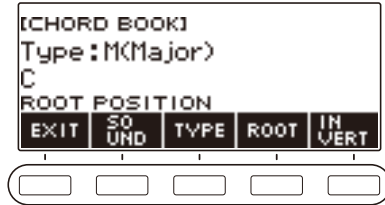
### 1. Press **MENU**.

This displays the menu screen.

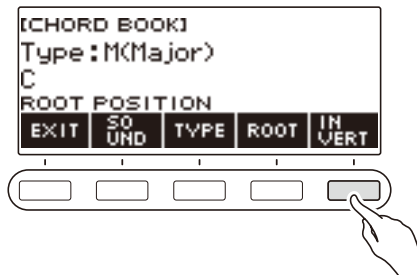
### 2. Use **<** and **>** to select the **5 buttons** menu that includes **CHORD BOOK**.

### 3. Press **CHORD BOOK**.

This displays the chord book screen, and keyboard keys light to show the form of the displayed chord.



### 4. Press **INVERT** and then select the inversion you want.



The table below shows the inversion types you can select.

Setting	Display Name
Root position	ROOT POSITION
First inversion	FIRST INVERSION
Second inversion	SECOND INVERSION
Third inversion	THIRD INVERSION
Fourth inversion	FOURTH INVERSION

### **NOTE**

- Chord inversions differ according to the number of notes that make up the chord.

# Recording Your Keyboard Play

You can use the procedures in this section to record your keyboard play for later playback. There are two ways to record: Easy Recording, which simplifies recording of your performances, and Multi-track Recording, which lets you overdub record performances. Your recordings can be saved to Song Bank locations 361 through 368 (Tone Recordings: 361, Rhythm Recording: 362, Auto-Off Recording: 363: Multi-track Recording: 364 to 368).

## ■ Easy Recording

For Easy Recording, you can specify Tone Recording, Rhythm Recording, or Part-off Recording.

- You can use the tone screen to save a recorded performance as a Tone Recording.
- You can use the rhythm screen to save a recorded performance as a Rhythm Recording.
- Built-in songs, user songs, and performances that Part Off record a USB flash drive song are stored as Part-off Recordings.

## ■ Multi-track Recording

A Multi-track Recording consists of a single system track to which a performance that uses layer, split, and rhythm function can be recorded, and five solo tracks for recording with the UPPER1 part.

- There is memory for up to five multi-track recordings.  
Also, you can copy a Tone Recording and Rhythm Recording as a Multi-track Recording (page [EN-129](#)).

## ■ Recorded Information

The recorder records information about the operations of the functions listed below.

- Keyboard play and pedal operations
- Tone
- Touch Response
- Pedal
- Sustain
- Layer
- Split
- Balance
- Octave shift
- System Effects (Reverb\*<sup>1</sup>, Chorus\*<sup>2</sup>)
- Scale Tuning\*<sup>3</sup>
- Tempo\*<sup>3</sup>
- Rhythm\*<sup>4</sup>
- Recording settings beat

\*1 Can be recorded with part-off. Cannot be recorded to the solo track.

\*2 Cannot be recorded with part-off. Cannot be recorded to the solo track.

\*3 Cannot be recorded to the solo track.

\*4 Cannot be used the function with part-off. Cannot be recorded to the solo track.



- The Multi-track Recording solo track does not record UPPER2 part and LOWER part operations.

## Easy Keyboard Play Recording

Use the procedure below to record a performance using tone and rhythm functions.

1. Press **TONE** or **RHYTHM**.
2. Rotate the dial to select a tone or rhythm.
3. Press **RECORD**.

This displays “(REC)” and enters record standby.



- With Tone Recording, the initial default beat setting is the metronome beat setting.
- With Rhythm Recording, the initial default time signature setting is the rhythm time signature setting.
- For information about changing the beat setting to be used for recording, see “[Changing the Beat Setting for Recording](#)” (page EN-125).

4. Play something on the keyboard.

This displays “REC” along with the current measure and beat numbers, indicating that recording has started.



5. To exit the recording operation, press **RECORD** again.

After recording is complete, the song screen appears with the saved song recording displayed.

- A Tone Recording is displayed in the case of Tone Recording, while a Rhythm Recording is displayed in the case of Rhythm Recording.



## 6. To start playback of what you recorded, press ►/■.

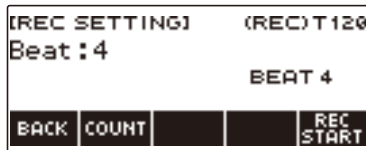
Each press of ►/■ starts and stops playback.

### NOTE

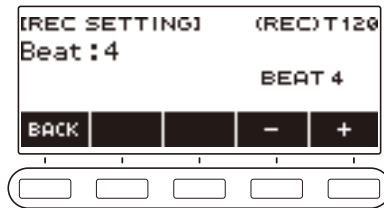
- The maximum size of a single song recording is approximately 40,000 notes or 999 measures. “(REC)” appears on the display when there are 100 or fewer notes or 32 or fewer measures of free space remaining in memory. “(REC)” disappears from the display, and recording stops automatically when memory becomes full.
- To exit recording standby or an ongoing record operation, press **HOME**. Exiting an ongoing record operation causes any data recording during the operation to be deleted. If you want to avoid inadvertently exiting recording standby or an ongoing record operation due to accidental pressing of **HOME**, use Home Customization to disable the panic function (page [EN-145](#)).
- If you press **RECORD**, the Home Screen will appear with the Base Display you selected with Home Customization. If you want to use the Home Screen while recording, disable the Home Customization panic function (page [EN-145](#)).
- Tone Recording, Rhythm Recording, and Part-off Recording cannot be combined within a single recording operation.

## Changing the Beat Setting for Recording

1. Press **TONE** or **RHYTHM**.
2. Rotate the dial to select a tone or rhythm.
3. Press **RECORD**.  
This displays "(REC)" and enters record standby.
4. Long-press **RECORD**.  
This displays a record settings screen.



5. Rotate the dial to change the beat value.

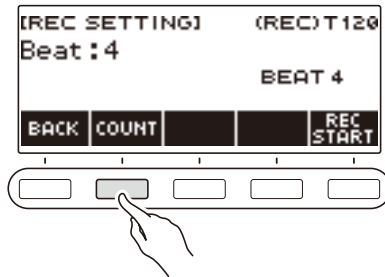


- For the beat setting, you can select Off, or a value of 1 to 16.
- After you rotate the dial once to select a value, you can change the value further using – and +.
- To go back to the previous screen, press BACK.

6. To exit the setting operation, press **BACK**.

## Sounding a Count While Recording

1. Press **TONE** or **RHYTHM**.
2. Rotate the dial to select a tone or rhythm.
3. Press **RECORD**.  
This displays "(REC)" and enters record standby.
4. Long-press **RECORD**.  
This displays a record settings screen.
5. Press **COUNT** and then select a count operation.



Each press of COUNT changes the setting.

Setting (Displayed Setting Name)	Description
Off	Count does not sound.
Count (COUNT)	Inserts one blank measure before recording starts, and sounds a count.
Pre-count (PRECOUNT)	Inserts one blank measure before recording starts, and sounds a count for that measure only.

6. To exit the setting operation, press **BACK**.

## Recording Along with Song Part-off Playback

### 1. Press **SONG**.

This displays the song screen.

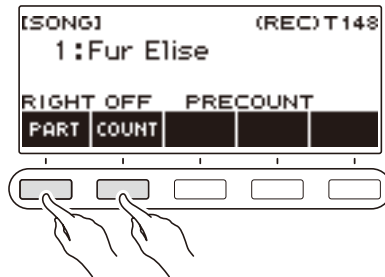
### 2. Rotate the dial to select a song from among the built-in songs, user songs, and USB flash drive songs.

### 3. Press **RECORD**.

- If the Part-off setting is normal, it will change to RIGHT OFF.
- If the count setting is off, it will change to PRECOUNT.

### 4. Use **PART** and **COUNT** to select the settings you want.

- If you are creating a Part-off Recording, you cannot select "Off" as the count setting.



### 5. Press **▶/■**.

### 6. Press **▶/■** or **RECORD** to exit the recording operation.

After recording is complete, the song screen appears with the saved Part-off Recording displayed.



### 7. Press **▶/■** to start playback of the recorded song.

### 8. To re-record, repeat this procedure from step 3.

- Recording settings are retained until you change to another song, so you can re-record using the same settings.

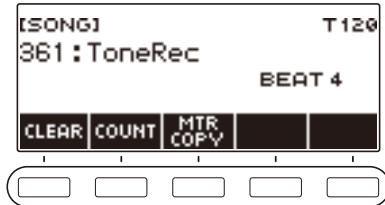


## Deleting an Easy Recording

### 1. Press **SONG**.

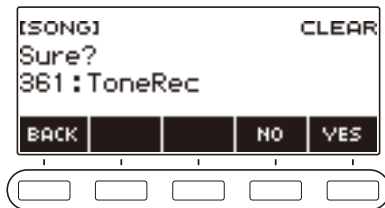
This displays the song screen.

### 2. Rotate the dial to select the Easy Recording you want to delete.



### 3. Press **CLEAR**.

This displays "Sure?".



- You can also delete an Easy Recording by long-pressing **MENU**.

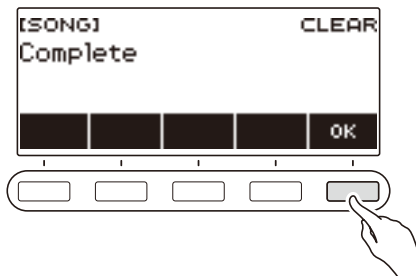
### 4. Press **YES**.

This deletes the Easy Recording.

- To cancel, press NO.

### 5. When "Complete" appears on the display, press **OK**.

This exits Easy Recording delete.



## Overdub Recording (Multi-track Recording)

### 1. Press **SONG**.



- If you long-press **RECORD** when you are not using the recorder function, you can select the first multi-track recorded song.

### 2. Rotate the dial to select the Multi-track Recording you want to overdub.

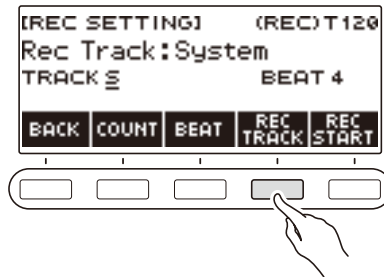
### 3. Press **RECORD**.

This enters record standby.

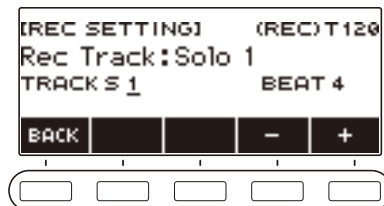
### 4. Long-press **RECORD**.

This displays a record settings screen.

### 5. Press **REC TRACK**.



### 6. Rotate the dial to select the record destination track.



- After you rotate the dial once to select a record destination track, you can change the selection further using – and +.
- To go back to the previous screen, press **BACK**.
- The beat can be changed only when the record destination is the system track.

## 7. Press **REC START**.

Recording starts from the first measure, which is a preparation measure. Playback of the recorded track starts simultaneously. Now you can play along with the playback.

- If you want to record your performance from the beginning without a preparation measure, start playing without pressing REC START.

## 8. Press **RECORD** to exit the recording operation.

Exiting the recording operation displays the song screen, which shows the Multi-track Recording you just saved.



## 9. Repeat steps 3 through 8 of the procedure to overdub your play.

## Copying a Tone Recording or Rhythm Recording as a Multi-track Recording

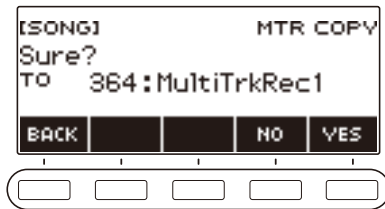
### 1. Press **SONG**.

This displays the song screen.

### 2. Rotate the dial to select the Tone Recording or Rhythm Recording you want to copy as a multi-track recording.

### 3. Press **MTR COPY**.

This displays "Sure?".



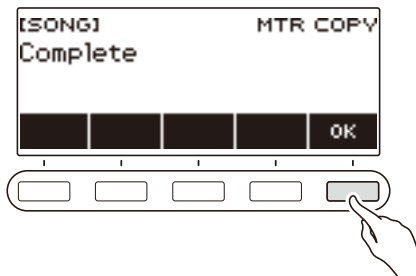
### 4. Press **YES**.

This copies the data to a blank Multi-track Recording number.

- To cancel, press NO.

### 5. When "Complete" appears on the display, press **OK**.

This exits the copy operation.

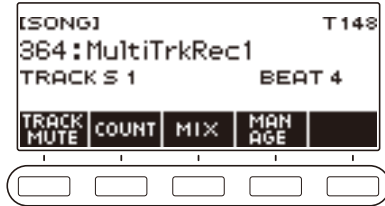


## Muting a Multi-track Recording Track

### 1. Press SONG.

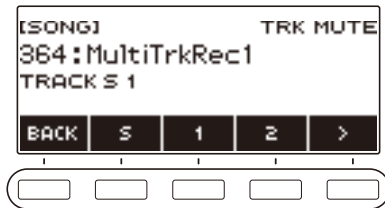
This displays the song screen.

### 2. Rotate the dial to select the Multi-track Recording you want to mute.



### 3. Press TRACK MUTE.

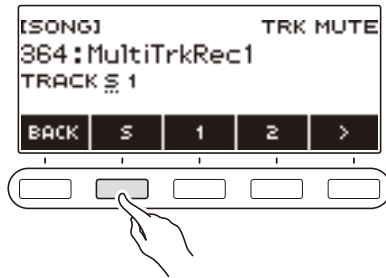
This displays the track mute setting screen.



### 4. Use < and > to select the 5 buttons menu that includes the number of the track you want to mute.

**5. Press the button for the number of the track you want to mute.**

The track that corresponds to the button you press is muted, which is indicated by a broken line under its track number.



- To unmute a track, press its track number button again.

**6. Press BACK to exit the setting operation.**

## Adjusting the Volume Level and Pan of Each Track of a Multi-track Recording (Mixing)

Pan is a setting that controls the distribution of a sound signal. 0 indicates the center, while a smaller value shifts to the left and a larger value shifts to the right.

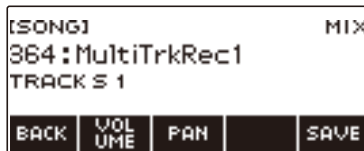
### 1. Press **SONG**.

This displays the song screen.

### 2. Rotate the dial to select the Multi-track Recording you want to adjust.

### 3. Press **MIX**.

This displays the parameter selection screen.



### 4. To adjust the volume level, press **VOLUME**. To adjust the pan, press **PAN**.

This displays the track selection screen.



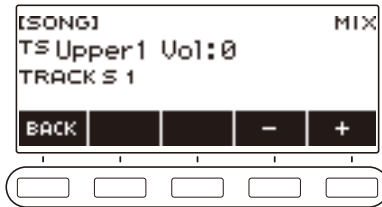
### 5. Use **<** and **>** to select the 5 buttons menu that includes the track you want to adjust.

- Track 1 consists of UPPER1, UPPER2, LOWER, and rhythm parts. Each part can be adjusted individually.
- The pan of Track 1 rhythm cannot be adjusted.

### 6. Press the button that corresponds to the track you want to adjust.

## 7. Rotate the dial to adjust.

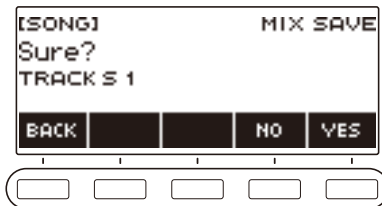
- The original (pre-adjusted) track is retained until you save your adjustments in steps 8 and 9 below. If you want to discard your adjustments and revert to the original (pre-adjusted) track, select press NO in step 9.



- The range of both the volume and pan value is  $-127$  to  $+127$ . These settings can be adjusted relative to the recorded value. The adjusted volume and pan value ranges are  $0$  to  $127$  and  $-64$  to  $+63$ , respectively. These settings cannot be adjusted outside of these ranges.
- After you rotate the dial once to adjust, you can adjust further using  $-$  and  $+$ .
- To return the setting to its initial default, press  $-$  and  $+$  at the same time.
- To go back to the previous screen, press BACK.
- To adjust other track, return to the first page of parameter selection screen by using  $\leftarrow$  and  $\rightarrow$ , and then press BACK. Repeat the steps of this procedure from step 5.

## 8. Press SAVE to save your adjustments.

This displays "Sure?".



## 9. Press YES.

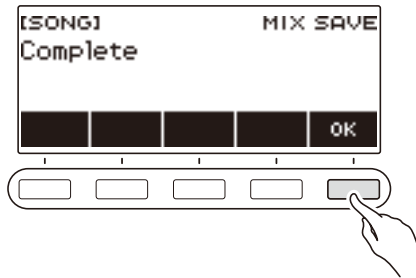
This saves your adjustments.

- To cancel, press NO.



## 10. When “Complete” appears on the display, press OK.

This displays the parameter selection screen.



## Copying a Multi-track Recording

### 1. Press **SONG**.

This displays the song screen.

### 2. Rotate the dial to select the Multi-track Recording you want to copy.

### 3. Press **MANAGE**.

This displays the Multi-track Recording management screen.



### 4. Press **SONG COPY**.

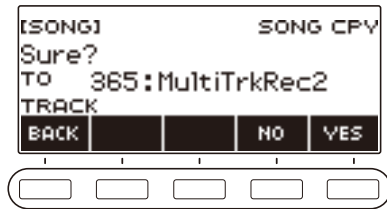
This displays the multi-track copy destination selection screen.



### 5. Rotate the dial or use – and + to select the copy destination.

## 6. Press SELECT.

This displays "Sure?".



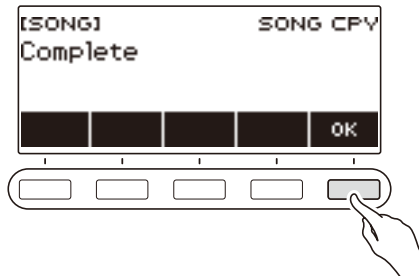
## 7. Press YES.

This copies the multi-track recording.

- To cancel, press NO.

## 8. When "Complete" appears on the display, press OK.

This completes the multi-track copy operation.



## Deleting One or More of the Multi-track Recordings in Memory

### 1. Press **SONG**.

This displays the song screen.

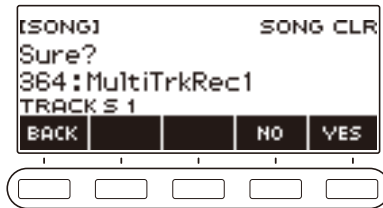
### 2. Rotate the dial to select the Multi-track Recording you want to delete.

### 3. Press **MANAGE**.

This displays the Multi-track Recording management screen.

### 4. Press **SONG CLEAR**.

This displays "Sure?".



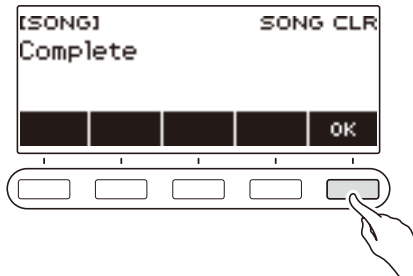
### 5. Press **YES**.

This deletes the multi-track recording.

- To cancel, press NO.

### 6. When "Complete" appears on the display, press **OK**.

This completes the multi-track delete operation.



### **NOTE**

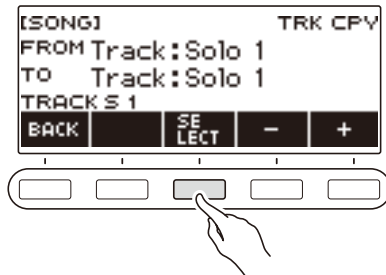
- In place of steps 3 and 4, you can also long-press **MENU** to delete the multi-track recording.

