

CT-S1 Casiotone

USER'S GUIDE



Preparing a Power
Supply



Turning Power
On or Off



Connecting
Headphones (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)



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/CT-S1/>



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MIDI Implementation Chart

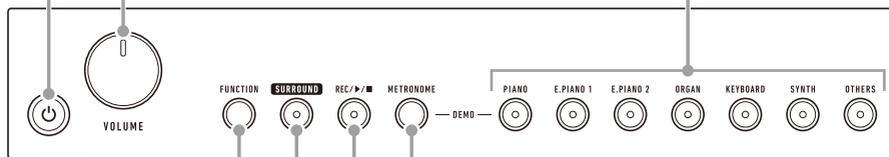
General Guide

■ Front Panel

⏻ (Power) button ⓘ page EN-13

VOLUME knob ⓘ page EN-15

Main tone buttons ⓘ page EN-21

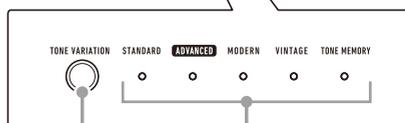
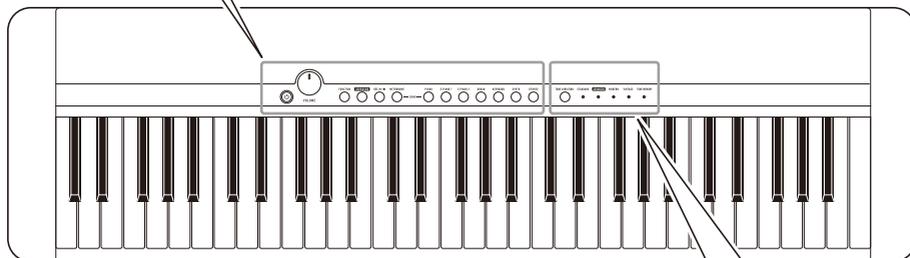


METRONOME button ⓘ page EN-15

REC/▶/■ button ⓘ page EN-42

SURROUND button ⓘ page EN-31

FUNCTION button ⓘ page EN-48



TONE VARIATION button ⓘ page EN-21

TONE VARIATION LEDs ⓘ page EN-21

- The numbers to the right of the ⓘ symbol are reference page numbers.

■ Back

USB TO HOST port ⓘ page EN-60

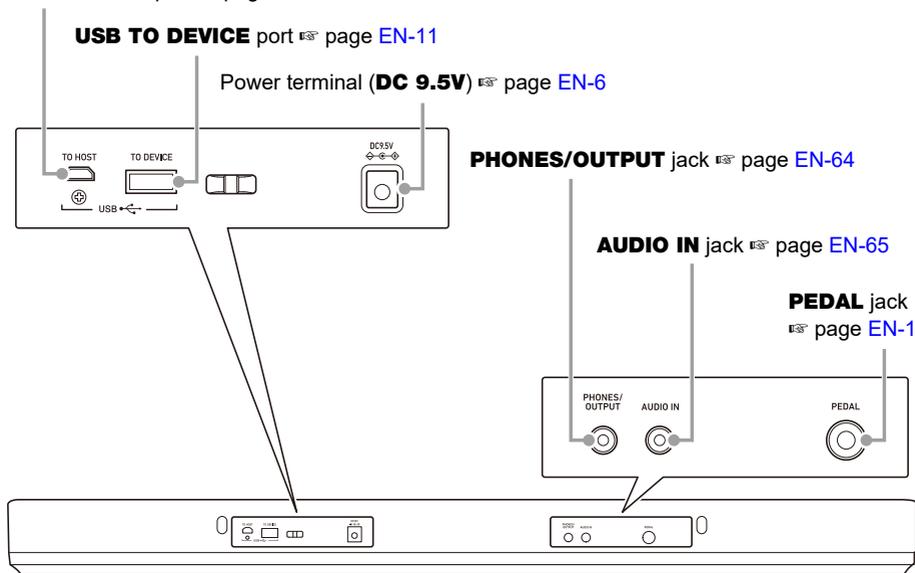
USB TO DEVICE port ⓘ page EN-11

Power terminal (**DC 9.5V**) ⓘ page EN-6

PHONES/OUTPUT jack ⓘ page EN-64

AUDIO IN jack ⓘ page EN-65

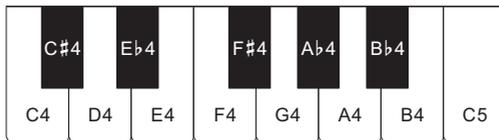
PEDAL jack ⓘ page EN-11



- The numbers to the right of the ⓘ symbol are reference page numbers.

■ Keyboard note names and pitches

The keyboard note names and pitches used in this manual follow the international standard. Middle C is C4, the lowest C is C2, and the highest C is C7. The illustration below shows keyboard key note names from C4 through C5.



Getting Ready to Play

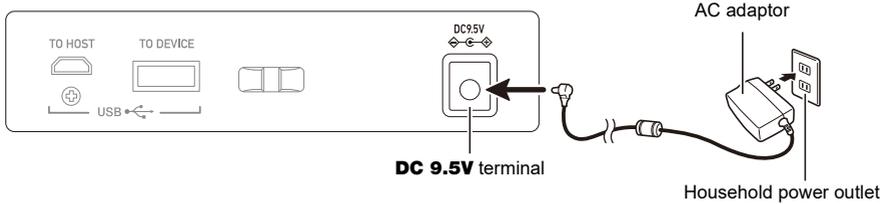
Preparing a Power Supply

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

Using the AC Adaptor

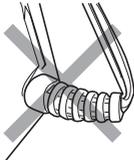
Use only the AC adaptor (JEITA Standard with unified polarity plug) specified for this Digital Keyboard. Use of a different type of AC adaptor can cause malfunction.

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

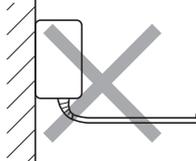


! IMPORTANT!

- 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.

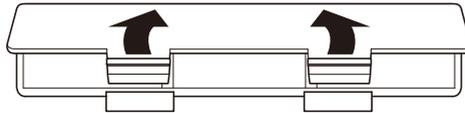
■ Batteries

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.

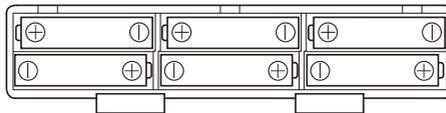
Be sure to replace batteries at least once a year, even if there is no indication of low battery power. Dead rechargeable batteries (eneloop) in particular may deteriorate if they are left in the product. Remove rechargeable batteries from the product as soon as possible after they go dead.

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



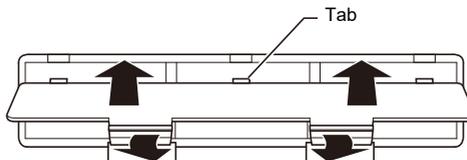
2. Load six AA-size batteries into the battery compartment.

- 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.

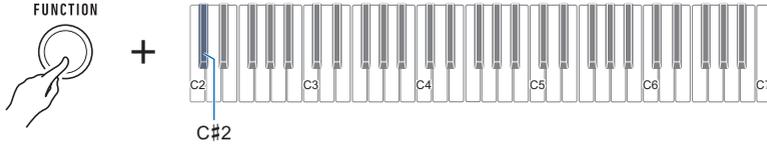


■ To specify the battery type

1. Turn on the Digital Keyboard.

- See “Turning Power On or Off” (page EN-13).

2. While holding down **FUNCTION**, press the **C#2** keyboard key.



- Each press of the keyboard key sounds a tone that lets you know what setting was selected.
One tone: Alkaline batteries
Two tones: Rechargeable nickel metal hydride batteries

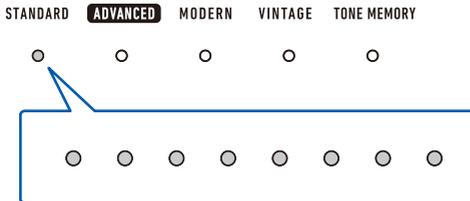
3. Release **FUNCTION** to complete the setting operation.

■ Low Battery Indication

The TONE VARIATION LEDs will flash to indicate that battery power is low. When this happens, replace the batteries with new ones.

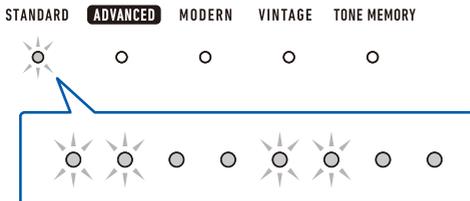
High Battery Power

Indicated when TONE VARIATION LEDs are lit.



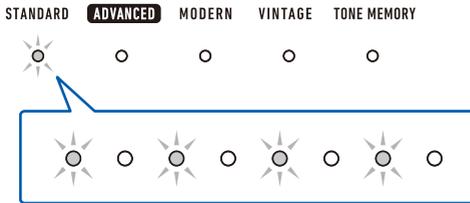
Declining Battery Power

Indicated when the TONE VARIATION LEDs flash at an interval of a few seconds.



Battery Replacement Required

Indicated when the TONE VARIATION LEDs flash.

**NOTE**

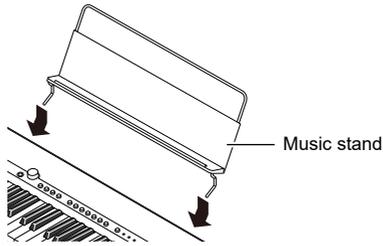
- Low battery power may cause notes to become distorted, or other problems.
- You can conserve battery power by using headphones and by reducing the volume level.

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

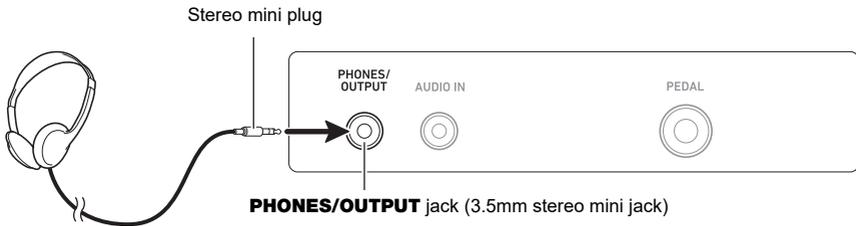
Insert the music stand legs into the back of the Digital Keyboard.



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

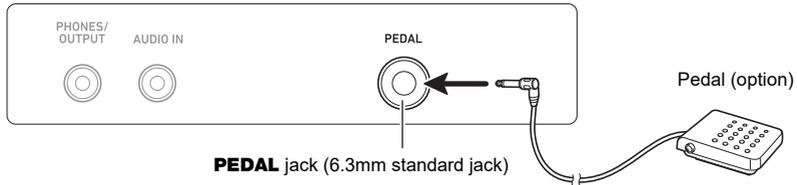
- Headphones do not come with this Digital Keyboard.
- Use the optional (CP-16) or a commercially available headphones.
- The surround effect is not applied while you are listening over headphones.

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.

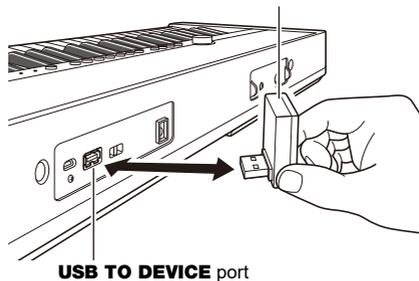
Connecting the Wireless MIDI & audio adaptor (Option)

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.

Wireless MIDI & audio adaptor (Option: WU-BT10)

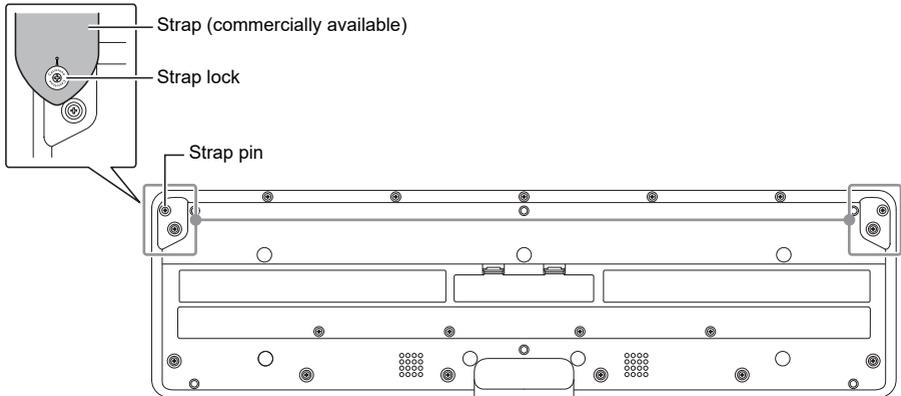


NOTE

- 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-66).
- 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.

Playing on the Keyboard

Turning Power On or Off

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

The Digital Keyboard becomes operational after a few seconds.



2. To turn off the Digital Keyboard, hold down the (Power) until all of the LEDs go out.

IMPORTANT!

- Turning off power normally causes the tone and other settings to return to their initial defaults. However, the settings below are remembered.
 - MIDI Output Channels (Main Part, Layer Part)
 - Bluetooth
 - MY SETUP power on recall
 - Auto Power Off
 - Battery type

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-47](#)).

Auto Power Off

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

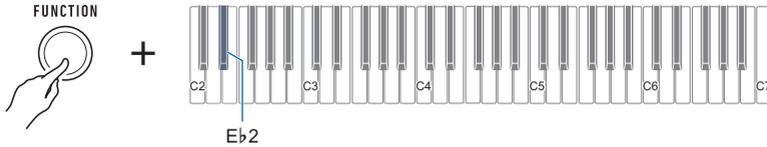
NOTE

- While the metronome is in use, power will not turn off automatically even if you do not play anything on the keyboard.

■ Disabling Auto Power Off

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

1. While holding down **FUNCTION**, press the **E \flat 2** keyboard key.



- Each press of the keyboard key sounds a tone that lets you know what setting was selected.
High tone: On
Low tone: Off

2. After disabling Auto Power Off, release **FUNCTION**.

Adjusting the Volume Level

1. Rotate the **VOLUME** knob.

This changes the volume level.



VOLUME

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 **METRONOME**.

This starts the metronome.

METRONOME



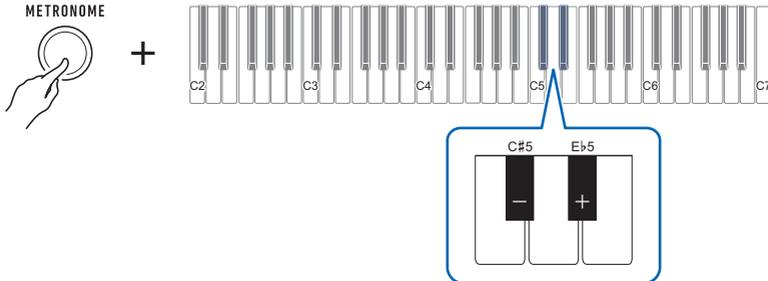
2. Press **METRONOME** again to stop the metronome.

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.

- Select a setting of Off (0), or a value of 1 to 16 beats. A reference tone sounds whenever the setting values becomes off (0).

1. Start the metronome.
2. While holding down **METRONOME**, use the **C#5** and **E♭5** keyboard keys to change the number of beats setting.



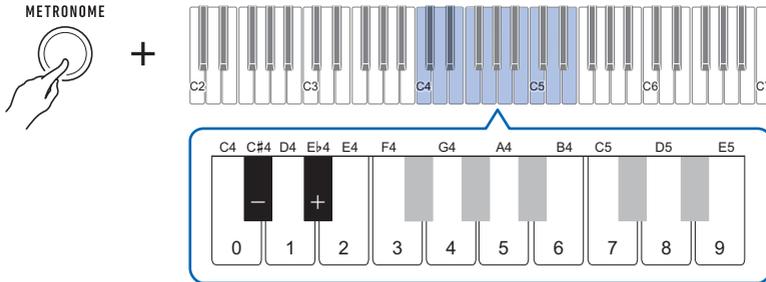
- Selecting Off (0) disables the chime. Use this setting when you want to practice without worrying about the first beat of each measure.
- To return the setting to its initial default, press the – and + keyboard keys at the same time.

3. Release **METRONOME** to complete the setting operation.

Changing the Metronome Tempo

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

1. Start the metronome.
2. Holding down **METRONOME**, use keyboard keys **C4** through **E5** to change the tempo setting.

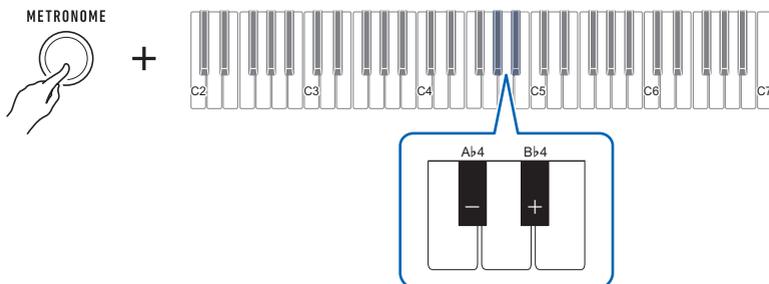


- You can specify a tempo value in the range of 20 to 255.
 - Each press of the – or + keyboard key raises or lowers the tempo by 1. Holding down either button scrolls the setting value.
 - You can also use the tempo value input keys (0 to 9) to enter a specific tempo value.
- Examples:
- To set a tempo of 80, press 8, then 0. The tempo setting will not change until you release **METRONOME** in step 3, below.
 - To set a tempo of 120, press 1, then 2, then 0. In this case, the tempo value will change as soon as you input the third digit.
- To return the setting to its initial default, press the – and + keyboard keys at the same time.

3. Release **METRONOME**.

Changing the Metronome Sound Volume Level

1. Start the metronome.
2. While holding down **METRONOME**, use the **A \flat 4** and **B \flat 4** keyboard keys to change the metronome sound volume level.



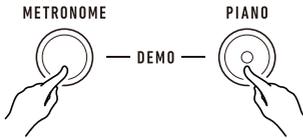
- You can specify a volume value from 0 to 10.
- To return the setting to its initial default, press the – and + keyboard keys at the same time.

3. Release **METRONOME** to complete the setting operation.

Listening to Demo Play

Demo songs include CASIO original tone demo songs and piano demo songs.