## Copying the Solo Track of a Multi-track Recording

1. **Press SONG.**  
This displays the song screen.
2. **Rotate the dial to select the Multi-track Recording whose solo track you want to copy.**
3. **Press MANAGE.**  
This displays the Multi-track Recording management screen.
4. **Press TRACK COPY.**  
This displays the solo track copy source selection screen.



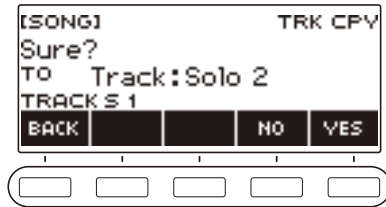
5. **Rotate the dial or use – and + to select the copy source.**
6. **Press SELECT.**  
This displays the solo track copy destination selection screen.



7. **Rotate the dial or use – and + to select the copy destination.**

**8. Press SELECT.**

This displays “Sure?”.

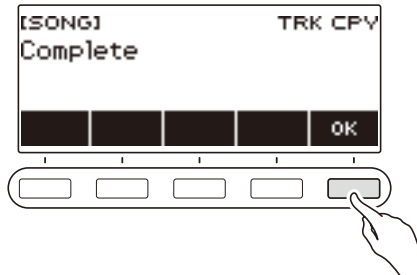
**9. Press YES.**

This copies the solo track.

- To cancel, press NO.

**10. When “Complete” appears on the display, press OK.**

This exits the solo track copy operation.



## Deleting a Multi-track Recording Track

**1. Press SONG.**

This displays the song screen.

**2. Rotate the dial to select the Multi-track Recording whose track you want to delete.****3. Press MANAGE.**

This displays the Multi-track Recording management screen.

#### 4. Press TRACK CLEAR.

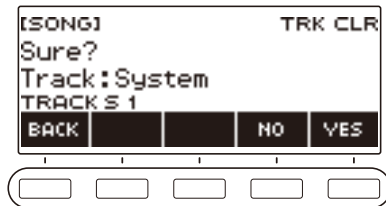
This displays the track delete selection screen.



#### 5. Rotate the dial or use – and + to select a track.

#### 6. Press SELECT.

This displays “Sure?”.



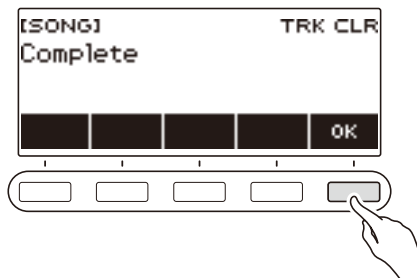
#### 7. Press YES.

This deletes the track.

- To cancel, press NO.

#### 8. When “Complete” appears on the display, press OK.

This exits the track delete operation.



# Customizing the Home Screen (Home Customization)

You can change the Home Screen's Base Display and/or the 5 buttons to customize the screen as you like. You can also configure a setting so various type of playback do not stop when you press the **HOME**.



## **NOTE**

- Saving Customize contents in MY SETUP keeps them from being deleted when the Digital Keyboard is turned off. You also can configure Digital Keyboard settings so MY SETUP settings are recalled whenever Digital Keyboard power is turned on (page [EN-67](#)).

## Changing the Base Display

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the 5 buttons menu that includes **HOME CSTM**.

### 3. Press **HOME CSTM**.

This displays the Home Customization screen, which shows Base Display items.



### 4. Rotate the dial to change the Base Display.

Screens you can select are shown in the table below.

Setting	Display Name
Tone screen	Tone
Rhythm screen	Rhythm
Tone/rhythm screen	Tone/Rhythm

- After you rotate the dial once to select a setting, you can change the setting further using – and +.
- To go back to the previous screen, press **BACK**.

### 5. To exit the setting operation, press **EXIT**.

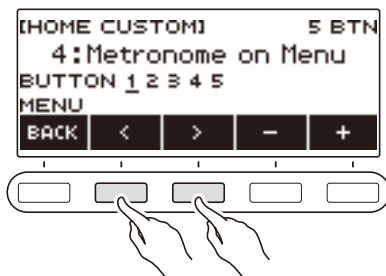


## Changing the Function of Each 5 buttons

1. **Press **MENU**.**  
This displays the menu screen.
2. **Use **<** and **>** to select the **5 buttons** menu that includes **HOME CSTM**.**
3. **Press **HOME CSTM**.**  
This displays the Home Customization screen, which shows Base Display items.
4. **Press **5 BTN (5 buttons)**.**  
This displays the 5 buttons (5 BTN) setting screen.



5. **Use **<** and **>** to select the button whose function you want to change.**



6. **Rotate the dial or use **-** and **+** to change the function.**  
For information about the functions that can be assigned to the 5 buttons see "[Home Customization 5 buttons Function List](#)" (page EN-210).
7. **Press **BACK** to exit the setting operation.**

### **NOTE**

- With some functions, the current settings of its parameters will appear above the corresponding 5 buttons. In some cases, the current setting name will be abbreviate due to space limitations.

## Preventing Playback Stop when HOME is Pressed (PANIC function)

Pressing the **HOME** normally stops all types of playback. This is the “PANIC function”. This lets you stop playback instantly, even if you do not know how to stop a particular type of playback. You can also disable the PANIC function if you want.

### 1. Press **MENU**.

This displays the menu screen.

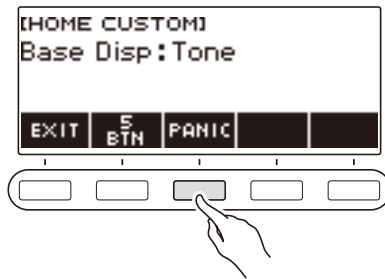
### 2. Use **<** and **>** to select the **5 buttons** menu that includes **HOME CSTM**.

### 3. Press **HOME CSTM**.

This displays the Home Customization screen, which shows base screen items.

### 4. Press **PANIC**.

This causes “PANIC” to disappear from the display, indicating that the PANIC function is disabled.



### 5. To enable the **PANIC** function, press **PANIC** again.

#### **NOTE**

- Playback may stop even when the PANIC function is disabled.

# Configuring Settings

## Setting Operation

Use the procedure below to configure settings.

**1. Press MENU.**

This displays the menu screen.

**2. Use < and > to select the 5 buttons menu that includes SETTING.**

**3. Press SETTING.**

This displays the setting screen.



**4. Use the < and > buttons to select a setting item.**

**5. Rotate the dial or use - and + to change the setting.**

**6. To exit the setting operation, press EXIT.**

## Setting Item List

Function Name	Description	Display Name	Setting
Transpose	Can be used to raise the overall pitch in semitone steps to make it easier to play a piece written in a difficult key, or to adjust to a key that better matches a vocalist, another musical instrument, etc.	Transpose	-12 to 0 to +12 (Initial Default: 0)
Touch off velocity	Can be used to specify the velocity value when Touch Response is disabled.	Touch Off Velocity	1 to 127 (Initial Default: 100)
Keyboard Lighting	Can be used to disable and enable Keyboard Lighting.	Key Light	Off, On (Initial Default: On)
MIC Reverb	Can be used to adjust the depth of the reverb applied to the microphone input sound. However, you cannot adjust reverb while using the karaoke function.	MIC Reverb	0 to 127 (Initial Default: 40)
Split point	Can be used to change the range of the lower keyboard and/or the accompaniment keyboard.	Split Point	C2 to C7 (Initial Default: F#3)
Rhythm auto setting	Can be used to disable automatic setting of the tempo and pattern when a rhythm is selected.	Rhythm Auto Set	Off, On (Initial Default: On)
Chord fingering mode	Can be used to specify the chord fingering mode.	Chord Mode	CASIO Chord, Fingered 1, Fingered 2, Fingered on Bass, Fingered Assist, Full Range Chord (Initial Default: Fingered 1)
Rhythm Controller Type	Can be used to change the control method of rhythm patterns and fill-ins.	Rhythm Controller Type	Type 1, Type 2 (Initial Default: Type 1)
Rhythm volume level	Can be used to adjust the rhythm volume level.	Rhythm Volume	0 to 127 (Initial Default: 115)
Song volume level	Can be used to adjust the song volume level.	Song Volume	0 to 127 (Initial Default: 127)
Lesson Fingering Voice Guide	Can be used to disable Fingering Voice Guide during lessons.	Fingering Voice Guide	Off, On (Initial Default: On)

Function Name	Description	Display Name	Setting
Lesson Note Sound Guide	Can be used to disable Note Sound Guide during lessons.	Note Sound Guide	Off, On (Initial Default: On)
Lesson Evaluation	Can be used to disable lesson evaluation at the end of a lesson.	Lesson Evaluation	Off, On (Initial Default: On)
Tuning	Can be used to fine tune the overall pitch by changing the frequency of A4 in 0.1Hz units.	Tuning	415.5Hz to 440.0Hz to 465.9Hz (Initial Default: 440.0)
Surround	Can be used to create a more expansive sound.	Surround	Off, On (Initial Default: Off)
AUDIO IN center cancel	Can be used to cancel the center part of audio input using the <b>AUDIO IN</b> jack or Bluetooth audio.	Audio In Center Cancel	Off, On (Initial Default: Off)
MIDI OUT Channel UPPER1	Can be used to change the channel of MIDI messages that are MIDI output by UPPER1 play.	MIDI Out Ch Upper1	Off, 1 to 16 (Initial Default: 1)
MIDI OUT Channel UPPER2	Can be used to change the channel of MIDI messages that are MIDI output by UPPER2 play.	MIDI Out Ch Upper2	Off, 1 to 16 (Initial Default: 2)
MIDI OUT Channel LOWER	Can be used to change the channel of MIDI messages that are MIDI output by LOWER play.	MIDI Out Ch Lower	Off, 1 to 16 (Initial Default: 3)
MIDI In Navigate	Can be used to it possible to enable use of the NAVIGATE function that causes Keyboard Lighting to be controlled by MIDI IN note messages.	MIDI In Navigate	Off, Listen, Right Hand Off, Left Hand Off, Both Hand Off (Initial Default: Off)
MIDI In Navigate Channel Right Hand	Can be used to change the channel of the note message that operates as the right-hand melody for the NAVIGATE function.	MIDI In Navi Ch Right	1 to 16 (Initial Default: 4)
MIDI In Navigate Channel Left Hand	Can be used to change the channel of the note message that operates as the left-hand melody for the NAVIGATE function.	MIDI In Navi Ch Left	1 to 16 (Initial Default: 3)
Local Control	Selecting "Off" disables output of sound when something is played on the Digital Keyboard.	Local Control	Off, On (Initial Default: On)
Auto Power Off	Can be used to enable/disable Auto Power Off.	Auto Power Off	Off, On (Initial Default: On)

Function Name	Description	Display Name	Setting
Power-On Alert	Can be used to disable and enable Power-On Alert.	Power-On Alert	Off, On (Initial Default: On)
Battery type	Can be used to specify the type of batteries being used.	Battery	Alkaline, Ni-MH (Initial Default: Alkaline)
Display Contrast	Can be used to adjust display contrast.	LCD Contrast	1 to 12 (Initial Default: 7)
Button long-press time	Can be used to adjust the button long-press time.	Button Long Press Time	Short, Normal, Long (Initial Default: Normal)
Initialize	Can be used to return settings to their initial factory defaults.	Setting Initialize	
Initialize All	Can be used to return the entire Digital Keyboard to its initial factory default state.	All Initialize	
Version Information	Can be used to view version information.	Version	

## IMPORTANT!

- **Keyboard Lighting is disabled while the MIDI IN NAVIGATE function is enabled.**
- **The settings below are retained even when power is turned off.**
  - MIDI OUT Channel (Upper1, Upper2, Lower)
  - MIDI In Navigate
  - MIDI In Navigate Channel (Left hand, right hand)
  - Bluetooth
  - Keyboard Lighting
  - MY SETUP power on recall
  - Auto Power Off
  - Power-On Alert
  - Battery type
  - Display contrast
  - Button long-press time

## Returning Settings to Their Initial Factory Defaults

### 1. Press **MENU**.

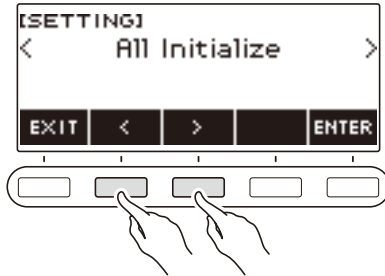
This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **SETTING**.

### 3. Press **SETTING**.

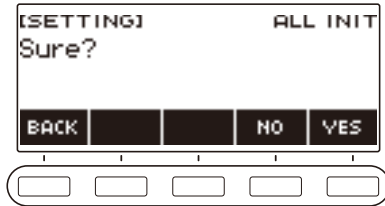
This displays the setting screen.

### 4. Use **<** and **>** to select “All Initialize”.



### 5. Press **ENTER**.

This displays “Sure?”.



### 6. Press **YES**.

After initialization is complete, the message “Complete” appears for a few seconds, and then the Digital Keyboard restarts.

- To cancel, press NO.



# Using a USB Flash Drive

Your Digital Keyboard supports the use of a commercially available USB flash drive to perform the operations below.

- Formatting USB flash drives.
- Saving of Digital Keyboard MY SETUP, recorded song, and other data to a USB flash drive.
- Importing of MY SETUP, recorded song, and other data from a USB flash drive to Digital Keyboard memory.
- Using the Digital Keyboard to play back general song data (MIDI files) copied to a USB flash drive using a computer.
  - For information about copying song data to a USB flash drive, see “[Saving Digital Keyboard Data to a USB Flash Drive](#)” (page EN-156).
  - For the song data playback operation, see “[Selecting a Song on a USB Flash Drive](#)” (page EN-75).

## USB Flash Drive and **USB TO DEVICE** Port Precautions

### **IMPORTANT!**

- **Be sure to observe the precautions provided in the documentation that comes with the USB flash drive.**
- **Avoid using a USB flash drive under the following conditions. Such conditions can corrupt data stored on a USB flash drive.**
  - Areas subjected to high temperature, high humidity, or corrosive gas
  - Areas subjected to strong electrostatic charge and digital noise
- **Never remove the USB flash drive while data is being written to or loaded from it. Doing so can corrupt the data on the USB flash drive and damage the **USB TO DEVICE** port.**
- **Never insert anything besides a CASIO specified device or a USB flash drive into the **USB TO DEVICE** port. Doing so creates the risk of malfunction.**
- **A USB flash drive can become warm after very long use. This is normal and does not indicate malfunction.**
- **Electrostatic charge discharging from your fingers or the USB flash drive to the **USB TO DEVICE** port can cause malfunction of the Digital Keyboard. If this happens, turn the keyboard off and then back on again.**

### **Copyrights**

You are allowed to use recordings for your personal use. Any reproduction of an audio or music format file without the permission of its copyright holder is strictly prohibited under copyright laws and international treaties. Also, making such files available on the Internet or distributing them to third parties, regardless of whether such activities are conducted with or without compensation, is strictly prohibited under copyright laws and international treaties. CASIO COMPUTER CO., LTD. shall not be held in any way liable for any use of this Digital Keyboard that is illegal under copyright laws.



# Inserting and Removing a USB Flash Drive on the Digital Keyboard

## Supported USB Flash Drives

Your Digital Keyboard supports USB flash drives formatted to FAT (FAT32 or exFAT). If your USB flash drive is formatted to a different file system, use the Windows format function on a computer to reformat it to FAT (FAT32 or exFAT). Do not use quick format.

### **IMPORTANT!**

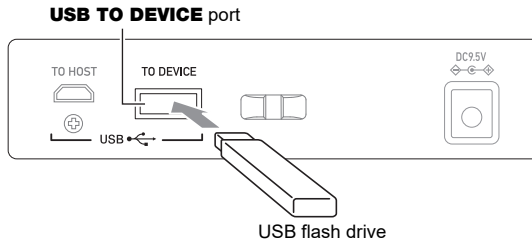
- **Never insert anything besides a CASIO specified device or a USB flash drive into the **USB TO DEVICE** port.**
- **When you perform a USB flash drive operation or turn on the Digital Keyboard while a USB flash drive is plugged in, the Digital Keyboard initially needs to perform a “mounting” process to prepare for data exchange with the USB flash drive. Digital Keyboard operations are momentarily disabled while a mounting process is being performed.**
  - **“MOUNTING” is shown on the display while a mounting process is in progress.**
  - **Do not attempt to perform any operation on the Digital Keyboard while a mounting process is in progress.**
  - **It may take up to 10 or 20 seconds or even longer for the USB flash drive mounting process to finish.**
  - **A USB flash drive mounting process needs to be performed each time it is connected to the Digital Keyboard.**
- **In the case of an exFAT format USB flash drive, the number of importable files may be limited if long file names are used.**

### **NOTE**

- Mounting a USB flash drive on this Digital Keyboard creates a folder named “MUSICDAT” in the drive’s root directory (if a MUSICDAT folder does not already exist there). Use this folder when exchanging data between the Digital Keyboard and USB flash drive.

## Mounting a USB Flash Drive on the Digital Keyboard

- As shown in the illustration below, insert a USB flash drive into the Digital Keyboard's **USB TO DEVICE** port.
  - Carefully push the USB flash drive in as far as it goes. Do not use undue force when inserting the USB flash drive.



## Removing a USB Flash Drive From the Digital Keyboard

- Check to confirm that there is no data exchange operation being performed, and then pull the USB flash drive straight out.

## USB Flash Drive Formatting

### ⚠ IMPORTANT!

- Be sure to format a USB flash drive on the Digital Keyboard before using it for the first time.
- Formatting a USB flash drive deletes all data currently stored on it. Before formatting a USB flash drive, make sure it does not have any valuable data stored on it.
- The format operation performed by this Digital Keyboard is a “quick format”. If you want to completely delete all of the data on a USB flash drive, format it on your computer or some other device.

## USB flash drive formatting

- Insert the USB flash drive you want to format into the Digital Keyboard's **USB TO DEVICE** port.
- Press **MENU**.  
This displays the menu screen.
- Use **<** and **>** to select the 5 buttons menu that includes **MEDIA**.

**4. Press MEDIA.**

This displays the media screen.



- This screen does not appear until the mounting process is complete.

**5. Use < and > to select the 5 buttons menu that includes FORMAT.****6. Press FORMAT.**

This displays "Sure?".

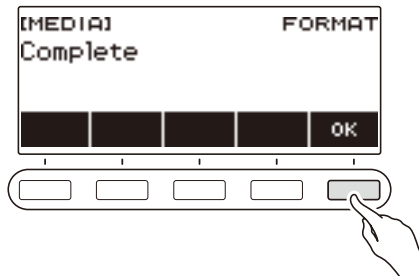
**7. Press YES.**

This formats the USB flash drive.

- To cancel, press NO.

**8. When "Complete" appears on the display, press OK.**

This exits the formatting operation.

**NOTE**

- Formatting a USB flash drive on the Digital Keyboard creates a folder named "MUSICDAT" in its root directory. Use this folder when exchanging data between the Digital Keyboard and USB flash drive.

## USB Flash Drive Operations

The section provides information about the operations below.

- Saving Digital Keyboard data to a USB flash drive
- Importing Data (Files) from a USB Flash Drive to Digital Keyboard Memory
- Deleting Digital Keyboard Importable Data (Files) on a USB Flash Drive
- Renaming Digital Keyboard Importable Data (Files) on a USB Flash Drive

### ■ Data Types

Data types supported by your Digital Keyboard are those shown in the table below. The text in the “Displayed Type Name” column is displayed for the data type on the Digital Keyboard’s LCD.