1. Press **METRONOME** and **PIANO** at the same time.



This causes the **PIANO** button to flash and starts tone demo song play.



- Some tone demo songs use the surround effect. The **SURROUND** button will light while the surround effect is in use.



- Tone demo songs play in sequence, one after another.

2. To play a piano demo song, press **PIANO**.

This will start playback of the first piano demo song.

- The 10 built-in piano songs will play in sequence, one after another.

3. To select a particular piano demo song for playback, hold down **PIANO** as you press a keyboard key from **C2** to **A2**.

This starts playback of the piano demo song you selected.

Keyboard Note Name	Song Name
C2	Turkish March (W.A.Mozart)
C#2	Moments Musicaux 3
D2	Minuet in G Major
E♭2	Inventionen 1
E2	Praeludium 1 (J.S.Bach)
F2	Le Coucou
F#2	Arabesque (F.Burgmüller)
G2	La Chevaleresque
A♭2	Fröhlicher Landmann
A2	Von fremden Ländern und Menschen [Kinderszenen]

4. Press **PIANO** again to return to the tone demo songs.

5. To stop playback, press **REC/▶/■**.

REC/▶/■



- You can also stop playback by pressing **METRONOME**.

Controlling the Sound of a Performance

Selecting a Musical Instrument Tone

This Digital Keyboard lets you play using tones for a wide variety of musical instrument sounds. A bank of main tone buttons are assigned piano, organ, and other tones for quick and easy selection. The same song can sound completely different when played with a different instrument type.

Playing with a Main Tone

1. Press one of the main tone buttons.

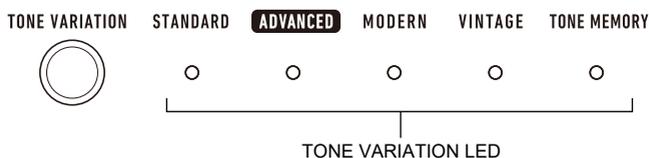
- The button you press lights and the keyboard changes to the button's tone.



2. To change to a variation of a tone, press **TONE VARIATION**.

Each press cycles to the next tone variation.

- A TONE VARIATION LED lights to indicate which variation is selected.



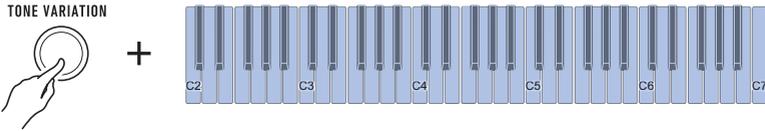
NOTE

- Using a main tone button to select a tone causes the settings below to return to their initial defaults.
 - Layer
 - Part volume (main)
 - Sustain
 - Sustain time (main part)
 - Reverb
 - Pedal effect part (main)

Selecting a Tone

1. While holding down **TONE VARIATION**, press a keyboard key from C2 to C7.

This sounds the selected tone.

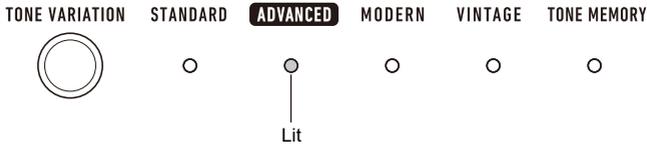


- A TONE VARIATION LED will light to indicate the selected tone's category.
- Each of the keyboard keys has a tone assigned to it. For tone information, see the "Tone List" (page EN-76).

2. Release **TONE VARIATION** to complete the setting operation.

■ Advanced Tones

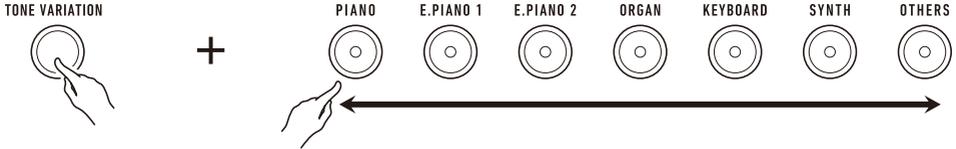
The **ADVANCED** TONE VARIATION LED lights when an advanced tone is selected. Advanced tones provide enhanced sound source control, and enable advanced expressive techniques, tone expression, and more.



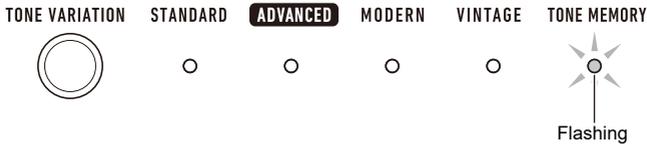
Registering a Tone to a Main Tone Button (Tone Memory)

You can use tone memory to register tone and layer settings, octave shift settings, and other settings to main tone buttons. You will then be able to recall the registered settings when you need them to perform a particular song, etc.

1. While holding down **TONE VARIATION**, press the main button to which you want to register the tone settings.



This will sound a notification tone and cause the **TONE MEMORY** TONE VARIATION LED to flash momentarily, and register your tone settings.



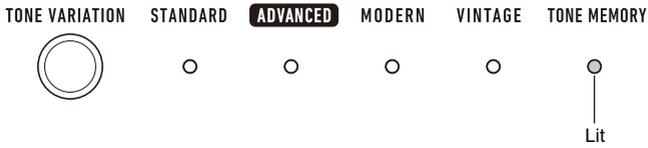
- The **TONE MEMORY** TONE VARIATION LED and the main tone button where the setting was stored will light to indicate that the tone is selected.
- You can register up to seven setups, one to each of the main tone buttons.

Registered Settings

- Sustain
- Tone (main, layer)
- Layered
- Part octave shift (main, layer)
- Sustain time (main part, layer part)
- Part volume (main, layer)
- Pedal effect part (main, layer)
- Reverb type

■ To recall a registered tone

1. Check to make sure that the **TONE MEMORY TONE VARIATION LED** is lit.



- If it isn't, press **TONE VARIATION** as many times as necessary until the **TONE MEMORY TONE VARIATION LED** is lit.

2. Press the main tone button where the tone settings are registered.

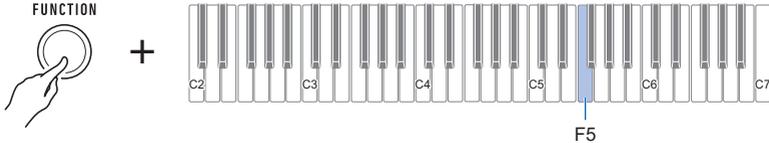
This will switch to the tone settings registered to the button.

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. While holding down **FUNCTION**, press the **F5** keyboard key.



- Each press of the keyboard key sounds a tone that lets you know what setting was selected.

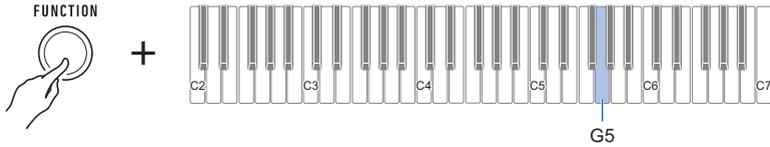
Notification tone	Setting type	Description
One low tone	Off	Keyboard pressure does not affect volume.
One high tone	Light	Easier to produce a louder sound than the Normal setting, for a lighter feel.
Two high tones	Normal	Normal Touch Response.
Three high tones	Heavy	More difficult to produce a louder sound, for a heavier feel.

2. Release **FUNCTION** to complete the setting operation.

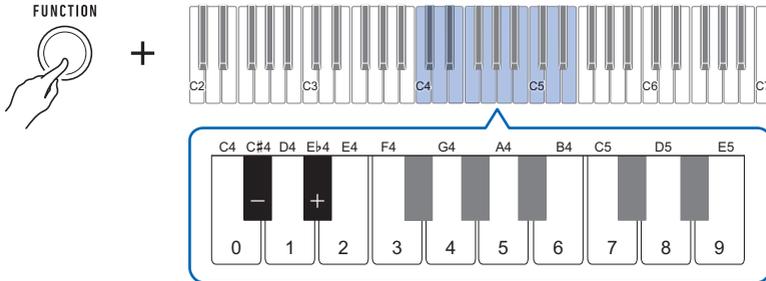
■ To adjust the volume when Touch Response is disabled (Touch off Velocity)

1. While holding down **FUNCTION**, press the **G5** keyboard key.

- Do not release **FUNCTION** until step 2, below.



2. Use keyboard keys **C4** through **E5** to set the volume level.



- You can specify a volume value from 1 to 127.
- Each press of the **-** or **+** keyboard key changes the volume value by 1. Long-pressing either of these keyboard keys scrolls the setting value.
- You can use keyboard keys 0 to 9 to enter a specific volume value.

Examples:

- To set a volume of 20, press 2, then 0. The volume setting will not change until you release **FUNCTION** in step 3, below.
- To set a volume of 120, press 1, then 2, then 0. In this case, the volume value will change as soon as you input the third digit.
- To return the setting to its initial default, press the **-** and **+** keyboard keys at the same time.

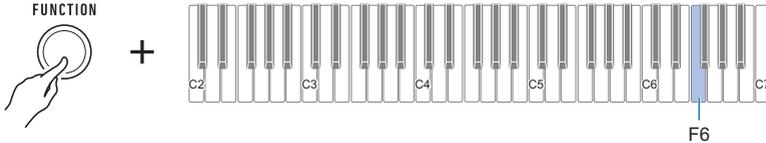
3. Release **FUNCTION**.

Using a Pedal

A pedal (optional SP-3 or SP-20) can be used to apply various changes to your sound while playing. Under initial default settings, sustain is assigned to the pedal, so it can be used as a damper pedal.

Changing Pedal Functions

1. While holding down **FUNCTION**, press the F6 keyboard key.



- Each press of the keyboard key sounds a tone that lets you know what setting was selected.

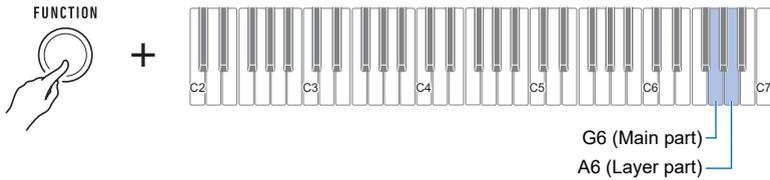
Notification Tone	Setting Type	Description
One tone	Pedal sustain	Playing notes while the pedal is depressed causes the notes to be sustained, even if the keyboard keys are released.
Two tones	Sostenuto	Playing notes and then pressing the pedal before the keyboard keys are released causes the notes to be sustained.
Three tones	Soft	Pressing the pedal and playing notes causes the notes to be slightly softened.
Four tones	Metronome	Starts and stops the metronome.

2. Release **FUNCTION** to complete the setting operation.

■ Disabling the Pedal Function Effect of Each Part

You can use the procedure below to disable the pedal function effect of the main part and layer part.

1. While holding down **FUNCTION**, press the **G6** or **A6** keyboard key.



This disables the pedal function effect.

- Each press of the keyboard key sounds a tone that lets you know what setting was selected.

High tone: On

Low tone: Off

The pedal function effect is applied to parts that are turned on, and not applied to parts that are turned off.

2. Release **FUNCTION** to complete the setting operation.

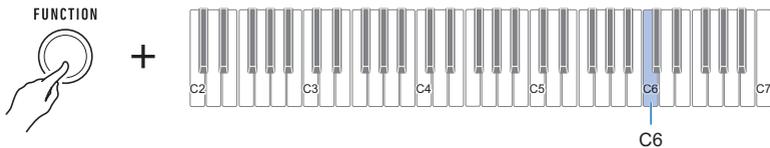
NOTE

- For details about parts, see “[Layering Two Tones](#)” (page [EN-32](#)).

Sustaining Notes After Keyboard Keys Are Released

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

1. While holding down **FUNCTION**, press the **C6** keyboard key.



This enables sustain.

- Each press of the keyboard key sounds a tone that lets you know what setting was selected.

High tone: On

Low tone: Off

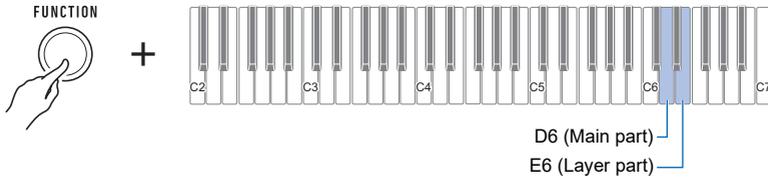
2. Release **FUNCTION** to complete the setting operation.

Adjusting the Sustain Time of the Parts

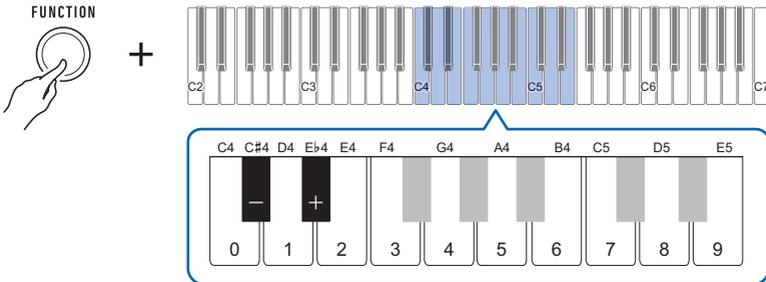
When sustain is enabled, you can use the procedure below to make the sustain times of the main part and layered part longer or shorter.

1. While holding down **FUNCTION**, press the **D6** or **E6** keyboard key.

- Do not release **FUNCTION** until step 2, below.



2. Use keyboard keys **C4** through **E5** to set the sustain time.



- You can set a sustain time within the range of 0 to 9.
- Each press of the – or + keyboard key raises or lowers the sustain time setting by 1. Long-pressing either of these keyboard keys changes the setting at high speed.
- To return the setting to its initial default, press the – and + keyboard keys at the same time.

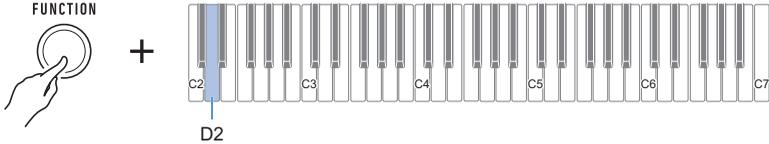
3. Release **FUNCTION** to complete the setting operation.

Playing with Reverb

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

1. While holding down **FUNCTION**, press the **D2** keyboard key.

- Do not release **FUNCTION** until step 2, below.



A notification tone will sound to indicate the reverb type selection mode.

2. Use keyboard keys **C2** through **C4** to select a reverb type.

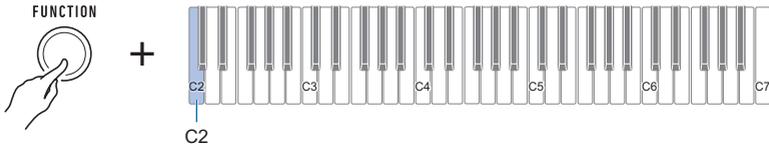
Keyboard Note Name	Reverb Type
C2	Tone (Depends on the tone.)
C#2 to F2	Room 1 to 5
F#2 to G2	Large Room 1 or 2
A \flat 2 to C#3	Hall 1 to 6
D3 to E3	Stadium 1 to 3
F3 to F#3	Plate 1 or 2
G3	Delay
A \flat 3	Pan delay
A3 to B \flat 3	Long delay 1 or 2
B3	Church
C4	Cathedral

This sounds a notification tone and sets the selected reverb type.

3. Release **FUNCTION** to complete the setting operation.

Turning off Reverb

1. While holding down **FUNCTION**, press the **C2** keyboard key.



This turns off reverb.

- Each press of the keyboard key sounds a tone that lets you know what setting was selected.
High tone: On
Low tone: Off

2. Release **FUNCTION** to complete the setting operation.

Playing with a Multi-dimensional Expanded Sound (Surround)

Enabling surround causes sound to expand multi-dimensionally, front, back, left, and right.

1. Press **SURROUND**.

This enables surround.

- The **SURROUND** button will be lit while the surround effect is enabled.

SURROUND



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

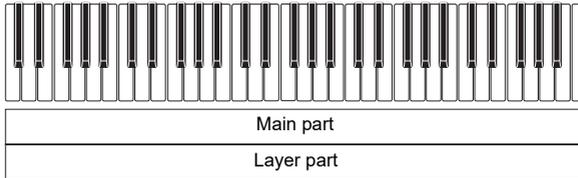
- This causes the **SURROUND** button light to go out.

NOTE

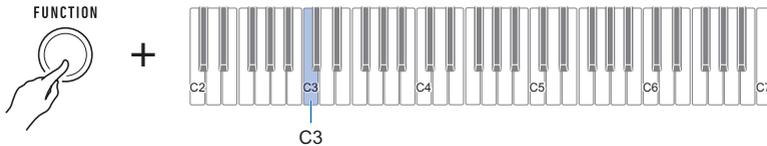
- The surround effect is not applied while you are listening over headphones.
- Connecting headphones disables the surround effect.

Layering Two Tones

You can use the procedure below to layer two tones and output the resulting sound. The part that is played using a single tone is the main part, while the second part that is layered over the main part is the layer part.



1. While holding down **FUNCTION**, press the **C3** keyboard key.

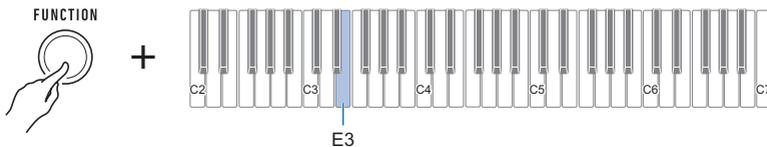


This enables layering.

- Each press of the keyboard key sounds a tone that lets you know what setting was selected.
High tone: On
Low tone: Off

2. To select the layer part, hold down **FUNCTION** as you press the **E3** keyboard key.

- Do not release **FUNCTION** until step 3, below.



3. Press a keyboard key within the range of **C2** through **C7** to select a tone.

This layers the tone you selected.

- Each of the keyboard keys has a tone assigned to it. For tone information, see the “[Tone List](#)” (page [EN-76](#)).