#### • Digital Keyboard → USB Flash Drive

You can store the data shown in the table below onto a USB flash drive.

Data Type		Displayed Type Name	File Name Extension
Songs	Tone Recording	TONE REC	TRF, MID
	Rhythm Recording	RHYTHM REC	RRF, MID
	Part-off Recording	PART OFF REC	LRF
	Multi-track Recording	MULTI TRACK REC	MRF, MID
MY SETUP		MY SETUP	MYS
All data above		ALL DATA	DAL

#### • USB Flash Drive → Digital Keyboard

You can import the data shown in the table below from a USB flash drive into Digital Keyboard memory, rename it, and delete it.

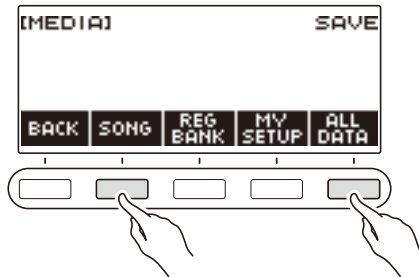
Data Type		Displayed Type Name	File Name Extension
Songs	User Songs	USER SONG	CMF, MID
	Tone Recording	TONE REC	TRF
	Rhythm Recording	RHYTHM REC	RRF
	Part Off Recording	PART OFF REC	LRF
	Multi-track Recording	MULTI TRACK REC	MRF
User Rhythms		USER RHYTHM	AC7, CKF, Z00
MY SETUP		MY SETUP	MYS
All data above		ALL DATA	DAL

### IMPORTANT!

- Even if a file name has one of the extensions shown in the table above, you may not be able to import it into Digital Keyboard memory if the data was created with a non-compatible device, etc.

## Saving Digital Keyboard Data to a USB Flash Drive

1. Insert the USB flash drive into the Digital Keyboard's **USB TO DEVICE** port.
2. Press **MENU**.  
This displays the menu screen.
3. Use **<** and **>** to select the **5 buttons** menu that includes **MEDIA**.
4. Press **MEDIA**.  
This displays the media screen.
5. Press **SAVE**.
6. Press the button that corresponds to the data type you want to save.
  - If you select **ALL DATA** as the data type, steps 7 and 8 are not necessary. Proceed to step 9.
  - If you pressed the **SONG** button, press the button that corresponds to the type of song data you want to save. If you pressed the **TONE** button or **RHYTHM** button as the data type, next select the file type and then advance to step 9. If you pressed the **PART OFF** button for the data type, advance to step 9.



7. Rotate the dial or use **-** and **+** to select the data you want to save.
8. Press **SELECT**.
  - If the data type you want to save is a multi-track recording, you also need to select a file type (file name extension).
9. Rename the file.
  - For information about viewing and editing text, see [“Inputting Characters”](#) (page [EN-22](#)).

**10. To confirm the file name, press CONFIRM.**

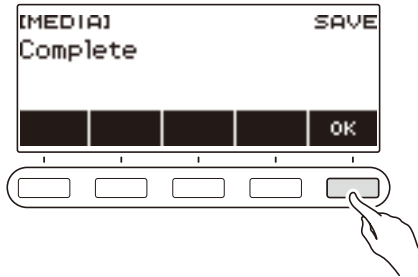
This displays “Sure?”.

- The message “Replace?” appears if there is already data with the same name in the USB flash drive’s “MUSICDAT” folder.

**11. Press the YES to save the file.**

This saves the file to the USB flash drive.

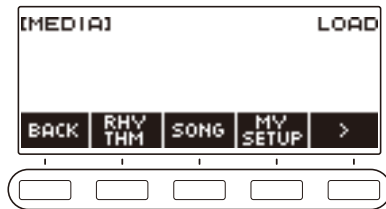
- To cancel, press NO.

**12. When “Complete” appears on the display, press OK.****NOTE**

- When saving Multi-track Recording data as a standard MIDI file (SMF), only the system track data is saved if the system track contains data. If the system track does not contain any data, only the solo track data is saved.

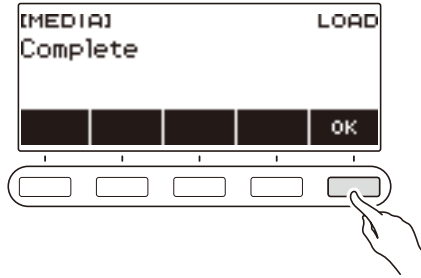
## Loading Data From a USB Flash Drive to Digital Keyboard Memory

1. Insert the USB flash drive into the Digital Keyboard's **USB TO DEVICE** port.
2. Press **MENU**.  
This displays the menu screen.
3. Use **<** and **>** to select the **5 buttons** menu that includes **MEDIA**.
4. Press **MEDIA**.  
This displays the media screen.
5. Press **LOAD**.
6. Press the button that corresponds to the type of data you want to load.
  - If you pressed **SONG**, press the button that corresponds to the type of song data you want to load.



7. Rotate the dial or use **-** and **+** to select the file you want to load.  
This displays the file name extension of the selected file.
8. Press **SELECT**.
  - If the data you are importing is tone recording, rhythm recording, part off recording, or all data, advance to step 11.
9. Rotate the dial to select the import destination number.
10. Press **SELECT**.  
This displays "Sure?".
  - "Replace?" is displayed if data already exists in the destination.
11. Press **YES**.  
This loads the file.
  - To cancel, press **NO**.

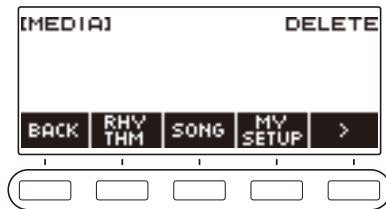
**12.** When “Complete” appears on the display, press OK.



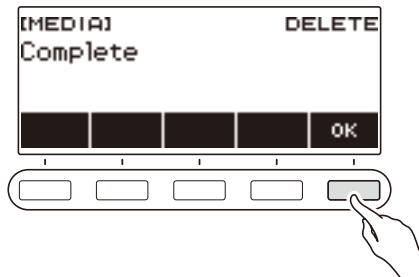


## Deleting a USB Flash Drive File

1. Insert the USB flash drive into the Digital Keyboard's **USB TO DEVICE** port.
2. Press **MENU**.  
This displays the menu screen.
3. Use **<** and **>** to select the **5 buttons** menu that includes **MEDIA**.
4. Press **MEDIA**.  
This displays the media screen.
5. Press **DELETE**.
6. Touch the data type of the data you want to delete.
  - If you pressed **SONG**, press the button that corresponds to the song type you want to delete.

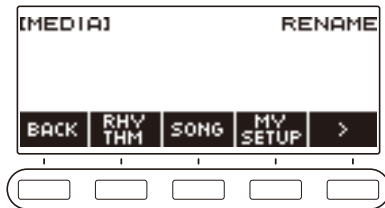


7. Rotate the dial or use **-** and **+** to select the file you want to delete.  
This displays the file name extension of the selected file.
8. Press **SELECT**.  
This displays "Sure?".
9. Press **YES**.  
This deletes the file.
  - To cancel, press **NO**.
10. When "Complete" appears on the display, press **OK**.



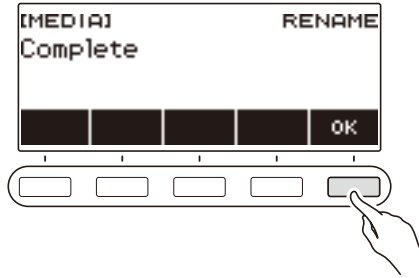
## Renaming a File on a USB Flash Drive

1. Insert the USB flash drive into the Digital Keyboard's **USB TO DEVICE** port.
2. Press **MENU**.  
This displays the menu screen.
3. Use **<** and **>** to select the **5 buttons** menu that includes **MEDIA**.
4. Press **MEDIA**.  
This displays the media screen.
5. Use **<** and **>** to select the **5 buttons** menu that includes **RENAME**.
6. Press **RENAME**.
7. Press the button that corresponds to the data type you want to rename.
  - If you pressed **SONG**, press the button that corresponds to the song data you want to rename.



8. Rotate the dial or use **-** and **+** to select the file you want to rename.  
This displays the file name extension of the selected file.
9. Press **SELECT**.
10. Rename the file.
  - For information about how to edit characters, see ["Inputting Characters"](#) (page EN-22).
11. To confirm the file name, press **CONFIRM**.  
This displays "Sure?".
  - The message "Replace?" appears if there is already data with the same name in the USB flash drive's "MUSICDAT" folder.
12. Press **YES**.  
This renames the file.
  - To cancel, press **NO**.

### 13. When “Complete” appears on the display, press OK.



#### **NOTE**

- Changing the letters in a file name from upper case to lower case or vice versa does not count as a name change. Change the file name to something else.

# Connecting with External Devices

## Linking with a Smart Device (APP Function)

You can use the APP function to connect the Digital Keyboard with a phone, tablet or other smart device and perform the operations described below.

- Using the lesson functions of an app on the smart device, playing notes on the Digital Keyboard.
- Using the Digital Keyboard sound source to sound music data played using an app on the smart device.

### **IMPORTANT!**

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- **Configure the settings of your smart device (Airplane Mode, etc.) to enable data communication.**

### ■ **Downloading the Smart Device App**

Download the Chordana Play from the CASIO website and install it on the smart device.

<https://support.casio.com/global/en/emi/manual/LK-S450/>



## Connecting with a Smart Device

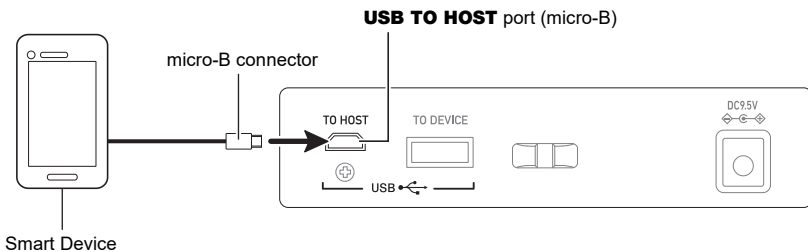
There are two ways to connect with a smart device: using a commercially available USB cable and connection via Bluetooth.

### ■ Using a Cable to Connect the Digital Keyboard with a Smart Device

For information about the requirements for a cable used for connection, visit the website below.

<https://web.casio.com/app/en/play/support/connect.html>

1. Referring to “[Downloading the Smart Device App](#)” (page EN-163), install the app on the smart device.
2. Use a commercially available USB cable to connect the smart device port to the Digital Keyboard’s **USB TO HOST** port.
  - After connecting the smart device to the Digital Keyboard, use the smart device app to perform operations. For details about operations, refer to the user documentation of the app.



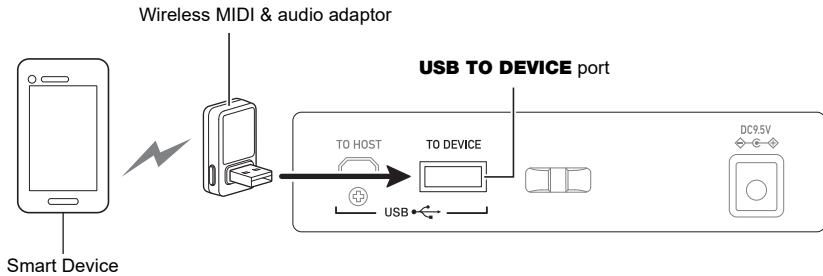
### ⚠ IMPORTANT!

- Connect using a USB cable that is no more than two meters long.
- Do not connect a USB cable and audio cable to a smart device at the same time.
- If you are connecting with a USB cable, do not use the **USB TO DEVICE** port if you plan to use the CASIO smart device app.

## ■ Using Bluetooth to Connect the Digital Keyboard with a Smart Device

You can use the Wireless MIDI & audio adaptor (Option: WU-BT10) for Bluetooth connection.

1. Referring to “[Downloading the Smart Device App](#)” (page [EN-163](#)), install the app on the smart device.
2. Plug the Wireless MIDI & audio adaptor into the **USB TO DEVICE** port (page [EN-14](#)).
  - After connecting the smart device to the Digital Keyboard, use the smart device app to perform operations. For details about operations, refer to the user documentation of the app.



## ⚠ IMPORTANT!

- Do not perform any Digital Keyboard operation while it is in the process of connecting with the smart device app.
- With a Bluetooth connection, your communication environment or the capabilities of your smart device can cause noticeable communication delay or sound distortion when using the app's lesson function. If this happens, try the countermeasures below.
  - Refer to the app's user documentation and review how to use the lesson function and the information about MIDI playback quality.
  - Use a cable connection instead of Bluetooth.
- If you are connecting with Bluetooth, do not use the **USB TO HOST** port if you plan to use the CASIO smart device app.

## Connecting to a Computer and Using MIDI

You can connect the Digital Keyboard to a computer and exchange MIDI data between them. You can record your performance using computer music software, and use the Digital Keyboard to play data sent from a computer.

### ■ Minimum Computer System Requirements

The following shows the minimum computer system requirements for sending and receiving MIDI data. Be sure to check your computer system setup before trying to install the driver.

### ● Supported Operating Systems

Windows 8.1\*1

Windows 10\*2

macOS (OS X/Mac OS X) 10.7, 10.8, 10.9, 10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 11.0

\*1 Windows 8.1 (32-bit versions, 64-bit versions)

\*2 Windows 10 (32-bit versions, 64-bit versions)

### ● USB port

### ! IMPORTANT!

- **Connecting with a computer running an operating system that is not one of those above can cause malfunction of the computer. Never connect the Digital Keyboard to a computer running a non-supported operating system.**

### NOTE

- For the latest news about supported operating systems, visit the website at the URL below.  
<https://support.casio.com/global/en/emi/manual/LK-S450/>



## ■ Connecting to a Computer

### IMPORTANT!

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- **Incorrect connections can make data exchange impossible. Be sure to follow the steps of the procedure below.**

- 1. Turn off the Digital Keyboard and then start up your computer.**
  - Do not start up the music software on your computer yet!
- 2. Use a commercially available USB cable to connect your computer to the Digital Keyboard's **USB TO HOST** port.**
  - Use a USB 2.0 or 1.1 A-micro-B connector type USB cable that supports data communication.
- 3. Turn on the Digital Keyboard.**
  - If this is the first time you are connecting, the driver required to transfer data will automatically be installed on your computer.
- 4. Start up commercially available music software on your computer.**
- 5. Use the settings of your computer's commercially available music software to select "CASIO USB- MIDI" as the MIDI device.**
  - For information about how to select the MIDI device, refer to the user documentation that comes with the music software you are using.

### IMPORTANT!

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- **Be sure to turn on the Digital Keyboard before starting up your computer's music software.**

### NOTE

- Once you are able to connect successfully, you can leave the USB cable connected when you turn off your computer and/or this Digital Keyboard.
- For detailed specifications and connections that apply to MIDI data communication by this Digital Keyboard, see the latest support information provided on the website at the URL below.  
<https://support.casio.com/global/en/emi/manual/LK-S450/>





## ■ Configuring MIDI Settings

For about the MIDI settings below, see the “[Setting Item List](#)” (page EN-147).

- Keyboard Lighting
- MIDI OUT Channel (Upper1, Upper2, Lower)
- MIDI In Navigate
- MIDI In Navigate Channel (Left hand, right hand)
- Local Control

## Using a Cable to Connect with an Audio Device

You can connect this Digital Keyboard to a commercially available playback device or amplifier, or to a recording device. You can also use this Digital Keyboard to sound output from a portable audio player or another device, and use that as backing for your keyboard play.

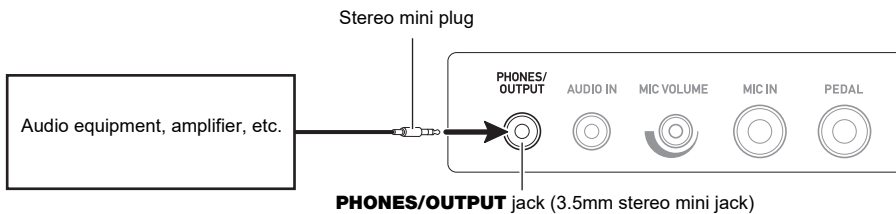
### ■ Sounding Output from the Digital Keyboard on an External Device

Connection requires commercially available connecting cords, supplied by you.

Use a connecting cord that has a stereo mini plug on one end for connection to this Digital Keyboard, and a plug that matches the configuration of the input jack of external device on the other end.

### ⚠ IMPORTANT!

- Turn off the external device and the Digital Keyboard before connecting them. Before turning power on or off, turn down the volume level of this Digital Keyboard and external devices.
- After connecting, turn on this Digital Keyboard first and then the external device.
- If this Digital Keyboard’s notes are distorted when they are sounded on an external audio device, lower the Digital Keyboard’s volume level.
- The headphones you use must have a 3.5mm 3-pole stereo mini plug. Use of other types of plugs is not supported.



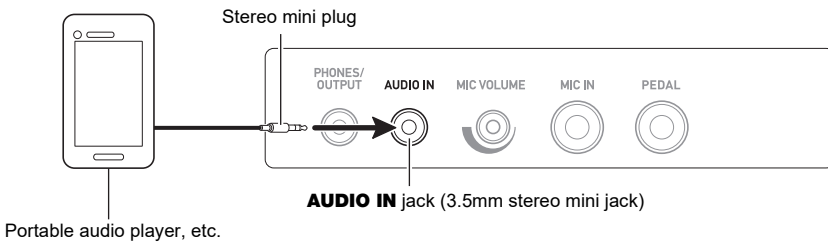
## ■ Sounding Input From an External Device on This Digital Keyboard

Connection requires commercially available connecting cords, supplied by you.

The connecting cord should have a stereo mini plug on one end for connection to this Digital Keyboard and a plug that matches the configuration of the output jack of external device on the other end. When sounding input from an external device with this Digital Keyboard, use the external device controls to adjust the volume level. In this case, you cannot adjust the volume level on this Digital Keyboard.

### ! IMPORTANT!

- Turn off this Digital Keyboard before connecting. Before turning power on or off, turn down the volume level of the Digital Keyboard and external devices.
- After connecting, turn on the external device and then this Digital Keyboard.
- If external device notes sounded by this Digital Keyboard are distorted, lower the external device's volume level.
- If the volume level of the external device notes sounds by this Digital Keyboard is lower than the volume level of the notes you are playing on the keyboard, adjust the volume balance of the Digital Keyboard. See "[Changing the Volume Balance Between Keyboard Play and Rhythm Play \(Balance\)](#)" on page EN-52.
- Setting the volume level of the external device too high can cause Digital Keyboard power to turn off in order to protect it against damage. If this happens, lower the volume of the external device.
- The end of the connecting cord you connect to the Digital Keyboard must have a 3.5mm 3-pole stereo mini plug. Use of other types of plugs is not supported.



## ■ AUDIO IN center cancel (Vocal Cut)

Enabling Vocal Cut cuts (mutes or minimizes) the vocal part in the sound being input with the **AUDIO IN** jack or Bluetooth audio. Note that this function cancels the sound in the center position of the audio, which may (depending on how the original audio was mixed) end up canceling something else other than the vocal part. How vocal cut is performed depends on the sound being input.

For information about how to configure settings, see the "[Setting Item List](#)" (page EN-147).

### NOTE



- Built-in effects (reverb) of the Digital Keyboard are not applied to **AUDIO IN** jack input.

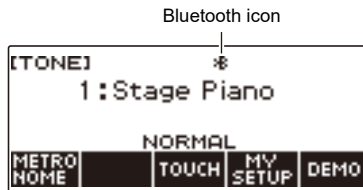
## Sounding a Bluetooth Audio Capable Device (Bluetooth Audio Pairing)

You can use a Wireless MIDI & audio adaptor (optional: WU-BT10) to pair this Digital Keyboard with an external Bluetooth audio capable audio device and then playback from the external device through this Digital Keyboard's speakers.