4. Release **FUNCTION** to complete the setting operation.

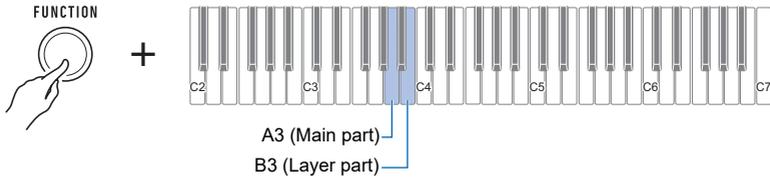
5. To cancel layering, hold down **FUNCTION** as you press the **C3** keyboard key.

Adjusting the Volume Level of Each Part

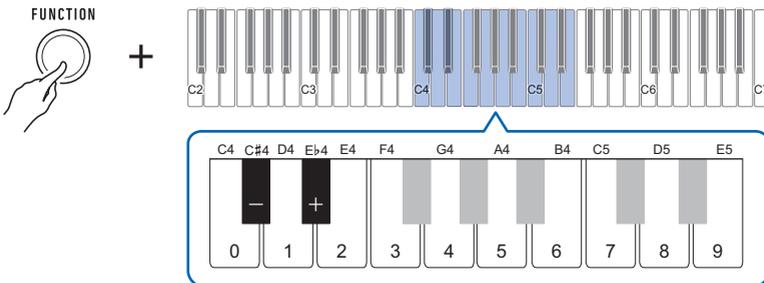
You can use the procedure below to adjust the volume level of the main tone and layer tone.

1. While holding down **FUNCTION**, press the **A3** or **B3** keyboard key.

- Do not release **FUNCTION** until step 2, below.



2. Use keyboard keys **C4** through **E5** to set the volume level.



- You can specify a volume value from 0 to 127.
- Each press of the + or – keyboard key changes the volume value by 1. Long-pressing either of these keyboard keys scrolls the setting value.
- You can use keyboard keys 0 to 9 to enter a specific volume value.

Examples:

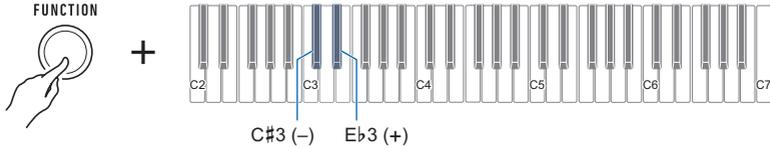
- To set a volume of 20, press 2, then 0. The volume setting will not change until you release **FUNCTION** in step 3, below.
- To set a volume of 120, press 1, then 2, then 0. In this case, the volume value will change as soon as you input the third digit.
- To return the setting to its initial default, press the – and + keyboard keys at the same time.

3. Release **FUNCTION**.

Changing the Pitch in Octave Units (Octave Shift)

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

1. While holding down **FUNCTION**, press the **C#3** or **E \flat 3** keyboard key.



Keyboard Note Name	Description
C#3	Lowers the pitch one octave.
E \flat 3	Raises the pitch one octave.

- You can specify a value in the range of -3 to +3 octaves.
- A reference tone sounds whenever the setting values becomes 0.
- To return the setting to its initial default, press the - and + keyboard keys at the same time.

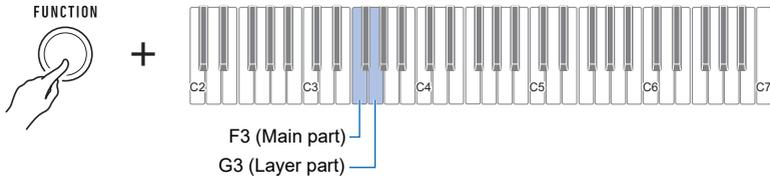
2. Release **FUNCTION** to complete the setting operation.

Changing the Pitch of Parts in Octave Units (Part Octave Shift)

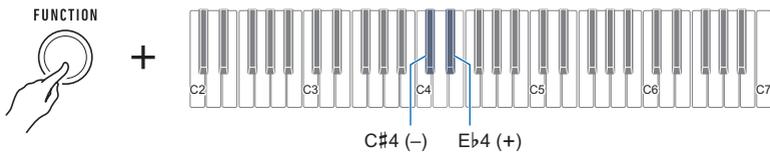
You can use the procedure below to raise or lower the pitches of the main part and layer part in octave units.

1. While holding down **FUNCTION**, press the **F3** or **G3** keyboard key.

- Do not release **FUNCTION** until step 2, below.



2. Press the **C#4** or **E♭4** keyboard key.



Keyboard Note Name	Description
C#4	Lowers the pitch one octave.
E♭4	Raises the pitch one octave.

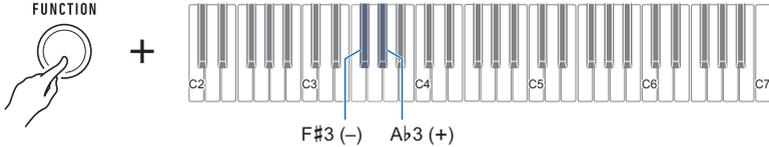
- You can specify a value in the range of -3 to +3 octaves.
- A reference tone sounds whenever the setting values becomes 0.
- To return the setting to its initial default, press the - and + keyboard keys at the same time.
- If you changed a part tone, the part octave shift value is the recommended value of the newly selected part. For information about tone recommended values, see the "Tone List" (page EN-76).

3. Release **FUNCTION** to complete the setting operation.

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. While holding down **FUNCTION**, press the **F#3** or **A \flat 3** keyboard key.



Keyboard Note Name	Description
F#3	Lowers the pitch one semitone.
A \flat 3	Raises the pitch one semitone.

- The setting range is one octave up (+12 semitones) and down (-12 semitones).
- A reference tone sounds whenever the setting values becomes 0.
- To return the setting to its initial default, press the - and + keyboard keys at the same time.

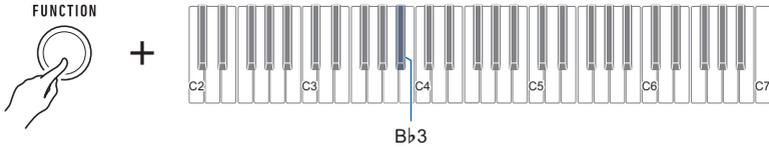
2. Release **FUNCTION** to complete the setting operation.

Fine Tuning (Tuning)

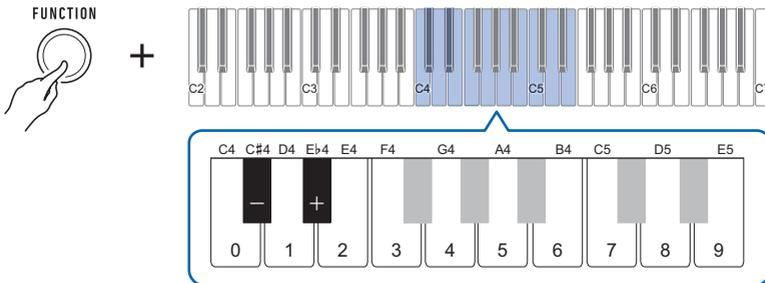
You can use the procedure below to adjust the overall pitch by changing the frequency of A4. (0.1 Hz units)

1. While holding down **FUNCTION**, press **B \flat 3** keyboard key.

- Do not release **FUNCTION** until step 2, below.



2. Use keyboard keys **C4** through **E5** to set the note pitch.



- You can specify a frequency in the range of 415.5 Hz to 440 Hz to 465.9 Hz.
- Each press of the – or + keyboard key decreases or increases the frequency of the A4 note in 0.1 Hz steps. Long-pressing either of these keyboard keys scrolls the setting value.
- A reference tone sounds whenever the setting values becomes an integer (whole number), such as 440, 441, etc.
- You can use keyboard keys 0 through 9 to input a three-digit integer value and then press **FUNCTION**. In this case, the digit to the right of the decimal point will automatically become 0.
- To return the setting to its initial default, press the – and + keyboard keys at the same time.

3. Release **FUNCTION** to complete the setting operation.

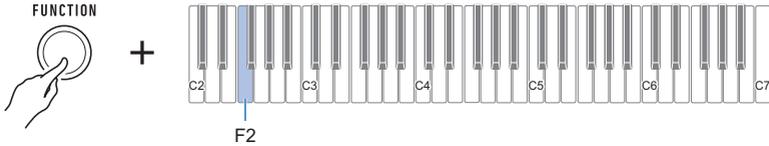
Changing the Keyboard Scale Tuning

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.

■ To change the scale tuning

1. While holding down **FUNCTION**, press the **F2** keyboard key.

- Do not release **FUNCTION** until step 2, below.



This sounds a notification tone and enters the scale tuning selection mode.

2. Use keyboard keys **C2** through **E3** to select a scale tuning.

Keyboard Note Name	Scale Tuning Name
C2	Equal temperament
C#2	Just major intonation
D2	Just minor intonation
E \flat 2	Pythagorean tuning
E2	Kimberger III
F2	Werckmeister 1-3(III)
F#2	Mean-tone tuning
G2	Rast
A \flat 2	Bayati
A2	Hijaz
B \flat 2	Saba
B2	Dashti
C3	Chahargah
C#3	Segah
D3	Gurjari Todi
E \flat 3	Chandrakauns
E3	Charukeshi

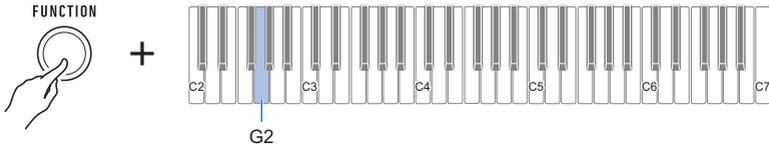
This sounds a notification tone and sets the selected scale tuning.