### IMPORTANT!

- Before performing the pairing operation, turn down the volume levels of this Digital Keyboard and the external device.
- If external device notes sounded by this Digital Keyboard are distorted, lower the external device's volume level.
- If the volume level of the external device notes sounds by this Digital Keyboard is lower than the volume level of the notes you are playing on the keyboard, adjust the volume balance of the Digital Keyboard. See "[Changing the Volume Balance Between Keyboard Play and Rhythm Play \(Balance\)](#)" on page EN-52.
- Setting the volume level of the external device too high can cause Digital Keyboard power to turn off in order to protect it against damage. If this happens, lower the volume of the external device.
- Due to Bluetooth characteristics you may notice some lag in notes. If that happens, connect using a USB cable.

1. Long-press the  (Power) button to turn off the Digital Keyboard.
2. Plug the Wireless MIDI & audio adaptor into the **USB TO DEVICE** port (page EN-14).
3. Press the  (Power) button to turn on the Digital Keyboard.  
This displays the Bluetooth icon.



4. Press **MENU**.  
This displays the menu screen.
5. Use **<** and **>** to select the **5 buttons** menu that includes **BLUETOOTH**.

## 6. Press **BLUETOOTH**.

This displays the Bluetooth screen.



## 7. Press **PAIRING**.

This displays the Bluetooth audio pairing screen with “Pairing” shown, indicating Bluetooth audio pairing.



- A broken line is under the Bluetooth icon while the Digital Keyboard is Bluetooth audio paired with another device.
- To stop Bluetooth audio pairing, press CANCEL.

## 8. Use the setting screen of the Bluetooth-capable audio device to select “**WU-BT10 AUDIO**” to pair with this Digital Keyboard.

Connecting with a Bluetooth audio-capable device causes “AUDIO” to appear on the Digital Keyboard display.



- This causes a solid line to appear under the Bluetooth icon.

## 9. Produce sound on the Bluetooth audio capable device.

Output from the audio Bluetooth capable device will sound from the Digital Keyboard's speakers.

### NOTE

- Turn on Bluetooth on both this Digital Keyboard and on the Bluetooth audio capable device.
- For information about how to change this Digital Keyboard's Bluetooth settings, see "[Turning Off Bluetooth](#)" (page [EN-176](#)).
- Information about the last Bluetooth audio capable devices connected to this Digital Keyboard is registered by the Wireless MIDI & audio adaptor. Because of this, it can automatically perform Bluetooth audio pairing with the same device, so you will not need to perform the Bluetooth audio pairing operation again.

## Deleting Bluetooth Audio Capable Device Pairing Registration

### NOTE

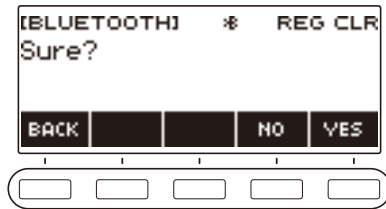
- Performing the procedure below will delete the pairing registration between this Digital Keyboard and its currently paired Bluetooth audio capable device. If you are experiencing connectivity problems with a Bluetooth audio capable device, perform the procedure below and then perform the procedure under “[Sounding a Bluetooth Audio Capable Device \(Bluetooth Audio Pairing\)](#)” (page EN-170).
- After performing the procedure below, you should also clear this Digital Keyboard’s pairing registration on the Bluetooth audio capable device. For information about how to do this, refer to the user documentation of each Bluetooth audio device.

1. Long-press the **⏻** (Power) button to turn off the Digital Keyboard.
2. Plug the Wireless MIDI & audio adaptor into the **USB TO DEVICE** port (page EN-14).
  - You cannot delete a Bluetooth audio pairing registration unless a Wireless MIDI & audio adaptor is connected to the Digital Keyboard.
3. Press **⏻** (Power) to turn on the Digital Keyboard.
4. Press **MENU**.  
This displays the menu screen.
5. Use **<** and **>** to select the **5 buttons** menu that includes **BLUETOOTH**.
6. Press **BLUETOOTH**.  
This displays the Bluetooth screen.



## 7. Press REG CLEAR.

This displays "Sure?".



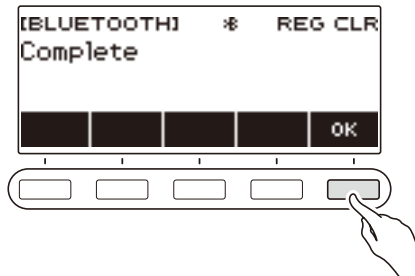
## 8. Press YES.

This deletes the Bluetooth audio pairing registration.

- To cancel, press the NO button.

## 9. When "Complete" appears on the display, press OK.

This exits the Bluetooth audio-capable pairing registration delete operation.



## Connecting with a Bluetooth MIDI Capable Device

You can use a Wireless MIDI & audio adaptor (optional WU-BT10) to pair this Digital Keyboard with a Bluetooth MIDI-capable audio device.

1. Long-press **⏻** (Power) to turn off the Digital Keyboard.
2. Plug the Wireless MIDI & audio adaptor into the **USB TO DEVICE** port (page [EN-14](#)).
3. Press **⏻** (Power) to turn on the Digital Keyboard.
4. Use the setting screen of the app you installed on your Bluetooth-capable MIDI device to select “WU-BT10 MIDI” and connect with the Digital Keyboard.  
Connecting with a Bluetooth MIDI-capable device causes “MIDI” to appear on the display.



### **!** IMPORTANT!

- Do not perform any Digital Keyboard operation while it is in the process of connecting with a Bluetooth MIDI capable device.

### **NOTE**

- Turn on Bluetooth on both this Digital Keyboard and on the Bluetooth MIDI capable device.
- For information about this Digital Keyboard's Bluetooth function, see “[Turning Off Bluetooth](#)” (page [EN-176](#)).
- You need to perform the above operation each time you connect with a Bluetooth capable MIDI device.



## Turning Off Bluetooth

You can use the procedure below to turn off Bluetooth if you do not need to connect via Bluetooth using the Wireless MIDI & audio adaptor (Option: WU-BT10).

### 1. Press **MENU**.

This displays the menu screen.

### 2. Use **<** and **>** to select the **5 buttons** menu that includes **BLUETOOTH**.

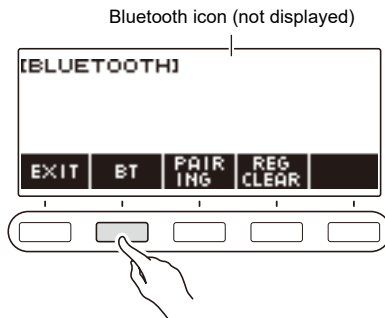
### 3. Press **BLUETOOTH**.

This displays the Bluetooth screen.



### 4. Press **BT**.

This turns off Bluetooth, which causes "BT" and the Bluetooth icon to disappear from the display.





### 5. To turn Bluetooth on, press **BT** again.

This displays "BT" and the Bluetooth icon.

#### **NOTE**

- ◇ is displayed in place of the Bluetooth icon while the Digital Keyboard is performing a Bluetooth on or off operation.

## Troubleshooting

Symptom	Required Action
<b>Included Accessories</b>	
I can't find included items during unpacking.	Carefully check inside all of the packing materials.
<b>Power Requirements</b>	
Power does not turn on.	<ul style="list-style-type: none"> <li>Check the AC adaptor or make sure that the batteries are facing correctly (page <a href="#">EN-8</a>).</li> <li>Replace the batteries with new ones. Or use AC adaptor power (page <a href="#">EN-8</a>).</li> </ul>
When  (Power) is pressed, the display appears momentarily, but power does not turn on.	Press  (Power) to turn power back on.
The Digital Keyboard suddenly turns off after outputting a loud sound.	<ul style="list-style-type: none"> <li>Replace the batteries with new ones. Or use AC adaptor power (page <a href="#">EN-8</a>).</li> <li>Lower the volume of the external device.</li> </ul>
The Digital Keyboard suddenly turns off after about 30 minutes.	Disable Auto Power Off (page <a href="#">EN-26</a> ).
<b>Display Name</b>	
The display keeps going dark or keeps flickering.	Replace the batteries with new ones (page <a href="#">EN-9</a> ). Or use AC adapter power (page <a href="#">EN-8</a> ).
Screen contents are visible only from a fixed angle.	This is due to the Digital Keyboard's production limitations. It does not indicate malfunction.
<b>Sound</b>	
Nothing happens when I press a keyboard key.	<ul style="list-style-type: none"> <li>Adjust the volume level (page <a href="#">EN-28</a>).</li> <li>Confirm that nothing is plugged into the <b>PHONES/ OUTPUT</b> jack on the back of the Digital Keyboard.</li> <li>Try turning this Digital Keyboard off and then back on again (page <a href="#">EN-25</a>) to initialize settings.</li> </ul>
Nothing happens or notes do not play normally when I play on the accompaniment (left-side) keyboard.	Press ACCMP to disable chord play with the accompaniment keyboard (page <a href="#">EN-108</a> ).
With some songs, the left-hand part you play on the keyboard does not sound during song part practice (left hand or both hands).	When doing a left-hand part lesson with a song that includes chord information (songs that have only melody notes for right-hand part play), nothing sounds when you play something on the left-hand part keyboard. Play chords following the Keyboard Lighting guide.

Symptom	Required Action
Nothing happens when I start an Auto Accompaniment.	<ul style="list-style-type: none"> <li>• With rhythms 191 to 200, nothing sounds if you do not play a chord on the keyboard. Try playing a chord (page <a href="#">EN-109</a>).</li> <li>• Check and adjust the rhythm volume level (page <a href="#">EN-100</a>).</li> <li>• Auto Accompaniment does not start if <b>▶/■</b> is pressed while there are no user rhythms stored in rhythm numbers 201 through 210 (page <a href="#">EN-118</a>).</li> <li>• Try turning the Digital Keyboard off and then back on again (page <a href="#">EN-25</a>) to initialize settings.</li> </ul>
Nothing happens when I start playing a song's Auto Accompaniment.	<ul style="list-style-type: none"> <li>• It takes a little time after you press the button until the song starts to play. Wait for the song to start.</li> <li>• Check and adjust the song volume level (page <a href="#">EN-74</a>).</li> <li>• Song play does not start if <b>▶/■</b> is pressed while there is no song data stored in song numbers 161 through 368 (pages <a href="#">EN-80</a>, <a href="#">EN-122</a>).</li> <li>• Try turning the Digital Keyboard off and then back on again (page <a href="#">EN-25</a>) to initialize settings.</li> </ul>
The metronome does not sound.	<ul style="list-style-type: none"> <li>• Check and adjust the metronome volume level (page <a href="#">EN-32</a>).</li> <li>• Try turning the Digital Keyboard off and then back on again (page <a href="#">EN-25</a>) to initialize settings.</li> </ul>
Notes keep sounding, without stopping.	<ul style="list-style-type: none"> <li>• Try turning the Digital Keyboard off and then back on again (page <a href="#">EN-25</a>) to initialize settings.</li> <li>• Replace the batteries with new ones. Or use AC adaptor power (page <a href="#">EN-8</a>).</li> </ul>
Some notes are cut off while they are playing.	This happens whenever the number of notes being sounded exceeds the maximum polyphony value of 48 (24 for some tones). It does not indicate malfunction.
Sounds skip while I am practicing in the EASY Mode.	<p>In the EASY Mode, play on the keyboard by following the timing of the keys that light.</p> <p>If you press multiple keyboard keys simultaneously at the wrong timing, sounds may seem like they are skipping.</p> <p>If this happens, make sure that you press one keyboard key at a time.</p>
The volume level or tone setting I configured has changed.	<ul style="list-style-type: none"> <li>• Adjust the volume level (page <a href="#">EN-28</a>).</li> <li>• Try turning the Digital Keyboard off and then back on again (page <a href="#">EN-25</a>) to initialize settings.</li> <li>• Replace the batteries with new ones. Or use AC adaptor power (page <a href="#">EN-8</a>).</li> </ul>
With certain volume levels and tones, the sound of notes played in one keyboard range will sound different from those played in another keyboard range.	This is due to system limitations and does not indicate malfunction.

Symptom	Required Action
With some tones, octaves do not change at the far ends of the keyboard.	This is due to system limitations, and does not indicate malfunction.
The pitch of the notes does not match other accompanying instruments or notes sound strange when played along with other instruments.	<ul style="list-style-type: none"> <li>• Check and adjust the transpose setting (page <a href="#">EN-55</a>) and tuning setting (page <a href="#">EN-56</a>).</li> <li>• Try turning the Digital Keyboard off and then back on again (page <a href="#">EN-25</a>) to initialize settings.</li> </ul>
The reverb of notes seems to change suddenly.	<ul style="list-style-type: none"> <li>• Check and adjust the reverb setting (page <a href="#">EN-42</a>).</li> <li>• Try turning the Digital Keyboard off and then back on again (page <a href="#">EN-25</a>) to initialize settings.</li> </ul>
<b>Operation</b>	
Tone, rhythm, and other settings revert to their initial defaults whenever I turn on the Digital Keyboard.	Turning power off and then back on again initializes Digital Keyboard settings (page <a href="#">EN-25</a> ).
<b>Connecting to a computer</b>	
I can't send or receive MIDI data.	<ul style="list-style-type: none"> <li>• Check to make sure that the USB cable is connected to the Digital Keyboard and your computer, and that the correct device is selected with your computer's music software (page <a href="#">EN-166</a>).</li> <li>• Turn off the Digital Keyboard and then exit the music software on your computer. Next, turn the Digital Keyboard back on and then restart the music software on your computer.</li> </ul>

## Error Indicators

Display Name	Cause	Action
Measure Limit	You are attempting to record more than 1,000 measures.	Make your recordings up to 999 measures long.
Memory Full	You are attempting a recording that exceeds the allowable per-song size limit.	Keep song recordings with the allowable per-song size limit
Data Full	You are attempting to copy a Tone Recording and Rhythm Recording as a Multi-track Recording when there is no empty Multi-track Recording number.	Delete one or more of the multi-track recordings in memory.
No Media	The USB flash drive is not plugged correctly into the Digital Keyboard's <b>USB TO DEVICE</b> port.	Plug the USB flash drive correctly into the <b>USB TO DEVICE</b> port.
	The USB flash drive was removed while some operation was in progress.	Do not remove the USB flash drive while any operation is in progress.
	The USB flash drive is write-protected.	Write-enable the USB flash drive.
	The USB flash drive is protected by anti-virus software.	Use a USB flash drive that is not protected by anti-virus software.
No File	There is no loadable or playable file in the "MUSICDAT" folder.	Move the file you want to load or play to the "MUSICDAT" folder.
Read Only	A read-only file with the same name you are trying to use is already stored on the USB flash drive.	Use a different name.
		Remove the read-only attribute from the existing USB flash drive file and overwrite it with the new data you want to save.
		Move the file USB flash drive file into its "MUSICDAT" folder.
Media Full	There is not enough room available on the USB flash drive.	Delete some of the files on the USB flash drive to make room for new data.
		Use a different USB flash drive.
Not SMF 0/1	You are attempting to load or play back an SMF Format 2 file.	The Digital Keyboard supports SMF Format 0 or Format 1 files only.
Size Too Large	The file on the USB flash drive is too large to import and play on the Digital Keyboard.	In the case of a standard MIDI file, use a file whose size is 320 KB maximum.
Wrong Data	The file on the USB flash drive is corrupted.	Use a file that is not corrupted.

<b>Display Name</b>	<b>Cause</b>	<b>Action</b>
Version Not Supported	The USB flash drive file version is not supported by the Digital Keyboard.	Use a version that is supported by the Digital Keyboard.
Unformatted	The USB flash drive format is not compatible with the Digital Keyboard.	Use a computer to format the USB flash drive to a format that is compatible with the Digital Keyboard
	The USB flash drive is corrupted.	Use a different USB flash drive.

## Product Specifications

<b>Model</b>	LK-S450
<b>Keyboard</b>	61 keys
<b>Touch Response</b>	3 types, Off
<b>Keyboard Lighting</b>	Maximum number of keys simultaneously lit: 10, can be disabled
<b>Maximum Polyphony</b>	48 notes
<b>Tones</b>	
Preset Tones	600
Other	Layer, Split, Sustain
<b>Effects</b>	Reverb (20 types, Off); Chorus (10 types, Tone); DSP (Built into some tones)
<b>Master Effects</b>	Equalizer (10 presets)
<b>Active Effects</b>	Volume sync equalizer, Surround
<b>External Input Effects</b>	Vocal Cut. Cancels the vocal (center) part in audio input using the AUDIO IN terminal or Bluetooth audio.
<b>Metronome</b>	
Beat	Beat chime off, 1 to 16 beats
Tempo	20 to 255
<b>Song Bank</b>	
Built-in Songs	160
User Songs	200*1
Part Off	Left hand, right hand, both hands
<b>Lesson</b>	
Lesson Type	3 steps (LISTEN, WATCH, REMEMBER); EASY Mode, Challenge Mode
Lesson part	Left hand, right hand, both hands
Other	AB Loop, Fingering Voice Guide, Note Sound Guide, Performance Evaluation
<b>Auto Accompaniment</b>	
Preset Rhythms	200 types
User Rhythms	10 types*2
One Touch Presets	200 types
Other	INTRO, ENDING; chord fingering mode switching
<b>Chord Book</b>	Chord Sound Guide
<b>Demo Function</b>	Built-in Song Bank (110 songs)
<b>Function Volume Adjustment</b>	Metronome; Rhythm; Song
<b>MIDI Recorder</b>	Real-time recording, playback
Tone Recording	1
Rhythm Recording	1
Part off Recording	1
Multi-track Recording	5 songs, 6 tracks (1 system track, 5 solo tracks)
Capacity	1 song, approximately 40,000 notes

<b>Other Functions</b>	
Transpose	±1 octave (–12 to 0 to +12 semitones)
Octave Shift	–3 to 0 to +3 octaves
Tuning	A4 = 415.5 to 465.9Hz (Initial Default: 440.0Hz)
Scales	17 preset scales
<b>APP Function</b>	
Supported Devices	iOS, Android (USB terminal connection)
<b>MIDI Function</b>	16-channel multi-timbre receive; GM Level 1 standard
<b>Jacks</b>	
PHONES/OUTPUT jack	Stereo mini jack (3.5 mm)
MIC IN jack	Standard jack (6.3 mm) (dynamic microphone connection); (Input impedance: 3 kΩ; Input sensitivity: 10 mV)
AUDIO IN jack	Stereo mini jack (3.5 mm) (Input impedance: 10 kΩ; Input sensitivity: 200 mV)
USB TO HOST port	micro-B
USB TO DEVICE port	Type A
PEDAL jack	Standard jack (6.3 mm) (pedal sustain, sostenuto, soft, start/stop, fill-in)
<b>AC adapter terminal</b>	9.5V DC
<b>Power Requirements</b>	2-Way Power
Batteries	6 AA-size alkaline batteries or AA-size rechargeable nickel-metal hydride batteries
Continuous Operation	Approximately 3 hours (alkaline batteries), approximately 3 hours (rechargeable nickel-metal hydride batteries)* <sup>3</sup> Actual continuous operation time may be shorter due to battery type, performance type, and usage environment.
AC adapter	AD-E95100L (JEITA Standard with unified polarity plug)
Auto Power Off	After approximately 30 minutes of non-operation; Can be disabled.
<b>Speakers</b>	13 cm × 6 cm (oval) × 2 (Output: 2.5 W + 2.5 W)
<b>Power Consumption</b>	9.5 V --- 7.5 W
<b>LCD</b>	Adjustable contrast
<b>Dimensions</b>	93.0 (W) × 25.8 (D) × 8.4 (H) cm (36 5/8 × 10 3/16 × 3 5/16 inch)
<b>Weight</b>	Approximately 4.6 kg (10.1 lbs) (Excluding batteries)

\*1 Maximum capacity per song: Approximately 320 kilobytes

\*2 Maximum capacity per rhythm: Approximately 64 kilobytes

\*3 Measured values while using eneloop batteries.

eneloop is a registered trademark of Panasonic Corporation.

- Specifications and designs are subject to change without notice.



## AC Adaptor Handling Precautions

Model: AD-E95100L

1. Read these instructions.
2. Keep these instructions on hand.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this product near water.
6. Clean only with a dry cloth.
7. Do not install near radiators, heat registers, stoves, or any other source of heat (including amplifiers).
8. Use only attachments and accessories specified by the manufacturer.
9. Refer all servicing to qualified service personnel. Servicing is required after any of the following occurs: when the product is damaged, when the power supply cord or plug is damaged, when liquid is spilled into the product, when a foreign object falls into the product, when the product is exposed to rain or moisture, when the product does not operate normally, when the product is dropped.
10. Do not allow the product to be exposed to dripping or splashing liquid. Do not place any object containing liquid on the product.
11. Do not allow the electrical load output to exceed the label rating.
12. Make sure the surrounding area is dry before plugging into a power source.
13. Make sure the product is oriented correctly.
14. Unplug the product during lightning storms or when you do not plan to use it for a long time.
15. Do not allow product ventilation openings to become blocked. Install the product in accordance with the manufacturer's instructions.
16. Take care the power cord is located where it will not be stepped upon or bent severely, particularly in locations close to plugs and convenience receptacles, and in locations where it exits from the product.
17. The AC adaptor should be plugged into a power outlet as close to the product as possible to allow immediate disconnection of the plug in case of emergency.

The symbol below is an alert indicating un-insulated hazardous voltage inside the product's enclosure, which may be sufficient to constitute the risk of electric shock to users.



The symbol below is an alert indicating the presence of important operating and maintenance (servicing) instructions in the documentation that accompanies the product.



## Song List

No.	Title
<b>PIANO/CLASSICS</b>	
1	FÜR ELISE
2	LA PRIÈRE D'UNE VIERGE
3	VALSE op.64 no.1 "PETIT CHIEN"
4	TURKISH MARCH (MOZART)
5	TRÄUMEREI
6	ETUDE op.10 no.3 "CHANSON DE L'ADIEU"
7	LIEBESTRÄUME no.3
8	NOCTURNE op.9 no.2 (CHOPIN)
9	CANON (PACHELBEL)
10	JE TE VEUX
11	MARY HAD A LITTLE LAMB
12	LE CYGNE FROM "LE CARNAVAL DES ANIMAUX"
13	SONATA op.13 "PATHÉTIQUE" 2nd Mov.
14	HEIDENRÖSLEIN
15	AIR FROM "SUITE no.3"
16	SPRING FROM "THE FOUR SEASONS"
17	HABANERA FROM "CARMEN"
18	BRINDISI FROM "LA TRAVIATA"
19	HUNGARIAN DANCES no.5
20	MINUET IN G MAJOR
21	MUSETTE IN D MAJOR
22	ECOSSAISE IN G MAJOR
23	GAVOTTE (GOSSEC)
24	ARABESQUE (BURGMÜLLER)
25	CHOPSTICKS
26	DECK THE HALL
27	ODE TO JOY
28	AVE MARIA (GOUNOD)
29	SONATINA op.36 no.1 1st Mov.
30	PRELUDE op.28 no.7 (CHOPIN)
31	RÉVERIE
32	GYMNOPÉDIES no.1
33	GOING HOME FROM "FROM THE NEW WORLD"
34	BRIDAL MARCH FROM "LOHENGRIN"
35	SONATA op.27 no.2 "MOONLIGHT" 1st Mov.
36	THE ENTERTAINER
37	WEDDING MARCH FROM "MIDSUMMER NIGHT'S DREAM"
38	AMERICAN PATROL
39	FRÖHLICHER LANDMANN
40	LA VIOLETTE
41	SPINNERLIED
42	LA CHEVALERESQUE
43	SONATINE op.20 no.1 1st Mov.
44	SONATA K.545 1st Mov.
45	GAVOTTE FROM "FRANZÖSISCHE SUITE ?"

No.	Title
46	JESUS BLEIBET MEINE FREUDE
47	SERENADE FROM "EINE KLEINE NACHTMUSIK"
48	MARCH FROM "THE NUTCRACKER"
49	CHANSON DU TOREADOR FROM "CARMEN"
50	LARGO (HÄNDEL)
51	INNOCENCE
52	PROMENADE FROM "TABLEAUX D'UNE EXPOSITION"
53	INVENTIONEN no.1
54	PRÆLUDIUM no.1 (J.S.BACH)
55	DOLLY'S DREAMING AND AWAKENING
56	LA FILLE AUX CHEVEUX DE LIN
57	HUMORESKE (DVOŘÁK)
58	ARABESQUE no.1 (DEBUSSY)
59	MAPLE LEAF RAG
60	MELODY IN F
<b>EVENT</b>	
61	SILENT NIGHT
62	JINGLE BELLS
63	WE WISH YOU A MERRY CHRISTMAS
64	JOY TO THE WORLD
65	O CHRISTMAS TREE
<b>WORLD</b>	
66	WHEN THE SAINTS GO MARCHING IN
67	GREENSLEEVES
68	ANNIE LAURIE
69	HOME ON THE RANGE
70	AMAZING GRACE
71	LONG LONG AGO
72	TWINKLE TWINKLE LITTLE STAR
73	GRANDFATHER'S CLOCK
74	SANTA LUCIA
75	TROIKA
76	LIGHTLY ROW
77	ON TOP OF OLD SMOKEY
78	AULD LANG SYNE
79	COME BIRDS
80	DID YOU EVER SEE A LASSIE?
81	MICHAEL ROW THE BOAT ASHORE
82	DANNY BOY
83	MY BONNIE
84	HOME SWEET HOME
85	AURA LEE
86	ALOHA OE
87	JOSHUA FOUGHT THE BATTLE OF JERICO
88	THE MUFFIN MAN
89	LONDON BRIDGE

No.	Title
90	UNDER THE SPREADING CHESTNUT TREE
91	SIPPIN' CIDER THROUGH A STRAW
92	BEAUTIFUL DREAMER
93	IF YOU'RE HAPPY AND YOU KNOW IT, CLAP YOUR HANDS
94	MY DARLING CLEMENTINE
95	LITTLE BROWN JUG
96	HOUSE OF THE RISING SUN
97	SHE WORE A YELLOW RIBBON
98	YANKEE DOODLE
99	MY OLD KENTUCKY HOME
100	SZLA DZIEWECZKA
101	WALTZING MATILDA
102	ON THE BRIDGE OF AVIGNON
103	I'VE BEEN WORKING ON THE RAILROAD
104	OH! SUSANNA
105	CAMPTOWN RACES
106	JEANNIE WITH THE LIGHT BROWN HAIR
107	TURKEY IN THE STRAW
108	JAMAICA FAREWELL
109	FURUSATO
110	SAKURA SAKURA
<b>EXERCISE*</b>	
111-160	EXERCISE1-50
<b>USER SONG</b>	
161-360	User Song 1-200
<b>USER Recording</b>	
361	Tone Recording
362	Rhythm Recording
363	Part off Recording
364-368	Multi-track Recording
<b>USB SONG</b>	
369-999	USB flash drive song

\* A collection of songs for finger training. They may also provide some mental stimulation.

- The level of mental stimulation depends on the individual.
- This product is not a medical device.

## Tone List

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
<b>PIANO</b>						
1	STAGE PIANO	0	1	0	✓	0
2	GRAND PIANO	0	3	0		0
3	BRIGHT PIANO	1	1	0	✓	0
4	MELLOW PIANO	0	2	0	✓	0
5	POP PIANO	0	32	0	✓	0
6	ROCK PIANO	1	2	0	✓	0
7	DANCE PIANO	1	3	0	✓	0
8	LA PIANO	1	4	0		0
9	TACK PIANO	0	33	0		0
10	MONO PIANO	0	4	0		0
11	HONKY-TONK	3	32	0		0
12	OCTAVE PIANO	3	33	0		0
13	WIDE GRAND PIANO	0	5	0		0
14	STRINGS PIANO	0	34	0		0
15	PIANO PAD	0	35	0		0
16	ELEC.GRAND PIANO	2	32	0		0
17	MODERN E.G.PIANO	2	33	0		0
18	HARPSICHORD 1	6	1	0		0
19	HARPSICHORD 2	6	32	0		0
20	COUPLED HARPSICHORD	6	33	0	✓	0
<b>ELEC.PIANO</b>						
21	GALAXIA EP	5	32	0		0
22	DYNAMIC EP	4	32	0		0
23	LUCENT EP	5	33	0	✓	0
24	ELEC.PIANO 1	4	1	0	✓	0
25	ELEC.PIANO 2	4	2	0	✓	0
26	ELEC.PIANO 3	4	3	0	✓	0
27	ELEC.PIANO 4	4	4	0		0
28	ELEC.PIANO 5	5	34	0		0
29	ELEC.PIANO 6	4	5	0		0
30	60'S E.PIANO	4	6	0	✓	0
31	DYNO E.PIANO	4	33	0	✓	0
32	DIGITAL E.PIANO 1	5	1	0		0
33	DIGITAL E.PIANO 2	5	2	0		0
34	DIGITAL E.PIANO 3	5	3	0		0
35	PHASER E.PIANO	4	7	0	✓	0
36	WIDE E.PIANO	4	8	0		0
37	MELLOW E.PIANO	4	9	0		0
38	E.PIANO PAD	4	34	0		0
39	CLAVI 1	7	1	0		0
40	CLAVI 2	7	32	0		0
41	CLAVI 3	7	2	0		0
42	CLAVI 4	7	33	0		0
43	CLAVI 5	7	3	0		0
44	VIBRAPHONE 1	11	1	0	✓	0
45	VIBRAPHONE 2	11	2	0		0
46	VIBRAPHONE WIDE	11	3	0		0

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
47	MARIMBA	12	32	0		0
48	XYLOPHONE	13	1	0		0
49	CELESTA	8	1	0		1
50	GLOCKENSPIEL	9	1	0		1
51	MUSIC BOX	10	32	0		1
52	TUBULAR BELL	14	32	0		0
53	CHURCH BELLS	14	33	0	✓	0
<b>ORGAN</b>						
54	JS ORGAN	17	32	0	✓	0
55	RTF FD ORGAN	16	32	0	✓	0
56	ROCK OD ORGAN	18	32	0	✓	0
57	TREMOLO ORGAN	16	5	0	✓	0
58	DP ORGAN	16	4	0	✓	0
59	JAZZ ORGAN 1	17	33	0	✓	0
60	JAZZ ORGAN 2	17	34	0	✓	0
61	ELEC.ORGAN 1	16	1	0	✓	0
62	ELEC.ORGAN 2	16	2	0	✓	0
63	ELEC.ORGAN 3	16	33	0	✓	0
64	ELEC.ORGAN 4	16	34	0	✓	0
65	ELEC.ORGAN 5	16	35	0	✓	0
66	PERC.ORGAN 1	17	1	0	✓	0
67	PERC.ORGAN 2	17	35	0	✓	0
68	GOSPEL ORGAN	17	38	0	✓	0
69	FULL DRAWBAR	16	3	0	✓	0
70	ROCK ORGAN 1	18	1	0	✓	0
71	ROCK ORGAN 2	18	2	0	✓	0
72	CLICK ORGAN	17	37	0	✓	0
73	70'S ORGAN	17	36	0	✓	0
74	ORGAN PAD	16	6	0		0
75	PIPE ORGAN 1	19	32	0		0
76	PIPE ORGAN 2	19	33	0		0
77	PIPE ORGAN 3	19	2	0		0
78	CHAPEL ORGAN	19	34	0		0
79	THEATER ORGAN	19	1	0		0
80	ACCORDION FRENCH 1	21	32	0		0
81	ACCORDION FRENCH 2	21	33	0		0
82	ACCORDION FRENCH 3	21	34	0		0
83	ACCORDION ITALY 1	21	1	0		0
84	ACCORDION ITALY 2	21	35	0		0
85	ACCORDION	21	2	0		0
86	BANDONEON	23	32	0		0
87	BANDONEON SOLO	23	1	0		0
<b>GUITAR</b>						
88	NYLON GUITAR VELO.SLIDE	24	32	0		0
89	STEEL GUITAR VELO.SLIDE	25	32	0		0
90	NYLON STR.GUITAR 1	24	1	0		0
91	NYLON STR.GUITAR 2	24	2	0		0
92	NYLON STR.GUITAR 3	24	4	0	✓	0
93	STEEL STR.GUITAR 1	25	1	0		0
94	STEEL STR.GUITAR 2	25	2	0		0

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
95	STEEL STR.GUITAR 3	25	3	0		0
96	STEEL STR.GUITAR 4	25	4	0		0
97	12 STR.GUITAR	25	5	0		0
98	JAZZ GUITAR 1	26	1	0		0
99	JAZZ GUITAR 2	26	32	0		0
100	OD OCT JAZZ GUITAR	26	2	0	✓	0
101	CRUNCH JAZZ GUITAR	26	3	0	✓	0
102	CLEAN GUITAR 1	27	32	0	✓	0
103	CLEAN GUITAR 2	27	1	0	✓	0
104	CLEAN GUITAR 3	27	2	0	✓	0
105	CLEAN GUITAR 4	27	3	0		0
106	CLEAN GUITAR 5	27	4	0		0
107	CLEAN GUITAR 6	27	33	0		0
108	CLEAN GUITAR 7	27	7	0		0
109	CHORUS CLEAN GUITAR 1	27	5	0	✓	0
110	CHORUS CLEAN GUITAR 2	27	6	0		0
111	WAH CLEAN GUITAR	27	34	0	✓	0
112	CRUNCH ELEC.GUITAR 1	29	3	0	✓	0
113	CRUNCH ELEC.GUITAR 2	29	32	0	✓	0
114	CRUNCH ELEC.GUITAR 3	27	8	0		0
115	CHORUS CRUNCH GUITAR	29	4	0	✓	0
116	MUTE GUITAR	28	1	0		0
117	CRUNCH MUTE GUITAR	28	2	0	✓	0
118	OVERDRIVE MUTE GT	28	5	0		0
119	PHASER MUTE GUITAR	28	3	0	✓	0
120	AMBIENT MUTE GUITAR	28	4	0	✓	0
121	HUM BLUES GUITAR	29	5	0	✓	0
122	OVERDRIVE GUITAR 1	29	1	0	✓	0
123	OVERDRIVE GUITAR 2	29	2	0		0
124	LFO WAH OD GUITAR	29	6	0	✓	0
125	WAH OD GUITAR	29	33	0	✓	0
126	CRY OD GUITAR	29	34	0	✓	0
127	FLANGER OD GUITAR	29	35	0	✓	0
128	DISTORTION GT 1	30	1	0	✓	0
129	DISTORTION GT 2	30	2	0	✓	0
130	DISTORTION GT 3	30	3	0	✓	0
131	DISTORTION GT 4	30	5	0		0
132	WAH DIST GUITAR	30	4	0	✓	0
133	MANDOLIN	25	40	0		0
134	UKULELE	24	3	0		0
135	VERSATILE NYLON GUITAR	24	8	0		0
136	VERSATILE STEEL GUITAR	25	8	0		0
137	VERSATILE SINGLE COIL E.GUITAR	27	9	0		0
<b>BASS</b>						
138	ACOUSTIC BASS 1	32	1	0		-1
139	FINGERED BASS 1	33	6	0		-1
140	FINGERED BASS 2	33	5	0		-1
141	FINGERED BASS VELO.SLAP 1	33	33	0		-1
142	FINGERED BASS VELO.SLAP 2	33	32	0		-1
143	SLAP BASS 1	36	1	0		-1

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
144	FINGER SLAP BASS 1	36	5	0		-1
145	SYNTH-BASS 1	39	3	0		-1
146	ACOUSTIC BASS 2	32	32	0	✓	-1
147	RIDE BASS	32	33	0		-1
148	FINGERED BASS 3	33	1	0		-1
149	FINGERED BASS 4	33	2	0		-1
150	FINGERED BASS 5	33	3	0		-1
151	FINGERED BASS 6	33	4	0		-1
152	FINGERED BASS 7	33	7	0		-1
153	CHORUS FINGERED BASS	33	8	0	✓	-1
154	WAH FINGERED BASS	33	9	0	✓	-1
155	PICKED BASS 1	34	1	0		-1
156	PICKED BASS 2	34	2	0		-1
157	MUTE PICKED BASS	34	5	0		-1
158	SLAP BASS 2	36	32	0		-1
159	SLAP BASS 3	36	2	0		-1
160	CHORUS SLAP BASS	36	33	0		-1
161	AMP SLAP BASS	36	3	0	✓	-1
162	WAH SLAP BASS	36	34	0	✓	-1
163	FRETLESS BASS	35	32	0		-1
164	CHORUS FRETLESS BASS	35	33	0	✓	-1
165	AMP FRETLESS BASS	35	34	0	✓	-1
166	FINGER SLAP BASS 2	36	4	0		-1
167	FINGER SLAP BASS 3	36	35	0		-1
168	SYNTH-BASS 2	38	6	0	✓	-1
169	SYNTH-BASS 3	38	1	0		-1
170	SYNTH-BASS 4	38	2	0		-1
171	SYNTH-BASS 5	39	1	0		-1
172	SYNTH-BASS 6	39	2	0		-1
173	SYNTH-BASS 7	38	32	0	✓	-1
174	SYNTH-BASS 8	39	33	0		-1
175	SYNTH-BASS 9	39	4	0		-1
176	SYNTH-BASS 10	39	5	0		-1
177	SYNTH-BASS 11	38	4	0		-1
178	SYNTH-BASS 12	38	5	0		-1
179	SYNTH-BASS 13	39	6	0		-1
180	ORGAN BASS	39	7	0		0
181	VERSATILE ELECTRIC BASS 1	33	10	0		-1
182	VERSATILE ELECTRIC BASS 2	33	24	0		-1
<b>STRINGS</b>						
183	STEREO STRINGS	48	32	0	✓	0
184	MELLOW STRINGS 1	49	1	0		0
185	MELLOW STRINGS 2	48	1	0		0
186	BRIGHT STRINGS	49	2	0		0
187	STRINGS	48	3	0		0
188	SLOW STRINGS 1	48	2	0	✓	0
189	SLOW STRINGS 2	49	32	0		0
190	STRING ENSEMBLE	48	4	0		0
191	WARM STRINGS	48	5	0		0
192	PIZZICATO STRINGS	45	32	0		0