3. Release **FUNCTION** to complete the setting operation.

■ To specify the base note of the scale tuning

1. While holding down **FUNCTION**, press the **G2** keyboard key.

- Do not release **FUNCTION** until step 2, below.



A notification tone will sound to indicate the scale tuning base note selection mode.

2. Use keyboard keys **C2** through **B2** to select a scale tuning base note.

Keyboard Note Name	Scale Tuning Base Note
C2	C
C#2	C#
D2	D
E \flat 2	E \flat
E2	E
F2	F
F#2	F#
G2	G
A \flat 2	A \flat
A2	A
B \flat 2	B \flat
B2	B

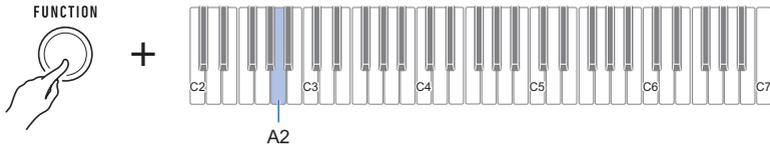
Sounds a notification tone and sets the scale tuning base note.

3. Release **FUNCTION** to complete the setting operation.

■ To disable piano stretch tuning

Piano stretch tuning, which is normally used for piano tuning, sharpens high notes and flattens low notes.

1. While holding down **FUNCTION**, press the **A2** keyboard key.



This disables stretch tuning.

- Each press of the keyboard key sounds a tone that lets you know what setting was selected.
High tone: On
Low tone: Off

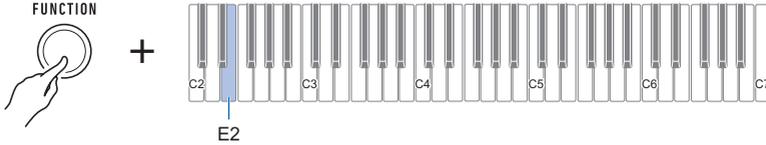
2. Release **FUNCTION** to complete the setting operation.

Using the Equalizer

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

1. While holding down **FUNCTION**, press the **E2** keyboard key.

- Do not release **FUNCTION** until step 2, below.



This sounds a notification tone and enters the equalizer setting mode.

2. Use keyboard keys **C2** through **A2** to select the equalizer setting you want.

Keyboard Note Name	Setting Type	Description
C2	Standard	Standard setting
C#2	Bass +	Boosts the low range.
D2	Treble +	Boosts the high range.
E♭2	Loudness	Boosts all ranges.
E2	Mellow	Produces a mellow sound.
F2	Bright	Produces a bright sound.
F#2	Rock	Produces a sound optimized for rock music.
G2	Dance	Produces a sound optimized for dance music.
A♭2	Jazz	Produces a sound optimized for jazz music.
A2	Classic	Produces a sound optimized for classical music.

This sounds a notification tone and sets the equalizer type.

3. Release **FUNCTION** to complete the setting operation.

Recording Your Keyboard Play (MIDI Recorder)

You can use the procedures in this section to record and playback your keyboard play.

Recording and Playing Back Keyboard Play

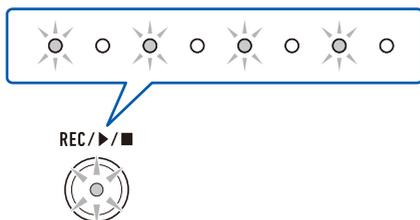
Use the procedure below to record what you play on the keyboard.

1. Select a tone and configure the other settings you want to use for recording.

2. Press **REC/▶/■.**



This causes the **REC/▶/■** button light to flash and enters record standby.



3. Play what you want to record.

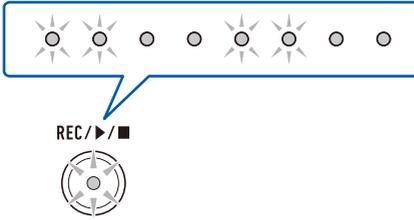
When you start to play, the **REC/▶/■** button light will stop flashing and recording will start.

NOTE

- Up to approximately 40,000 notes can be recorded for a single song. When the number of remaining recordable notes is 100 or fewer, the **REC/▶/■** button light will flash. When the number of remaining recordable notes reaches zero, the **REC/▶/■** button light will go out and recording will stop automatically.
- Up to approximately 999 measures can be recorded for a single song. When the number of remaining recordable measures is 32 or fewer, the **REC/▶/■** button light will flash. When the number of remaining recordable measures reaches zero, the **REC/▶/■** button light will go out and recording will stop automatically.
- You can record while the metronome is sounding. See “Using the Metronome” (page EN-15).

4. To stop recording, press **REC/▶/■**.

This causes the **REC/▶/■** button light to flash and enters playback standby. After a pre-count sounds, playback of what you recorded will start.



5. To stop playback, press **REC/▶/■**.

This causes the **REC/▶/■** button light to go out and stops playback.

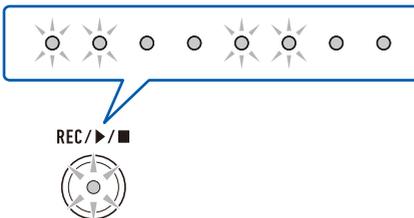
! IMPORTANT!

- Turning off the Digital Keyboard while recording is in progress will cause the recording to be deleted.
- A new recording replaces (deletes) previously recorded contents.
- Depending on the tone you are using and the reverb setting, the sound produced during playback may be different from the sound that you heard when you recorded.

■ To play back a recorded performance later

1. Press **REC/▶/■** as many times as necessary to start playback of the song you recorded.

- This starts playback of the performance you recorded.



■ Recorded MIDI Data

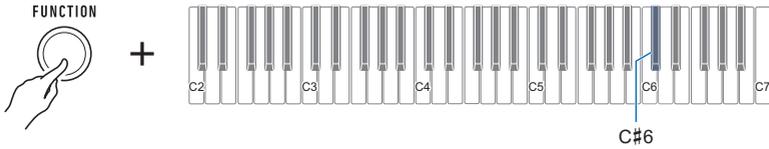
Recording with the MIDI recorder also records the operations below.

- Keyboard play and pedal operations
- Tone
- Touch Response
- Sustain
- Reverb
- Octave Shift
- Part volume
- Scale tuning
- Layer

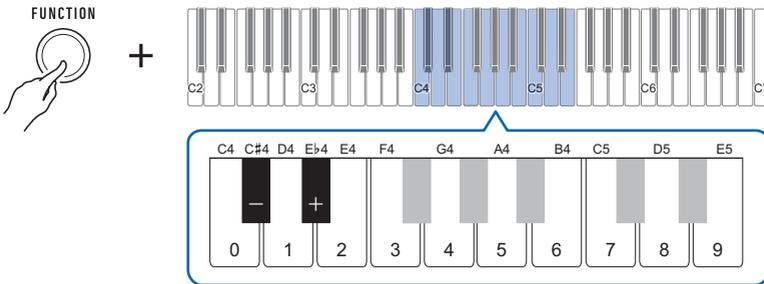
Changing the Volume of a Recorded Performance

1. While holding down **FUNCTION**, press the **C#6** keyboard key.

- Do not release **FUNCTION** until step 2, below.



2. Use keyboard keys **C4** through **E5** to set the volume level.



- You can specify a volume value from 0 to 10.
- Each press of the + or – keyboard key changes the volume value by 1. Long-pressing either of these keyboard keys scrolls the setting value.
- You can use keyboard keys 0 to 9 to enter a specific volume value.
- To return the setting to its initial default, press the – and + keyboard keys at the same time.

3. Release **FUNCTION** to complete the setting operation.

To delete a recorded performance

1. Long press **REC/▶/■**.

This will sound a notification tone and delete the performance you recorded.

REC/▶/■

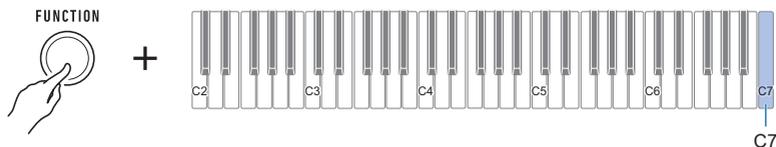


Saving and Recalling a Setup (MY SETUP)

You can use MY SETUP to save the setup (tone and other settings) of the Digital Keyboard. You can recall a saved setup when you need it to perform a particular song, etc.

Saving to MY SETUP

1. While holding down **FUNCTION**, long press the **C7** keyboard key.



This sounds a notification tone and saves the setup.

2. Release **FUNCTION** to complete the setting operation.

Savable Settings

The settings listed below can be saved with MY SETUP.