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
193	CHAMBER	48	33	0		0
194	OCTAVE STRINGS	48	34	0		0
195	ORCHESTRA HIT	55	4	0		0
196	SOLO VIOLIN	40	32	0		0
197	VIOLIN	40	33	0		0
198	SLOW VIOLIN	40	34	0		0
199	VIOLA	41	32	0		0
200	CELLO	42	32	0		-1
201	CONTRABASS	43	32	0		-1
202	HARP	46	32	0		0
203	VIOLIN SECTION	48	6	0		0
204	HARP & STRINGS	49	3	0		0
<b>BRASS</b>						
205	STEREO BRASS	61	1	0	✓	0
206	SOLO TRUMPET	56	1	0		0
207	SYNTH-BRASS 1	62	32	0		0
208	BRASS	61	2	0		0
209	BRASS SECTION 1	61	3	0		0
210	BRASS SECTION 2	61	4	0		0
211	BIG BAND BRASS	61	32	0		0
212	HARD BRASS	61	5	0		0
213	BRASS SFZ	61	33	0		0
214	BRASS VELO.FALL	61	34	0		0
215	BRASS VELO.SHAKE	61	35	0		0
216	BRASS VELO.GLISSANDO	61	36	0		0
217	SYNTH-BRASS 2	62	33	0		0
218	SYNTH-BRASS 3	62	1	0		0
219	SYNTH-BRASS 4	62	34	0		0
220	WARM SYNTH-BRASS	62	35	0		0
221	ANALOG SYNTH-BRASS	62	36	0		0
222	80'S SYNTH-BRASS	62	2	0		0
223	TRANCE BRASS	63	32	0		0
224	TRUMPET 1	56	32	0	✓	0
225	TRUMPET 2	56	2	0		0
226	MELLOW TRUMPET	56	3	0		0
227	MUTE TRUMPET	59	1	0		0
228	TROMBONE	57	32	0		-1
229	JAZZ TROMBONE	57	33	0		-1
230	FRENCH HORN	60	32	0		0
231	FRENCH HORN SECTION	60	1	0		0
232	TUBA	58	32	0		-2
233	VERSATILE BRASS 1	61	8	0		0
234	VERSATILE BRASS 2	61	9	0		0
<b>REED</b>						
235	SOLO TENOR SAX	66	1	0		-1
236	SOLO ALTO SAX	65	32	0		0
237	BREATHY ALTO SAX	65	33	0	✓	0
238	SOLO SOPRANO SAX	64	32	0		0
239	BREATHY S.SAX	64	34	0		0
240	SOLO OBOE	68	32	0		0



No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
241	SOLO BASSOON	70	32	0		-1
242	ALTO SAX	65	1	0	✓	0
243	TENOR SAX	66	2	0	✓	-1
244	BREATHY TENOR SAX	66	3	0	✓	-1
245	SOPRANO SAX	64	33	0		0
246	BARITONE SAX	67	1	0		-1
247	HARD ALTO SAX	65	2	0		0
248	TENOR SAXYS	66	4	0		0
249	CLARINET	71	32	0		0
250	VELO.CLARINET	71	1	0		0
251	OBOE	68	1	0		0
252	ENGLISH HORN	69	32	0		0
<b>PIPE</b>						
253	SOLO FLUTE 1	73	32	0		0
254	SOLO FLUTE 2	73	33	0		0
255	FLUTE	73	1	0		0
256	JAZZ FLUTE	73	2	0		0
257	PICCOLO	72	32	0		1
258	RECORDER	74	32	0		0
259	PAN FLUTE 1	75	32	0		0
260	PAN FLUTE 2	75	33	0		0
261	WHISTLE	78	1	0		0
262	OCARINA	79	32	0		0
263	SHAKUHACHI	77	32	0		0
264	PIPE SECTION	72	33	0		0
<b>SYNTH</b>						
265	SUPER SAW LEAD 1	81	16	0		0
266	SUPER SAW LEAD 2	81	17	0	✓	0
267	TRANCE POLY LEAD	81	18	0		0
268	TRANCE PLUCK	81	38	0	✓	0
269	PROGRESSIVE PLUCK	81	39	0	✓	0
270	SAW PLUCK	81	40	0	✓	0
271	DIRTY PLUCK	80	38	0	✓	0
272	HOUSE CHORD SYNTH	81	44	0	✓	0
273	POPULAR PLUCK 1	81	19	0	✓	0
274	POPULAR PLUCK 2	81	20	0	✓	0
275	VOCAL CHOP SYNTH 1	85	16	0		0
276	VOCAL CHOP SYNTH 2	85	17	0		0
277	X SYNTH LEAD 1	81	7	0		0
278	X SYNTH LEAD 2	80	36	0		0
279	X SYNTH LEAD 3	81	32	0	✓	0
280	X SYNTH LEAD 4	80	37	0		0
281	X SYNTH LEAD 5	81	33	0		0
282	X SYNTH LEAD 6	80	6	0		0
283	VA SYNTH 1	80	3	0		0
284	VA SYNTH 2	80	4	0		0
285	VA SYNTH 3	80	5	0		0
286	VA SYNTH SEQ-BASS 1	81	10	0		0
287	VA SYNTH SEQ-BASS 2	81	11	0		0
288	VA SYNTH SEQ-BASS 3	81	12	0		-1

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
289	VA SYNTH SEQUENCE 1	81	13	0		-1
290	VA SYNTH SEQUENCE 2	81	14	0		0
291	EDM KICK & BASS	96	8	0		0
292	EDM PER SYNTH	97	10	0		0
293	EDM LAZER 1	96	9	0		0
294	EDM LAZER 2	96	10	0		0
295	EDM THEME SYNTH	96	11	0		0
296	EDM THEME HIT	97	8	0		0
297	EDM BRASS HIT	96	12	0		1
298	EDM BASS	97	9	0		-1
299	EDM SE BEND	96	13	0		0
300	EDM SE VOX SYNTH	96	14	0		0
301	EDM SE WHITE	96	15	0		0
302	SAW LEAD 1	81	1	0		0
303	SAW LEAD 2	81	2	0	✓	0
304	SAW LEAD 3	81	3	0		0
305	MELLOW SAW LEAD	81	4	0		0
306	PULSE SAW LEAD	81	5	0		0
307	TRANCE LEAD	81	6	0		0
308	SS LEAD	81	34	0		0
309	SQUARE LEAD	80	32	0		0
310	SLOW SQUARE LEAD	80	1	0		0
311	PULSE LEAD	80	33	0		0
312	SQUARE PULSE LEAD	80	34	0		0
313	SINE LEAD	80	2	0		0
314	SYNTH SEQUENCE	80	8	0		0
315	SEQUENCE SAW	81	15	0		0
316	SEQUENCE SINE	80	7	0		0
317	8BIT ARPEGGIO	80	9	0		0
318	8BIT WAVE	80	35	0		0
319	SAW ARPEGGIO 1	81	8	0		0
320	SAW ARPEGGIO 2	81	9	0		0
321	SYNTH-VOICE LEAD	85	1	0		0
322	FIFTH LEAD	86	32	0		0
<b>PAD/CHOIR</b>						
323	SYNTH-STRINGS 1	51	32	0	✓	0
324	DIGITAL SYNTH-STR.1	51	33	0	✓	0
325	PROGRESSIVE VOICE	88	4	0	✓	0
326	SUPER SAW PAD	90	6	0		0
327	OLD TAPE PAD	88	5	0	✓	0
328	X SYNTH PAD 1	90	32	0	✓	0
329	X SYNTH PAD 2	90	33	0	✓	0
330	X SYNTH PAD 3	90	34	0		0
331	SYNTH-STRINGS 2	50	1	0		0
332	SYNTH-STRINGS 3	50	2	0		0
333	70'S SYNTH-STR.1	50	3	0		0
334	70'S SYNTH-STR.2	50	32	0		0
335	80'S SYNTH-STR.1	50	33	0		0
336	80'S SYNTH-STR.2	50	34	0		0
337	DIGITAL SYNTH-STR.2	50	4	0	✓	0

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
338	FAST SYNTH-STRINGS	50	5	0		0
339	SLOW SYNTH-STRINGS	50	35	0		0
340	FANTASY	88	1	0		0
341	NEW AGE	88	2	0		0
342	WARM PAD	89	1	0		0
343	FAT SAW PAD	89	2	0		0
344	SOFT PAD	89	3	0		0
345	SYNTH-PAD	90	1	0		0
346	VA SYNTH-PAD	90	2	0	✓	0
347	POLY SAW	90	3	0		0
348	BRIGHT SAW PAD 1	90	4	0		0
349	BRIGHT SAW PAD 2	90	5	0		0
350	GLASS PAD	92	32	0		0
351	BOTTLE PAD	92	33	0		0
352	ETHNIC PAD	93	32	0		0
353	SWEEP PAD	95	1	0		0
354	WOOD PAD	96	32	0		0
355	SOUND TRACK	97	1	0		0
356	VIBRAPHONE BELL	98	32	0		0
357	ATMOSPHERE PAD	99	1	0		0
358	STEEL PAD	99	32	0		0
359	BRIGHTNESS	100	1	0		0
360	BRIGHT BELL PAD	100	2	0		0
361	SPACE PAD	103	1	0		0
362	EDM PAD	88	3	0	✓	0
363	CHOIR AAHS	52	1	0		0
364	STRINGS VOICE	52	33	0		0
365	SLOW CHOIR	52	32	0		0
366	VOICE DOO	53	32	0		0
367	VOICE UUH	53	33	0		0
368	SYNTH-VOICE	54	1	0		0
369	VOICE ENSEMBLE	54	2	0		0
370	SYNTH-VOICE PAD	54	32	0		0
<b>ETHNIC</b>						
371	SITAR 1	104	32	0		0
372	SITAR 2	104	1	0		0
373	SITAR 3	104	33	0		0
374	SITAR PAD	104	34	0		0
375	TANPURA 1	104	2	0		0
376	TANPURA 2	104	35	0		0
377	HARMONIUM 1	20	32	0		0
378	HARMONIUM 2	20	1	0		0
379	SANTUR 1	15	1	0		0
380	SANTUR 2	15	32	0		0
381	SAROD 1	105	10	0		0
382	SAROD 2	105	41	0		0
383	SARANGI 1	110	8	0		0
384	SARANGI 2	110	43	0		0
385	VEENA 1	104	36	0		0
386	VEENA 2	104	37	0		0

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
387	SHANAI	111	1	0		0
388	BANSURI	72	9	0		0
389	PUNGI	111	8	0		0
390	TABLA	116	41	0		0
391	CAVAQUINHO	104	38	0		0
392	VIOLA CAIPIRA	104	39	0		0
393	BERIMBAU	104	40	0		0
394	PANDEIRO	116	40	0		0
395	ANGKLUNG TREM.	12	40	0		0
396	GENDER	11	40	0		0
397	CAK	25	12	0		0
398	CUK	24	40	0		0
399	CELLO FINGERED	32	12	0		-1
400	SASANDO	46	40	0		0
401	SHORT SULING	77	40	0		0
402	SULING BAMBOO 1	77	41	0		1
403	SALUANG	77	43	0		0
404	SULING BAMBOO 2	77	42	0		0
405	ER HU 1	110	9	0		0
406	ER HU 2	110	40	0		0
407	ER HU 3	110	41	0		0
408	ER HU 4	110	42	0		0
409	YANG QIN 1	15	2	0		0
410	YANG QIN 2	15	3	0		0
411	YANG QIN 3	15	34	0		0
412	ZHENG 1	107	8	0		0
413	ZHENG 2	107	40	0		0
414	PI PA 1	105	8	0		0
415	PI PA 2	105	9	0		0
416	PI PA 3	105	40	0		0
417	CHINESE HARP	46	33	0		0
418	DI ZI 1	72	8	0		0
419	DI ZI 2	72	40	0		0
420	XIAO	77	8	0		0
421	SHENG 1	109	8	0		0
422	SHENG 2	109	40	0		0
423	SUO NA 1	111	10	0		0
424	SUO NA 2	111	32	0	✓	0
425	LOUD 1	105	11	0		0
426	LOUD 2	105	42	0		0
427	SAZ	15	4	0		0
428	KANUN 1	15	5	0		0
429	KANUN 2	15	33	0		0
430	BOUZOUKI	105	43	0		0
431	RABAB	105	44	0		0
432	KEMENCHE	110	44	0		0
433	NEY 1	72	10	0		0
434	NEY 2	72	41	0		0
435	ZURNA	111	9	0		0
436	ARABIC ORGAN	16	7	0		0

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
437	ARABIC STRINGS	48	7	0		0
438	BANJO	105	32	0		0
439	MUTE BANJO	105	1	0		0
440	STEEL DRUMS	114	1	0		0
441	FIDDLE	110	32	0		0
<b>GM TONES</b>						
442	GM PIANO 1	0	0	0		0
443	GM PIANO 2	1	0	0		0
444	GM ELEC.GRAND PIANO	2	0	0		0
445	GM HONKY-TONK	3	0	0		0
446	GM E.PIANO 1	4	0	0		0
447	GM E.PIANO 2	5	0	0		0
448	GM HARPSICHORD	6	0	0		0
449	GM CLAVI	7	0	0		0
450	GM CELESTA	8	0	0		0
451	GM GLOCKENSPIEL	9	0	0		0
452	GM MUSIC BOX	10	0	0		0
453	GM VIBRAPHONE	11	0	0		0
454	GM MARIMBA	12	0	0		0
455	GM XYLOPHONE	13	0	0		0
456	GM TUBULAR BELL	14	0	0		0
457	GM DULCIMER	15	0	0		0
458	GM ORGAN 1	16	0	0		0
459	GM ORGAN 2	17	0	0		0
460	GM ORGAN 3	18	0	0		0
461	GM PIPE ORGAN	19	0	0		0
462	GM REED ORGAN	20	0	0		0
463	GM ACCORDION	21	0	0		0
464	GM HARMONICA	22	0	0		0
465	GM BANDONEON	23	0	0		0
466	GM NYLON STR.GUITAR	24	0	0		0
467	GM STEEL STR.GUITAR	25	0	0		0
468	GM JAZZ GUITAR	26	0	0		0
469	GM CLEAN GUITAR	27	0	0		0
470	GM MUTE GUITAR	28	0	0		0
471	GM OVERDRIVE GT	29	0	0		0
472	GM DISTORTION GT	30	0	0		0
473	GM GT HARMONICS	31	0	0		0
474	GM ACOUSTIC BASS	32	0	0		0
475	GM FINGERED BASS	33	0	0		0
476	GM PICKED BASS	34	0	0		0
477	GM FRETLESS BASS	35	0	0		0
478	GM SLAP BASS 1	36	0	0		0
479	GM SLAP BASS 2	37	0	0		0
480	GM SYNTH-BASS 1	38	0	0		0
481	GM SYNTH-BASS 2	39	0	0		0
482	GM VIOLIN	40	0	0		0
483	GM VIOLA	41	0	0		0
484	GM CELLO	42	0	0		0
485	GM CONTRABASS	43	0	0		0

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
486	GM TREMOLO STRINGS	44	0	0		0
487	GM PIZZICATO	45	0	0		0
488	GM HARP	46	0	0		0
489	GM TIMPANI	47	0	0		0
490	GM STRINGS 1	48	0	0		0
491	GM STRINGS 2	49	0	0		0
492	GM SYNTH-STRINGS 1	50	0	0		0
493	GM SYNTH-STRINGS 2	51	0	0		0
494	GM CHOIR AAHS	52	0	0		0
495	GM VOICE DOO	53	0	0		0
496	GM SYNTH-VOICE	54	0	0		0
497	GM ORCHESTRA HIT	55	0	0		0
498	GM TRUMPET	56	0	0		0
499	GM TROMBONE	57	0	0		0
500	GM TUBA	58	0	0		0
501	GM MUTE TRUMPET	59	0	0		0
502	GM FRENCH HORN	60	0	0		0
503	GM BRASS	61	0	0		0
504	GM SYNTH-BRASS 1	62	0	0		0
505	GM SYNTH-BRASS 2	63	0	0		0
506	GM SOPRANO SAX	64	0	0		0
507	GM ALTO SAX	65	0	0		0
508	GM TENOR SAX	66	0	0		0
509	GM BARITONE SAX	67	0	0		0
510	GM OBOE	68	0	0		0
511	GM ENGLISH HORN	69	0	0		0
512	GM BASSOON	70	0	0		0
513	GM CLARINET	71	0	0		0
514	GM PICCOLO	72	0	0		0
515	GM FLUTE	73	0	0		0
516	GM RECORDER	74	0	0		0
517	GM PAN FLUTE	75	0	0		0
518	GM BOTTLE BLOW	76	0	0		0
519	GM SHAKUHACHI	77	0	0		0
520	GM WHISTLE	78	0	0		0
521	GM OCARINA	79	0	0		0
522	GM SQUARE LEAD	80	0	0		0
523	GM SAW LEAD	81	0	0		0
524	GM CALLIOPE	82	0	0		0
525	GM CHIFF LEAD	83	0	0		0
526	GM CHARANG	84	0	0		0
527	GM VOICE LEAD	85	0	0		0
528	GM FIFTH LEAD	86	0	0		0
529	GM BASS+LEAD	87	0	0		0
530	GM FANTASY	88	0	0		0
531	GM WARM PAD	89	0	0		0
532	GM POLYSYNTH	90	0	0		0
533	GM SPACE CHOIR	91	0	0		0
534	GM BOWED GLASS	92	0	0		0
535	GM METAL PAD	93	0	0		0

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
536	GM HALO PAD	94	0	0		0
537	GM SWEEP PAD	95	0	0		0
538	GM RAIN DROP	96	0	0		0
539	GM SOUND TRACK	97	0	0		0
540	GM CRYSTAL	98	0	0		0
541	GM ATMOSPHERE	99	0	0		0
542	GM BRIGHTNESS	100	0	0		0
543	GM GOBLINS	101	0	0		0
544	GM ECHOES	102	0	0		0
545	GM SF	103	0	0		0
546	GM SITAR	104	0	0		0
547	GM BANJO	105	0	0		0
548	GM SHAMISEN	106	0	0		0
549	GM KOTO	107	0	0		0
550	GM THUMB PIANO	108	0	0		0
551	GM BAGPIPE	109	0	0		0
552	GM FIDDLE	110	0	0		0
553	GM SHANAI	111	0	0		0
554	GM TINKLE BELL	112	0	0		0
555	GM AGOGO	113	0	0		0
556	GM STEEL DRUMS	114	0	0		0
557	GM WOOD BLOCK	115	0	0		0
558	GM TAIKO	116	0	0		0
559	GM MELODIC TOM	117	0	0		0
560	GM SYNTH-DRUM	118	0	0		0
561	GM REVERSE CYMBAL	119	0	0		0
562	GM GT FRET NOISE	120	0	0		0
563	GM BREATH NOISE	121	0	0		0
564	GM SEASHORE	122	0	0		0
565	GM BIRD	123	0	0		0
566	GM TELEPHONE	124	0	0		0
567	GM HELICOPTER	125	0	0		0
568	GM APPLAUSE	126	0	0		0
569	GM GUNSHOT	127	0	0		0
<b>DRUM SET</b>						
570	STANDARD SET 1	0	120	0		0
571	STANDARD SET 2	1	120	0		0
572	STANDARD SET 3	2	120	0		0
573	STANDARD SET 4	3	120	0		0
574	STANDARD SET 5	4	120	0		0
575	DANCE SET 1	26	120	0		0
576	DANCE SET 2	27	120	0		0
577	DANCE SET 3	28	120	0		0
578	DANCE SET 4	29	120	0		0
579	DANCE SET 5	34	120	0		0
580	DANCE SET 6	35	120	0		0
581	TRANCE SET	31	120	0		0
582	HIP-HOP SET	9	120	0		0
583	ROOM SET	8	120	0		0
584	POWER SET	16	120	0		0

No.	Tone Name	Program Change	Bank Select MSB	Bank Select LSB	DSP Tone	Part Octave Shift
585	ROCK SET	17	120	0		0
586	ELECTRONIC SET	24	120	0		0
587	DRUM MACHINE SET 1	25	120	0		0
588	DRUM MACHINE SET 2	30	120	0		0
589	DRUM MACHINE SET 3	33	120	0		0
590	JAZZ SET	32	120	0		0
591	BRUSH SET	40	120	0		0
592	ORCHESTRA SET	48	120	0		0
593	LATIN SET 1	49	120	0		0
594	LATIN SET 2	50	120	0		0
595	INDONESIAN SET	53	120	0		0
596	INDIAN SET	54	120	0		0
597	ARABIC SET	52	120	0		0
598	CHINESE SET	51	120	0		0
599	SFX SET 1	60	120	0		0
600	SFX SET 2	61	120	0		0

#### NOTE

- Tone names that start with “VERSATILE” (such as 135 VERSATILE NYLON GUITAR) are the names of “versatile tones”. See “[Versatile Tone Map](#)” (page EN-208).
- DRUM SET assigns different percussive instruments to keyboard keys. Keyboard keys that do not have a tone assigned do not produce any sound. See the “[Drum Assignment List](#)” (page EN-203).