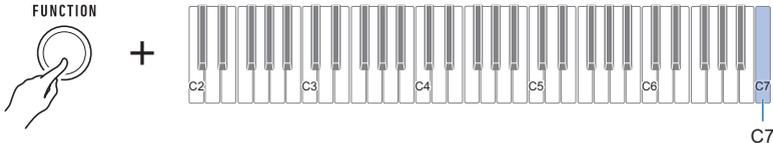
- Tones (main, layer)
- Sustain
- Sustain times (main part, layer part)
- Layer
- Touch Response
- Touch off velocity
- Octave shift
- Part octave shift (main, layer)
- Transpose
- Pedal
- Pedal effect part (main, layer)
- Metronome beat
- Metronome volume level
- Tempo
- Part volume (main, layer)
- Recorded song volume
- Surround
- Reverb type
- Equalizer
- Scale tuning type
- Scale tuning base note
- Piano Stretch Tuning
- Tuning
- AUDIO IN center cancel

Recalling From MY SETUP

1. While holding down **FUNCTION**, press the **C7** keyboard key.

NOTE

- Long-pressing the C7 keyboard key will cause the setup saved in MY SETUP to be overwritten with the current setup. Do not long-press C7 unless you want to do this.



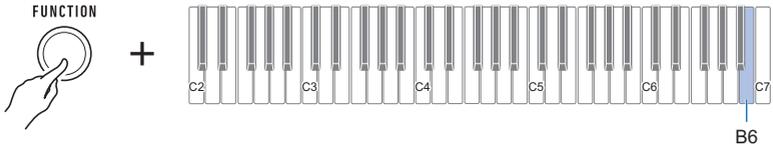
Pressing C7 will sound a notification tone and recall the setup.

2. Release **FUNCTION** to complete the setting operation.

Enabling MY SETUP Power On Recall

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

1. While holding down **FUNCTION**, press the **B6** keyboard key.



This enables MY SETUP power on recall.

- Each press of the keyboard key sounds a tone that lets you know what setting was selected.
 - High tone: Enable
 - Low tone: Disable

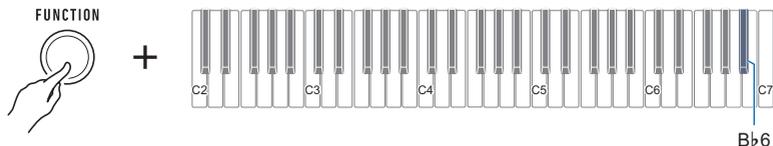
2. Release **FUNCTION** to complete the setting operation.

Configuring Settings

You can use **FUNCTION** in combination with keyboard keys to configure various settings.

Setting Operation

1. Use “**Keyboard Keys Used for Configuring Settings**” on page EN-49 to find the setting item you want and the location on the keyboard for changing its setting.
2. While holding down **FUNCTION**, use the keyboard key or keys you looked up in step 1 of this procedure to configure the setting you want.
 - This sounds a notification tone in accordance with the operation you perform.
Example: To enable or disable the notification tone, press the B♭6 keyboard key. See “**41 Notification tone**” on page EN-58.

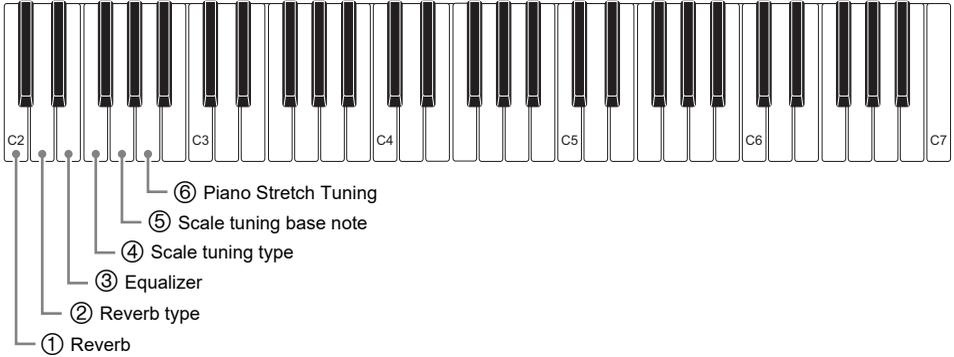


3. Release **FUNCTION** to complete the setting operation.

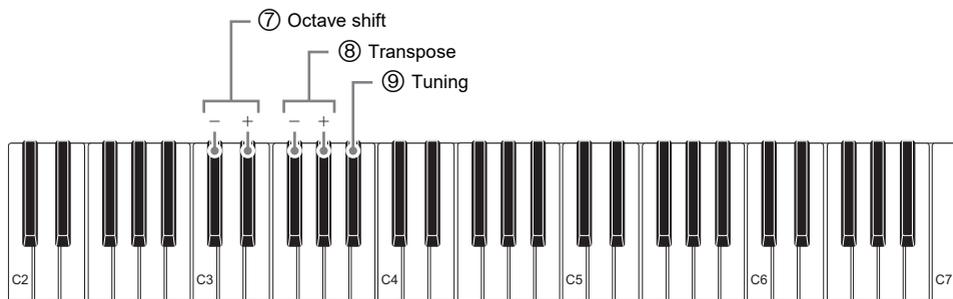
NOTE

- After performing steps 1 and 2 above, you can configure the settings below by pressing **17** Keyboard keys 0 through 9, or by using the **18** – and + keyboard keys.
 - 9** Tuning
 - 13** Part octave shift (main)
 - 14** Part octave shift (layer)
 - 15** Part volume (main)
 - 16** Part volume (layer)
 - 20** Touch off velocity
 - 22** Sustain time (main part)
 - 23** Sustain time (layer part)
 - 32** MIDI OUT Channel (main part)
 - 33** MIDI OUT Channel (layer part)
 - 34** Program Change Send
 - 38** Recorded song volume

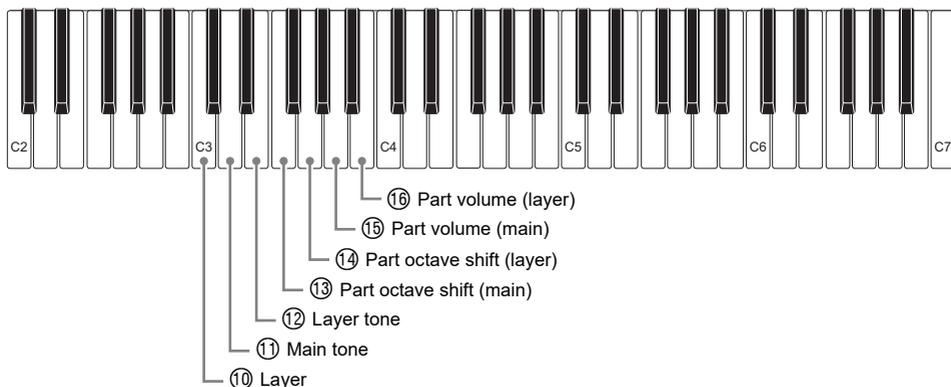
Keyboard Keys Used for Configuring Settings



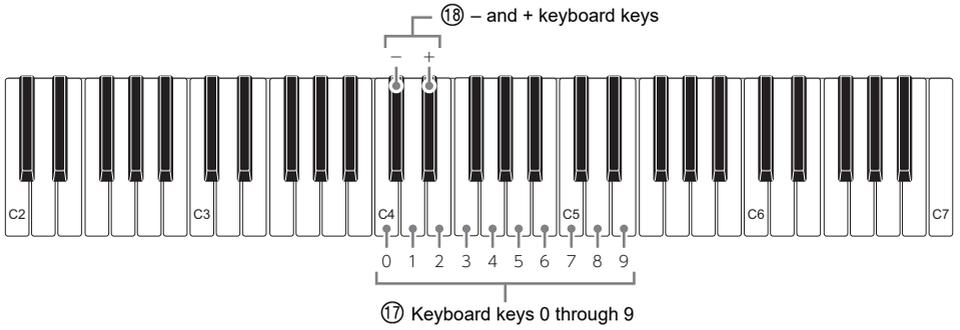
Item	Setting Options	Description	Remarks
① Reverb	Off, On (Initial Default: On)	Turns off reverb.	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. High tone: On Low tone: Off
② Reverb type	Reverb Type Setting Value List (page EN-30) (Initial Default: Tone)	Specifies the type of reverb to be applied.	
③ Equalizer	Equalizer Setting Value List (page EN-41) (Initial Default: Standard)	Adjusts frequency components of audio.	
④ Scale tuning type	Scale Tuning Setting Value List (page EN-38) (Initial Default: Equal temperament)	Sets the keyboard scale tuning.	
⑤ Scale tuning base note	Scale Tuning Base Note Setting Value List (page EN-39) (Initial Default: C)	Changes the scale tuning base note.	
⑥ Piano Stretch Tuning	Off, On (Initial Default: On)	Enables or disables piano stretch tuning.	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. High tone: On Low tone: Off



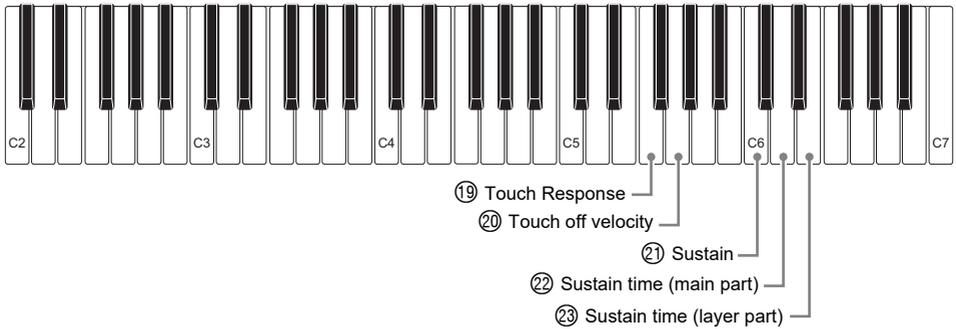
Item	Setting Options	Description	Remarks
⑦ Octave shift	-3 to 0 to +3 (Initial Default: 0)	Raise or lower pitch in octave units.	
⑧ Transpose	-12 to 0 to +12 (Initial Default: 0)	Raises or lowers the overall pitch in semitone steps.	
⑨ Tuning	415.5 Hz to 440.0 Hz to 465.9 Hz (Initial Default: 440.0)	Fine tunes the overall pitch by changing the frequency of A4 in 0.1 Hz units.	