# Rhythm List

No	Rhythm Name
<b>POPS</b>	
1	ELECTRO DANCE POP
2	ELECTRO FUNK POP
3	R&B POP SHUFFLE
4	ELECTRO POP
5	JAZZ FUNK
6	80's POP STAR
7	6/8 POP
8	POP SHUFFLE
9	OLDIES POP
10	SLOW SOUL
11	FAST SOUL
12	60's SHUFFLE
<b>8 BEAT</b>	
13	ACOUSTIC GUITAR 8 BEAT
14	STRAIGHT 8 BEAT
15	GUITAR 8 BEAT
16	OLDIES 8 BEAT
<b>16 BEAT</b>	
17	FUNK 16 BEAT
18	16 BEAT SHUFFLE
19	16 BEAT
20	FUNK SOUL
<b>ROCK</b>	
21	ROCK ANTHEM
22	HARD ROCK
23	SOFT SHUFFLE ROCK
24	BOOGIE BLUES
25	SHUFFLE ROCK
26	ROCK WALTZ
27	SHUFFLE BLUES
28	6/8 BLUES
29	R&B
30	SLOW ROCK
31	50's ROCK
32	NEW ORLNS R&R
<b>DANCE</b>	
33	DISCO SHUFFLE
34	R&B FUNK
35	CHART DANCE
36	70's DISCO POP
37	DANCE POP
38	HIP-HOP
39	DISCO POP
40	TRANCE
41	MODERN R&B
<b>JAZZ</b>	
42	STEADY JAZZ
43	PIANO JAZZ WALTZ

No	Rhythm Name
44	ORCHESTRA SWING 1
45	MODERN BIG BAND
46	FAST BIG BAND
47	ORCHESTRA SWING 2
48	SWING
49	SLOW SWING
50	5/4 JAZZ
51	FOX TROT
52	QUICKSTEP
<b>TRAD</b>	
53	WALTZ 1
54	ENGLISH WALTZ
55	VIENNESE WALTZ
56	FRENCH WALTZ
57	TANGO
58	MARCH
59	GERMAN MARCH
<b>LATIN I</b>	
60	BOSSA NOVA
61	ORCHESTRA BOSSA
62	BEGUINE
63	SAMBA 1
64	SAMBA 2
65	MAMBO
66	RHUMBA
67	CHA-CHA-CHA
68	MERENGUE
69	BOLERO
70	SALSA 1
71	SALSA 2
72	REGGAE
73	REGGAE DANCE
74	SKA
75	FOLKLORE
<b>LATIN II</b>	
76	REGGAETON
77	CUMBIA
78	OLD SAMBA
79	CALIPSO
80	FORRO UNIVERSITARIO
81	XOTE SERTANEJO
82	BAIAO
83	PAGODE
84	BANDA
85	NORTENO
86	PASILLO
87	TECHNO CUMBIA
88	VALLENATO
89	ARGENTINE CUMBIA

No	Rhythm Name
90	PUNTA
91	BACHATA
<b>WORLD I</b>	
<b>EUROPEAN</b>	
92	SCHLAGER
93	POLKA
94	PASODOBLE
95	CAUCASIAN
96	RUSSIAN CHANSON 1
97	RUSSIAN CHANSON 2
98	POLISH WALTZ
<b>AMERICAN</b>	
99	DIXIE
100	TEX-MEX
101	FAST GOSPEL
102	SLOW GOSPEL
103	HAWAIIAN
<b>ARABIC/ORIENTAL</b>	
104	MALFOUF
105	BALADI
106	KHALIJI
107	ADANI
108	MUS
109	SIRTAKI
<b>SOUTH AFRICAN</b>	
110	KWAITO
<b>WORLD II</b>	
<b>INDIAN</b>	
111	BHANGRA
112	DADRA
113	GARBA
114	KEHARWA
115	DANDIYA
116	TEEN TAAL
117	BHAJAN
118	JHAP TAAL
119	RUPAK
120	INDIAN POP 1
121	INDIAN POP 2
122	INDIAN POP 3
123	INDIAN POP 4
124	EKTAL
125	CHAUTAL
126	DHAMAR
127	TAMIL
128	RAJASTHANI
129	GOAN
130	QAWWALI
131	KERALA
132	KEHARWA TANPURA & TABLA
133	DADRA TANPURA & TABLA

No	Rhythm Name
134	TEEN TAAL TANPURA & TABLA
135	RUPAK TANPURA & TABLA
136	DEEPCHANDI TANPURA & TABLA
<b>CHINESE</b>	
137	GUANGDONG
138	JIANGNAN
139	BEIJING
140	DONGBEIYANGGE
141	JINGJU
142	HUANGMEIXI
143	QINQIANG
144	YUJU
145	YAOZU
146	DAIZU
147	MIAOZU
148	MENGGU
149	XINJIANG
150	ZANGZU
151	CHINESE POP
<b>INDONESIAN</b>	
152	KRONCONG
153	DANGDUT
<b>JAPANESE</b>	
154	ENKA 1
155	ENKA 2
156	SHOUKA 1
157	SHOUKA 2
<b>COUNTRY</b>	
158	COUNTRY POP
159	COUNTRY 8 BEAT
160	COUNTRY BALLAD
161	COUNTRY SHUFFLE
162	COUNTRY WALTZ
163	BLUEGRASS
<b>ENSEMBLE/ORCHESTRA</b>	
164	CHRISTMAS SONG
165	CHRISTMAS WALTZ
166	SCREEN SWING
167	SERENADE
168	STRING QUARTET
<b>BALLAD</b>	
169	16 BEAT BALLAD
170	AOR BALLAD
171	PIANO ROCK BALLAD
172	SLOW BALLAD 1
173	SLOW BALLAD 2
174	R&B BALLAD
175	BRUSH BALLAD
176	POP BALLAD
177	6/8 BALLAD
178	UNPLUGGED BALLAD

No	Rhythm Name
179	ROCK BALLAD
180	6/8 ROCK BALLAD
<b>PIANO RHYTHMS</b>	
181	PIANO 8 BEAT
182	PIANO BALLAD 1
183	PIANO BALLAD 2
184	EP BALLAD 1
185	EP BALLAD 2
186	BLUES BALLAD
187	JAZZ COMBO 1
188	JAZZ COMBO 2
189	RAGTIME
190	BOOGIE-WOOGIE
191	PIANO ROCK & ROLL
192	ARPEGGIO 1
193	ARPEGGIO 2
194	ARPEGGIO 3
195	PIANO MARCH 1
196	PIANO MARCH 2
197	STRIDE PIANO
198	WALTZ 2
199	WALTZ 3
200	WALTZ 4
<b>USER RHYTHMS</b>	
201 - 210	USER RHYTHM 1 - 10

# Drum Assignment List

Key	Note No.	DRUMS SET NAME					575-DANCE SET 1
		570-STANDARD SET 1	571-STANDARD SET 2	572-STANDARD SET 3	573-STANDARD SET 4	574-STANDARD SET 5	
C-1	0	Tabla Ga					Dance1 Kick 1
D-1	1	Tabla Ka					Dance1 Kick 2
E-1	2	Tabla Te					Dance1 Kick 3
F-1	3	Tabla Tu					Dance1 Kick 4
G-1	4	Dholak Ke					Dance1 Kick 5
A-1	5	Dholak Ka					Dance1 Snare 1
B-1	6	Dholak Ta 1					Dance1 Snare 2
C-1	7	Dholak Ta 2					Dance1 Snare 3
D-1	8	Dholak Na					Dance1 Snare 4
E-1	9	Dholak Ta 3					Dance1 Snare 5
F-1	10	Dholak Ring					Dance1 Snare 6
G-1	11	Mridangam Dhri					Dance1 Snare 7
A-1	12	Mridangam Dhom					Dance1 Snare 8
B-1	13	Mridangam Dhin					Dance1 Snare 9
C-1	14	Mridangam Mur					Dance1 Snare 10
D-1	15	Mridangam Nam					Dance1 Snare 11
E-1	16	Mridangam Num					Dance1 Snare 12
F-1	17	Mridangam Tam					Dance1 Snare 13
G-1	18	Mridangam Tar					Dance1 Snare 14
A-1	19	Mridangam Tar					Dance1 Snare 15
B-1	20	Mridangam Tar					Dance1 Snare 16
C-1	21	Mridangam Tar					Dance1 Snare 17
D-1	22	Mridangam Tar					Dance1 Snare 18
E-1	23	Mridangam Tar					Dance1 Snare 19
F-1	24	Mridangam Tar					Dance1 Snare 20
G-1	25	Mridangam Tar					Dance1 Snare 21
A-1	26	Mridangam Tar					Dance1 Snare 22
B-1	27	Mridangam Tar					Dance1 Snare 23
C-1	28	Mridangam Tar					Dance1 Snare 24
D-1	29	Mridangam Tar					Dance1 Snare 25
E-1	30	Mridangam Tar					Dance1 Snare 26
F-1	31	Mridangam Tar					Dance1 Snare 27
G-1	32	Mridangam Tar					Dance1 Snare 28
A-1	33	Mridangam Tar					Dance1 Snare 29
B-1	34	Mridangam Tar					Dance1 Snare 30
C-1	35	Mridangam Tar					Dance1 Snare 31
D-1	36	Mridangam Tar					Dance1 Snare 32
E-1	37	Mridangam Tar					Dance1 Snare 33
F-1	38	Mridangam Tar					Dance1 Snare 34
G-1	39	Mridangam Tar					Dance1 Snare 35
A-1	40	Mridangam Tar					Dance1 Snare 36
B-1	41	Mridangam Tar					Dance1 Snare 37
C-1	42	Mridangam Tar					Dance1 Snare 38
D-1	43	Mridangam Tar					Dance1 Snare 39
E-1	44	Mridangam Tar					Dance1 Snare 40
F-1	45	Mridangam Tar					Dance1 Snare 41
G-1	46	Mridangam Tar					Dance1 Snare 42
A-1	47	Mridangam Tar					Dance1 Snare 43
B-1	48	Mridangam Tar					Dance1 Snare 44
C-1	49	Mridangam Tar					Dance1 Snare 45
D-1	50	Mridangam Tar					Dance1 Snare 46
E-1	51	Mridangam Tar					Dance1 Snare 47
F-1	52	Mridangam Tar					Dance1 Snare 48
G-1	53	Mridangam Tar					Dance1 Snare 49
A-1	54	Mridangam Tar					Dance1 Snare 50
B-1	55	Mridangam Tar					Dance1 Snare 51
C-1	56	Mridangam Tar					Dance1 Snare 52
D-1	57	Mridangam Tar					Dance1 Snare 53
E-1	58	Mridangam Tar					Dance1 Snare 54
F-1	59	Mridangam Tar					Dance1 Snare 55
G-1	60	Mridangam Tar					Dance1 Snare 56
A-1	61	Mridangam Tar					Dance1 Snare 57
B-1	62	Mridangam Tar					Dance1 Snare 58
C-1	63	Mridangam Tar					Dance1 Snare 59
D-1	64	Mridangam Tar					Dance1 Snare 60
E-1	65	Mridangam Tar					Dance1 Snare 61
F-1	66	Mridangam Tar					Dance1 Snare 62
G-1	67	Mridangam Tar					Dance1 Snare 63
A-1	68	Mridangam Tar					Dance1 Snare 64
B-1	69	Mridangam Tar					Dance1 Snare 65
C-1	70	Mridangam Tar					Dance1 Snare 66
D-1	71	Mridangam Tar					Dance1 Snare 67
E-1	72	Mridangam Tar					Dance1 Snare 68
F-1	73	Mridangam Tar					Dance1 Snare 69
G-1	74	Mridangam Tar					Dance1 Snare 70
A-1	75	Mridangam Tar					Dance1 Snare 71
B-1	76	Mridangam Tar					Dance1 Snare 72
C-1	77	Mridangam Tar					Dance1 Snare 73
D-1	78	Mridangam Tar					Dance1 Snare 74
E-1	79	Mridangam Tar					Dance1 Snare 75
F-1	80	Mridangam Tar					Dance1 Snare 76
G-1	81	Mridangam Tar					Dance1 Snare 77
A-1	82	Mridangam Tar					Dance1 Snare 78
B-1	83	Mridangam Tar					Dance1 Snare 79
C-1	84	Mridangam Tar					Dance1 Snare 80
D-1	85	Mridangam Tar					Dance1 Snare 81
E-1	86	Mridangam Tar					Dance1 Snare 82
F-1	87	Mridangam Tar					Dance1 Snare 83
G-1	88	Mridangam Tar					Dance1 Snare 84
A-1	89	Mridangam Tar					Dance1 Snare 85
B-1	90	Mridangam Tar					Dance1 Snare 86
C-1	91	Mridangam Tar					Dance1 Snare 87
D-1	92	Mridangam Tar					Dance1 Snare 88
E-1	93	Mridangam Tar					Dance1 Snare 89
F-1	94	Mridangam Tar					Dance1 Snare 90
G-1	95	Mridangam Tar					Dance1 Snare 91
A-1	96	Mridangam Tar					Dance1 Snare 92
B-1	97	Mridangam Tar					Dance1 Snare 93
C-1	98	Mridangam Tar					Dance1 Snare 94
D-1	99	Mridangam Tar					Dance1 Snare 95
E-1	100	Mridangam Tar					Dance1 Snare 96
F-1	101	Mridangam Tar					Dance1 Snare 97
G-1	102	Mridangam Tar					Dance1 Snare 98
A-1	103	Mridangam Tar					Dance1 Snare 99
B-1	104	Mridangam Tar					Dance1 Snare 100
C-1	105	Mridangam Tar					Dance1 Snare 101
D-1	106	Mridangam Tar					Dance1 Snare 102
E-1	107	Mridangam Tar					Dance1 Snare 103
F-1	108	Mridangam Tar					Dance1 Snare 104
G-1	109	Mridangam Tar					Dance1 Snare 105
A-1	110	Mridangam Tar					Dance1 Snare 106
B-1	111	Mridangam Tar					Dance1 Snare 107
C-1	112	Mridangam Tar					Dance1 Snare 108
D-1	113	Mridangam Tar					Dance1 Snare 109
E-1	114	Mridangam Tar					Dance1 Snare 110
F-1	115	Mridangam Tar					Dance1 Snare 111
G-1	116	Mridangam Tar					Dance1 Snare 112
A-1	117	Mridangam Tar					Dance1 Snare 113
B-1	118	Mridangam Tar					Dance1 Snare 114
C-1	119	Mridangam Tar					Dance1 Snare 115
D-1	120	Mridangam Tar					Dance1 Snare 116
E-1	121	Mridangam Tar					Dance1 Snare 117
F-1	122	Mridangam Tar					Dance1 Snare 118
G-1	123	Mridangam Tar					Dance1 Snare 119
A-1	124	Mridangam Tar					Dance1 Snare 120
B-1	125	Mridangam Tar					Dance1 Snare 121
C-1	126	Mridangam Tar					Dance1 Snare 122
D-1	127	Mridangam Tar					Dance1 Snare 123
E-1	128	Mridangam Tar					Dance1 Snare 124
F-1	129	Mridangam Tar					Dance1 Snare 125
G-1	130	Mridangam Tar					Dance1 Snare 126

• “←” indicates a key is assigned the same tones as it is for 570-STANDARD SET 1.

Key	Note No.	DRUMS SET NAME					
		576:DANCE SET 2	577:DANCE SET 3	578:DANCE SET 4	579:DANCE SET 5	580:DANCE SET 6	581:TRANCE SET
C-1	0				Dance1 Kick 1		
D-1	1				Dance1 Kick 2		
E-1	2				Dance1 Kick 3		
F-1	3				Dance1 Kick 4		
G-1	4				Dance1 Kick 5		
A-1	5				Dance1 Snare 1		
B-1	6				Dance1 Snare 2		
C0	7				Dance1 Snare 3		
D0	8				Dance1 Snare 4		
E0	9				Dance1 Snare 5		
F0	10				Dance1 Snare 6		
G0	11				Dance1 Snare 7		
A0	12				Dance1 Snare 8		
B0	13				Dance1 Snare 9		
C1	14				Dance1 Snare 10		
D1	15				Dance1 Snare 11		
E1	16				Dance1 Snare 12		
F1	17				Dance1 Snare 13		
G1	18				Dance1 Snare 14		
A1	19				Dance1 Snare 15		
B1	20				Dance1 Snare 16		
C0	21				Dance1 Snare 17		
D0	22				Dance1 Snare 18		
E0	23				Dance1 Snare 19		
F0	24				Dance1 Snare 20		
G0	25				Dance1 Snare 21		
A0	26				Dance1 Snare 22		
B0	27				Dance1 Snare 23		
C1	28				Dance1 Snare 24		
D1	29				Dance1 Snare 25		
E1	30				Dance1 Snare 26		
F1	31				Dance1 Snare 27		
G1	32				Dance1 Snare 28		
A1	33				Dance1 Snare 29		
B1	34				Dance1 Snare 30		
C1	35				Dance1 Snare 31		
B2	36				Dance1 Snare 32		
C2	37				Dance1 Snare 33		
D2	38				Dance1 Snare 34		
E2	39				Dance1 Snare 35		
F2	40				Dance1 Snare 36		
G2	41				Dance1 Snare 37		
A2	42				Dance1 Snare 38		
B2	43				Dance1 Snare 39		
C3	44				Dance1 Snare 40		
D3	45				Dance1 Snare 41		
E3	46				Dance1 Snare 42		
F3	47				Dance1 Snare 43		
G3	48				Dance1 Snare 44		
A3	49				Dance1 Snare 45		
B3	50				Dance1 Snare 46		
C4	51				Dance1 Snare 47		
D4	52				Dance1 Snare 48		
E4	53				Dance1 Snare 49		
F4	54				Dance1 Snare 50		
G4	55				Dance1 Snare 51		
A4	56				Dance1 Snare 52		
B4	57				Dance1 Snare 53		
C5	58				Dance1 Snare 54		
D5	59				Dance1 Snare 55		
E5	60				Dance1 Snare 56		
F5	61				Dance1 Snare 57		
G5	62				Dance1 Snare 58		
A5	63				Dance1 Snare 59		
B5	64				Dance1 Snare 60		
C6	65				Dance1 Snare 61		
D6	66				Dance1 Snare 62		
E6	67				Dance1 Snare 63		
F6	68				Dance1 Snare 64		
G6	69				Dance1 Snare 65		
A6	70				Dance1 Snare 66		
B6	71				Dance1 Snare 67		
C7	72				Dance1 Snare 68		
D7	73				Dance1 Snare 69		
E7	74				Dance1 Snare 70		
F7	75				Dance1 Snare 71		
G7	76				Dance1 Snare 72		
A7	77				Dance1 Snare 73		
B7	78				Dance1 Snare 74		
C8	79				Dance1 Snare 75		
D8	80				Dance1 Snare 76		
E8	81				Dance1 Snare 77		
F8	82				Dance1 Snare 78		
G8	83				Dance1 Snare 79		
A8	84				Dance1 Snare 80		
B8	85				Dance1 Snare 81		
C9	86				Dance1 Snare 82		
D9	87				Dance1 Snare 83		
E9	88				Dance1 Snare 84		
F9	89				Dance1 Snare 85		
G9	90				Dance1 Snare 86		

• “←” indicates a key is assigned the same tones as it is for 570:STANDARD SET 1.

Key	Note No.	DRUMS SET NAME					
		582:HIP-HOP SET	583:ROOM SET	584:POWER SET	585:ROCK SET	586:ELECTRONIC SET	587:DRUM MACHINE SET 1
C-1	0						
D-1	1						
E-1	2						
F-1	3						
G-1	4						
A-1	5						
B-1	6						
C0	7						
D0	8						
E0	9						
F0	10						
G0	11						
A0	12						
B0	13						
C1	14						
D1	15						
E1	16						
F1	17						
G1	18						
A1	19						
B1	20						
C2	21						
D2	22						
E2	23						
F2	24						
G2	25						
A2	26						
B2	27						
C3	28						
D3	29						
E3	30						
F3	31						
G3	32						
A3	33						
B3	34						
C4	35						
D4	36						
E4	37						
F4	38						
G4	39						
A4	40						
B4	41						
C5	42						
D5	43						
E5	44						
F5	45						
G5	46						
A5	47						
B5	48						
C6	49						
D6	50						
E6	51						
F6	52						
G6	53						
A6	54						
B6	55						
C7	56						
D7	57						
E7	58						
F7	59						
G7	60						
A7	61						
B7	62						
C8	63						
D8	64						
E8	65						
F8	66						
G8	67						
A8	68						
B8	69						
C9	70						
D9	71						
E9	72						
F9	73						
G9	74						

• “←” indicates a key is assigned the same tones as it is for 570:STANDARD SET 1.



Key	Note No.	DRUMS SET NAME						
		594-LATIN SET 2	595-INDONESIAN SET	596-INDIAN SET	597-ARABIC SET	598-CHINESE SET	599-SFX SET 1	600-SFX SET 2
C-1	0							
D-1	1							
E-1	2							
F-1	3							
G-1	4							
A-1	5							
B-1	6							
C0	7							
D0	8							
E0	9							
F0	10							
G0	11							
A0	12							
B0	13							
C1	14							
D1	15							
E1	16							
F1	17							
G1	18							
A1	19							
B1	20							
C2	21							
D2	22							
E2	23							
F2	24							
G2	25							
A2	26							
B2	27							
C3	28							
D3	29							
E3	30							
F3	31							
G3	32							
A3	33							
B3	34							
C4	35							
D4	36							
E4	37							
F4	38							
G4	39							
A4	40							
B4	41							
C5	42							
D5	43							
E5	44							
F5	45							
G5	46							
A5	47							
B5	48							
C6	49							
D6	50							
E6	51							
F6	52							
G6	53							
A6	54							
B6	55							
C7	56							
D7	57							
E7	58							
F7	59							
G7	60							
A7	61							
B7	62							
C8	63							
D8	64							
E8	65							
F8	66							
G8	67							
A8	68							
B8	69							
C9	70							
D9	71							
E9	72							
F9	73							
G9	74							

• “←” indicates a key is assigned the same tones as it is for 570:STANDARD SET 1.



## Versatile Tone Map

Key	Velocity	Sound
<b>135 VERSATILE NYLON GUITAR</b>		
C1 - B6	1-30	Normal mp
	31-60	Normal mf
	61-75	Ghost Note
	76-90	Mute
	91-105	Hammering
	106-120	Glissando
	121-127	Open Harmonics
C7	1-127	Strum 1
C#7	1-127	Strum 2
D7	1-127	Strum 3
Eb7	1-127	Strum 4
E7	1-127	Strum 5
F7	1-127	Strum 6
F#7	1-127	Strum 7
G7	1-127	Strum 8
Ab7	1-127	Strum 9
A7	1-127	Strum 10
Bb7	1-127	Strum 11
B7	1-127	Strings Slap 1
C8	1-127	Strings Slap 2
C#8	1-127	Strings Slap 3
D8	1-127	Strings Slap 4
D#8	1-127	Strings Slap 5
E8	1-127	Body 1
F8	1-127	Body 2
F#8	1-127	Body 3
G8	1-127	Body 4
G#8	1-127	Body 5
A8	1-127	Body 6
A#8	1-127	Body 7
B8	1-127	Body 8
C9	1-127	Fret Noise 1
C#9	1-127	Fret Noise2
D9	1-127	Fret Noise3
D#9	1-127	Fret Noise4
E9	1-127	Fret Noise5
F9	1-127	Head String1
F#9	1-127	Head String2
G9	1-127	Head String3
<b>136 VERSATILE STEEL GUITAR</b>		
C1 - B6	1-30	Normal mp
	31-60	Normal mf
	61-75	Ghost Note
	76-90	Mute
	91-105	Hammering
	106-120	Glissando
	121-127	Open Harmonics
C7	1-127	Strum 1

Key	Velocity	Sound
C#7	1-127	Strum 2
D7	1-127	Strum 3
D#7	1-127	Strum 4
E7	1-127	Strum 5
F7	1-127	Strum 6
F#7	1-127	Strum 7
G7	1-127	Strum 8
G#7	1-127	Strum 9
A7	1-127	Strings Slap 1
A#7	1-127	Strings Slap 2
B7	1-127	Strings Slap 3
C8	1-127	Strings Slap 4
C#8	1-127	Strings Slap 5
D8	1-127	Strings Slap 6
D#8	1-127	Strings Slap 7
E8	1-127	Body 1
F8	1-127	Body 2
F#8	1-127	Body 3
G8	1-127	Body 4
G#8	1-127	Body 5
A8	1-127	Body 6
A#8	1-127	Body 7
B8	1-127	Body 8
C9	1-127	Fret Noise1
C#9	1-127	Fret Noise2
D9	1-127	Fret Noise3
D#9	1-127	Fret Noise4
E9	1-127	Fret Noise5
F9	1-127	Head String1
F#9	1-127	Head String2
G9	1-127	Head String3
<b>137 VERSATILE SINGLE COIL E. GUITAR</b>		
C1 - B6	1-30	Normal mp
	31-60	Normal mf
	61-75	Ghost Note
	76-90	Mute
	91-105	Hammering
	106-120	Glissando
	121-127	Open Harmonics
C7	1-127	Strum 1
C#7	1-127	Strum 2
D7	1-127	Strum 3
D#7	1-127	Strum 4
E7	1-127	Strum 5
F7	1-127	Strum 6
F#7	1-127	Strum 7
G7	1-127	Strum 8
G#7	1-127	Strum 9
A7	1-127	Strum 10

Key	Velocity	Sound
A#7	1-127	Strum 11
B7	1-127	Strum 12
C8	1-127	Strum 13
C#8	1-127	Strum 14
D8	1-127	Low Ghost Note 1
D#8	1-127	Low Ghost Note 2
E8	1-127	Low Ghost Note 3
F8	1-127	Low Ghost Note 4
F#8	1-127	Low Ghost Note 5
G8	1-127	Low Ghost Note 6
G#8	1-127	Low Ghost Note 7
A8	1-127	Low Ghost Note 8
A#8	1-127	Low Ghost Note 9
B8	1-127	Low Ghost Note 10
C9	1-127	Fret Noise1
C#9	1-127	Fret Noise2
D9	1-127	Fret Noise3
D#9	1-127	Fret Noise4
E9	1-127	Fret Noise5
F9	1-127	Fret Noise6
F#9	1-127	Fret Noise7
G9	1-127	Fret Noise8

**181 VERSATILE ELECTRIC BASS 1**

C1 - B6	1-60	Normal mf
	61-80	Normal ff
	81-120	Ghost Note
	121-127	Slap
C7	1-127	Gliss 1
C#7	1-127	Gliss 2
D7	1-127	Gliss 3
D#7	1-127	Gliss 4
E7	1-127	Gliss 5
F7	1-127	Gliss 6
F#7	1-127	Gliss 7
G7	1-127	Fret Noise 1
G#7	1-127	Fret Noise 2

**182 VERSATILE ELECTRIC BASS 2**

C1 - B6	1-60	Normal mf
	61-80	Normal ff
	81-120	Ghost Note
	121-127	Slap
C7	1-127	Gliss 1
C#7	1-127	Gliss 2
D7	1-127	Gliss 3
D#7	1-127	Gliss 4
E7	1-127	Gliss 5
F7	1-127	Gliss 6
F#7	1-127	Gliss 7
G7	1-127	Fret Noise 1
G#7	1-127	Fret Noise 2

Key	Velocity	Sound
<b>233 VERSATILE BRASS 1</b>		
C1 - G9	1-20	Normal mf
	21-40	Normal f
	41-60	Normal ff
	61-80	Attack
	81-90	Schoop
	91-100	Shake
	101-110	Falls Fast mf
	111-120	Falls Fast f
121-127	Gliss up	
<b>234 VERSATILE BRASS 2</b>		
C1 - G9	1-30	Normal f
	31-60	Normal ff
	61-75	Attack
	76-90	Schoop
	91-105	Shake
	106-120	Falls Fast f
	121-127	Gliss up


**NOTE**

- Versatile tones are intended for DTM (desktop music, or computer music). Performance sounds of stringed instruments, wind instruments, and other instruments, as well as noise peculiar to instruments are assigned in accordance with the key press strength (velocity). Because of this, when playing on the keyboard, relatively slight changes in keyboard pressure can result in large changes in volume, or changes in keyboard pressure may be opposite what is expected.

## Home Customization 5 buttons Function List

Category	Screen	Display Name			Screen
BLANK	BLANK	Empty			Blank
MENU	MENU	Menu Item My Setup			My Setup on Menu
		Menu Item Karaoke			Karaoke on Menu
		Menu Item Metronome			Metronome on Menu
		Menu Item Balance			Balance on Menu
		Menu Item Octave Shift			Octave Shift on Menu
		Menu Item Sustain			Sustain on Menu
		Menu Item Pedal			Pedal on Menu
		Menu Item Chord Book			Chord Book on Menu
		Menu Item System Effects			System FX on Menu
		Menu Item Equalizer			Equalizer on Menu
		Menu Item Scale Tuning			Scale on Menu
		Menu Item Bluetooth			Bluetooth on Menu
		Menu Item Media			Media on Menu
		Menu Item Setting			Setting on Menu
Menu Item Demo			Demo on Menu		
TONE	TONE	Tone	Upper1	Tone Upper1	
			Upper2	Tone Upper2	
			Lower	Tone Lower	
		Split			Split
		Layer			Layer
		Touch Response			Touch Response
BALANCE	BALANCE	Upper1			Part Volume Upper1
		Upper2			Part Volume Upper2
		Lower			Part Volume Lower
		Rhythm (Same as Rhythm volume)			Rhythm Volume
OCTAVE SHIFT	OCTAVE SHIFT	Upper octave shift	+	Upper Octave Shift +	
			-	Upper Octave Shift -	
		Upper			Upper Octave Shift
		Upper1			Part Octave Shift U1
		Upper2			Part Octave Shift U2
		Lower			Part Octave Shift L
SUSTAIN	SUSTAIN	Sustain			Sustain
PEDAL	PEDAL	Pedal 1	Effect Part	Upper1	Pedal Upper1
				Upper2	Pedal Upper2
				Lower	Pedal Lower
METRONOME	METRONOME	Start/Stop			Metronome St/Sp

Category	Screen	Display Name		Screen
TEMPO	TEMPO	+		Tempo +
		-		Tempo -
		Tap tempo		Tap Tempo
RHYTHM	RHYTHM*1	Intro		Rhythm Intro
		Variation		Rhythm Variation*2
		FILL-IN		Rhythm Fill-in*3
		Synchro start		Rhythm Sync Start
		Synchro Stop		Rhythm Sync Stop
		AC		Rhythm Accomp
		Chord mode		Rhythm Chord Mode
		Volume		Rhythm Volume
SYSTEM EFFECT	SYSTEM EFFECT	Reverb type		Reverb
		Chorus type		Chorus
MIDI	MIDI	MIDI OUT channel	Upper1	MIDI Out Ch Upper1
			Upper2	MIDI Out Ch Upper2
			Lower	MIDI Out Ch Lower
		MIDI IN Navigate	Type	MIDI In Navigate
			Right	MIDI In Navi Ch Right
			Left	MIDI In Navi Ch Left
Local Control		Local Control		
SETTING	SETTING	Transpose	+	Transpose +
			-	Transpose -
		Transpose		Transpose
		Key Light		Key Light
		Mic Reverb		Mic Reverb
		Tuning		Tuning
		Surround		Surround
		Audio center cancel		Audio In Center Cxl

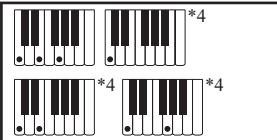






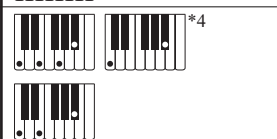

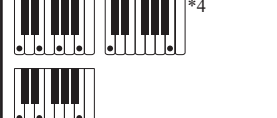





\*1 Not shown on the tone screen.











\*2 Rhythm Variation 1 in the case of Operation Type 2.

\*3 Rhythm Variation 2 in the case of Operation Type 2.

# Fingering Guide

## ■ FINGERED 1, FINGERED 2 Chords

<b>C</b>	
<b>Cm</b>	
<b>Cdim</b>	
<b>Caug<sup>*3</sup></b>	
<b>C<sup>b5</sup></b>	
<b>Csus4<sup>*3</sup></b>	
<b>Csus2<sup>*3</sup></b>	
<b>C7</b>	
<b>Cm7<sup>*3</sup></b>	
<b>CM7</b>	
<b>CmM7</b>	
<b>Cdim7<sup>*3</sup></b>	
<b>CdimM7</b>	
<b>C7<sup>b5</sup><sup>*3</sup></b>	
<b>Cm7<sup>b5</sup><sup>*3</sup></b>	

<b>CM7<sup>b5</sup></b>	
<b>Caug7</b>	
<b>CaugM7</b>	
<b>C7sus4</b>	
<b>C6<sup>*1</sup><sup>*3</sup></b>	
<b>Cm6<sup>*2</sup><sup>*3</sup></b>	
<b>Cadd9</b>	
<b>Cmadd9</b>	
<b>C69<sup>*3</sup></b>	
<b>Cm69<sup>*3</sup></b>	

\*1 With FINGERED 2, interpreted as Am7.

\*2 With FINGERED 2, interpreted as Am7<sup>b5</sup>.

\*3 Inverted form not supported in some cases.

\*4 These fingerings are special fingerings for Digital Keyboard chord input, and so they are not suitable for normal keyboard play.

## ■ FINGERED ON BASS, FULL RANGE CHORD

In addition to the chords that can be fingered with FINGERED 1 and FINGERED 2, the chords below also are recognized.

$\frac{C\#}{C}$	$\frac{D}{C}$	$\frac{F}{C}$	$\frac{F\#}{C}$	$\frac{G}{C}$	$\frac{A^b}{C}$	$\frac{A}{C}$	$\frac{B^b}{C}$	$\frac{C\#m}{C}$	$\frac{Dm}{C}$	$\frac{Fm}{C}$
$\frac{F\#m}{C}$	$\frac{Gm}{C}$	$\frac{A^b m}{C}$	$\frac{Am}{C}$	$\frac{B^b m}{C}$	$\frac{Bm}{C}$	$\frac{C\#dim}{C}$	$\frac{Ddim}{C}$			
$\frac{Fdim}{C}$	$\frac{F\#dim}{C}$	$\frac{Gdim}{C}$	$\frac{A^b dim}{C}$	$\frac{Adim}{C}$	$\frac{Bdim}{C}$	$\frac{F7}{C}$	$\frac{A^b 7}{C}$			
$\frac{Fm7}{C}$	$\frac{FM7}{C}$	$\frac{A^b M7}{C}$	$\frac{F\#m7^b5}{C}$	$\frac{Gm7}{C}$	$\frac{G7}{C}$	$\frac{A^b add9}{C}$				

### NOTE

- With FINGERED ON BASS, the lowest note fingered is interpreted as the base note. Inverted forms are not supported.
- With FULL RANGE CHORD, when the lowest note fingered is a certain distance from the neighboring note, the chord is interpreted as a fraction chord.
- Unlike FINGERED 1, 2, and FINGERED ON BASS, FULL RANGE CHORD requires pressing of at least three keys to form a chord.

## Chord Example List

*1 *2	C	C#/(D <sup>b</sup> )	D	(D#)/E <sup>b</sup>	E	F
M						
m						
dim						
aug						
sus4						
sus2						
7						
m7						
M7						
m7 <sup>b5</sup>						
7 <sup>b5</sup>						
7sus4						
add9						
madd9						
mM7						
dim7						
69						
6						
m6						

\*1 Root \*2 Chord Type

- Since the chord input range is limited, this model may not support some of the chords shown above.

*1 *2	F <sup>#</sup> /(G <sup>b</sup> )	G	(G <sup>#</sup> )/A <sup>b</sup>	A	(A <sup>#</sup> )/B <sup>b</sup>	B
M						
m						
dim						
aug						
sus4						
sus2						
7						
m7						
M7						
m7 <sup>b5</sup>						
7 <sup>b5</sup>						
7sus4						
add9						
madd9						
mM7						
dim7						
69						
6						
m6						

\*1 Root \*2 Chord Type

- Since the chord input range is limited, this model may not support some of the chords shown above.



# MIDI Implementation Chart

Function		Transmitted	Recognized	Remarks
<b>Basic Channel</b>	Default	1	1 - 16	
	Changed	1 - 16	1 - 16	
<b>Mode</b>	Default	Mode 3	Mode 3	
	Messages Altered	X * * * * *	X * * * * *	
<b>Note Number</b>	True voice	0 - 127 * * * * *	0 - 127 0 - 127 *1	
	Note ON Note OFF	O 9nH v = 1 - 127 X 8nH v = 64	O 9nH v = 1 - 127 X 9nH v = 0, 8nH v = **	** : no relation
<b>After Touch</b>	Key's	X	X	
	Ch's	X	O	
<b>Pitch Bender</b>		X	O	
<b>Control Change</b>	0	O	O	Bank select
	1	X	O	Modulation
	5	X	O	Portamento Time
	6, 38	X	O *3	Data entry LSB/MSB
	7	X	O	Volume
	10	X	O	Pan
	11	X	O	Expression
	64	X *2	O	Hold 1
	65	X	O	Portamento Switch
	66	O	O	Sostenuto
	67	X *2	O	Soft pedal
	71	X	O	Filter resonance
	72	X	O	Release time
	73	X	O	Attack time
	74	X	O	Brightness
	76	X	O	Vibrato rate
	77	X	O	Vibrato depth
	78	X	O	Vibrato delay
	84	X	O	Portamento Control
	91	X	O	Reverto send level
	93	X	O	Chorus send level
	94	X	O	Delay send level
	100, 101	X	O *3	RPN LSB/MSB
<b>Program Change</b>	True #	O * * * * *	O 0 - 127	
<b>Exclusive</b>		O *3	O *3	
<b>System Common</b>	Song Pos	X	X	
	Song Sel	X	X	
	Tune	X	X	
<b>System Real Time</b>	Clock	X	X	
	Commands	X	X	
<b>Aux Messages</b>	All sound off	X	O	
	Reset all controller	X	O	
	Local ON/OFF	X	X	
	All notes OFF	X	O	
	Active Sense	X	O	
	System Reset	X	X	
<b>Remarks</b>	*1: Depends on tone. *2: In accordance with pedal effect setting. *3: For details about RPN and system exclusive messages, see MIDI Implementation at <a href="https://support.casio.com/global/en/emi/manual/LK-S450/">https://support.casio.com/global/en/emi/manual/LK-S450/</a>			

Mode 1 : OMNI ON, POLY  
 Mode 3 : OMNI OFF, POLY

Mode 2 : OMNI ON, MONO  
 Mode 4 : OMNI OFF, MONO

O : Yes  
 X : No

**CASIO®**

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