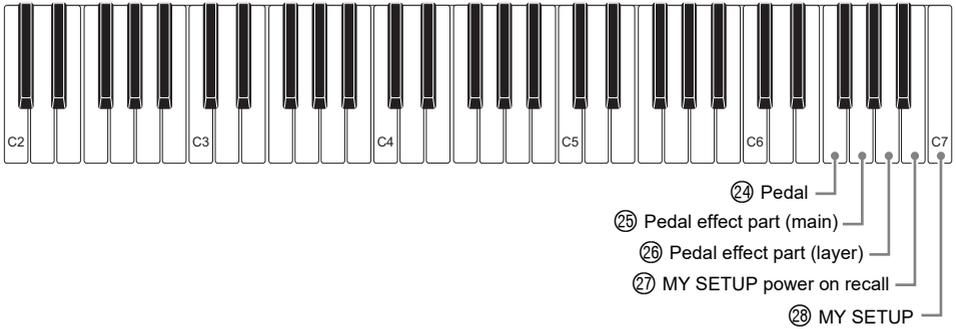
Item	Setting Options	Description	Remarks
⑩ Layer	Off, On (Initial Default: Off)	Layers or unlayers tones.	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. High tone: On Low tone: Off
⑪ Main tone	Tone List (page EN-76) (Initial Default: 1(C2)STAGE PIANO)	Can be used to change the main tone. (See page EN-21 .)	
⑫ Layer tone	Tone List (page EN-76) (Initial Default: 43(F#5)STRINGS)	Can be used to change the layer tone. (See page EN-32 .)	
⑬ Part octave shift (main)	-3 to 0 to +3 (Initial Default: Depends on the tone.)	Raises or lowers the pitch of the main part tone in octave units.	
⑭ Part octave shift (layer)	-3 to 0 to +3 (Initial Default: Depends on the tone.)	Raises or lowers the pitch of the layer part tone in octave units.	
⑮ Part volume (main)	0 to 127 (Initial Default: 127)	Raises or lowers the main part volume.	
⑯ Part volume (layer)	0 to 127 (Initial Default: 80)	Raises or lowers the layer part volume.	



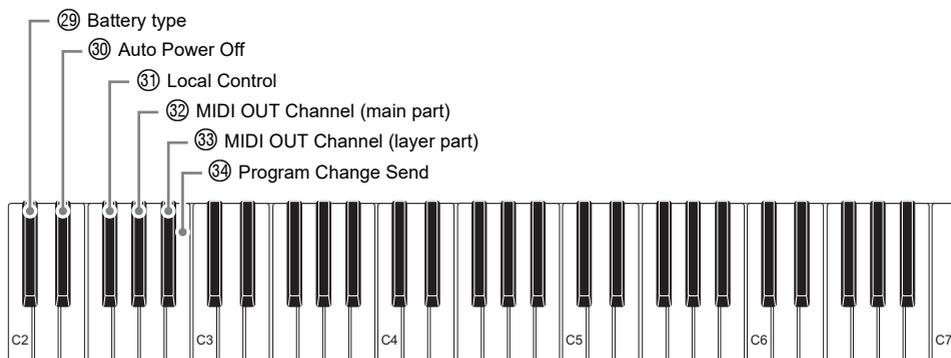
Item	Setting Options	Description	Remarks
⑰ Keyboard keys 0 through 9	-	Used to input values.	
⑱ - and + keyboard keys	-	Used to input values.	



Item	Setting Options	Description	Remarks
①⑨ Touch Response	Off, Light, Medium, Heavy (Initial Default: Medium)	Specifies how volume changes in accordance with keyboard key pressure. (See page EN-25 .)	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. One low tone: Off One high tone: Light Two high tones: Medium Three high tones: Heavy
②⑩ Touch off velocity	1 to 127 (Initial Default: 100)	Adjusts volume when Touch Response is disabled.	
②① Sustain	Off, On (Initial Default: Off)	When enabled, sustains notes to produce rich resonance.	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. High tone: On Low tone: Off
②② Sustain time (main part)	0 to 9 (Initial Default: 5)	Changes the length of the main part tone sustain when Sustain is enabled.	
②③ Sustain time (layer part)	0 to 9 (Initial Default: 5)	Changes the length of the layer part tone sustain when Sustain is enabled.	

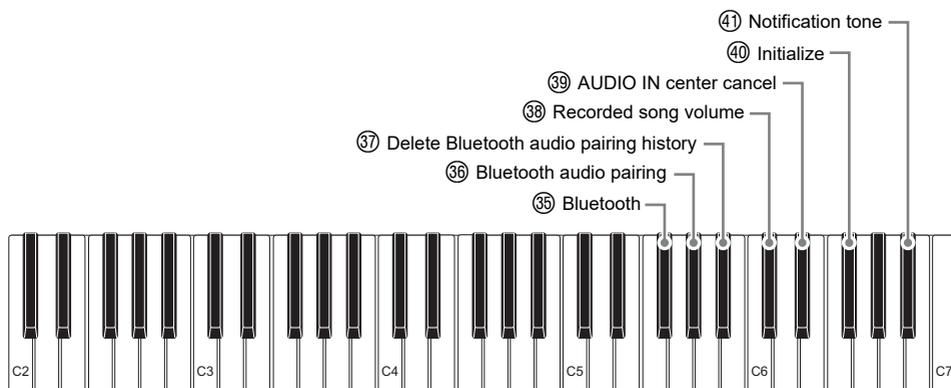


Item	Setting Options	Description	Remarks
②④ Pedal	Pedal sustain, sostenuto, soft, metronome (Initial Default: Pedal sustain)	Changes the pedal function.	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. One tone: Pedal sustain Two tones: Sostenuto Three tones: Soft Four tones: Metronome
②⑤ Pedal effect part (main)	Off, On (Initial Default: On)	Changes the pedal function effect for main part.	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. High tone: On Low tone: Off
②⑥ Pedal effect part (layer)	Off, On (Initial Default: On)	Changes the pedal function effect for layer part.	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. High tone: On Low tone: Off
②⑦ MY SETUP power on recall	Off, On (Initial Default: Off)	When enabled, automatically configures MY SETUP settings when power is turned on.	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. High tone: On Low tone: Off
②⑧ MY SETUP	–	Saves or recalls a Digital Keyboard setup.	Long-press: Save Short-press: Import



Item	Setting Options	Description	Remarks
29 Battery type	Alkaline, Nickel metal hydride (Initial Default: Alkaline)	Specifies the type of batteries being used. (See page EN-7.)	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. One tone: Alkaline Two tones: Nickel metal hydride
30 Auto Power Off	Off, On (Initial Default: On)	Enables/disables Auto Power Off. (See page EN-14.)	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. High tone: On Low tone: Off
31 Local Control	Off, On (Initial Default: On)	Enables/disables transmission of performance information generated by the Digital Keyboard to the Digital Keyboard's internal sound source.	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. High tone: On Low tone: Off
32 MIDI OUT Channel (main part)	Off, 1 to 16 (Initial Default: 1)	Changes the channel of MIDI messages that are MIDI output by main part play.	<ul style="list-style-type: none"> To return the setting to its initial default, press – and + at the same time. A reference tone sounds whenever the setting values becomes off.
33 MIDI OUT Channel (layer part)	Off, 1 to 16 (Initial Default: 2)	Changes the channel of MIDI messages that are MIDI output by layer part play.	<ul style="list-style-type: none"> To return the setting to its initial default, press – and + at the same time. A reference tone sounds whenever the setting values becomes off.

Item	Setting Options	Description	Remarks
③④ Program Change Send	0 to 127	Sends a program change message to the channel specified by MIDI OUT Channel (main part).	



Item	Setting Options	Description	Remarks
35 Bluetooth	Off, On (Initial Default: On)	Turns Bluetooth on or off.	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. Long-press (High tone): On Long-press (Low tone): Off
36 Bluetooth audio pairing	–	Pairing makes it possible to connect with a Bluetooth audio capable devices. (See page EN-66.)	Long-press while paired: Unpairing Long-press: Pairing
37 Delete Bluetooth audio pairing history	–	Deletes pairing history with Bluetooth audio capable devices. (See page EN-68.)	Long-press: Delete
38 Recorded song volume	0 to 10 (Initial Default: 10)	Adjusts the recorded song volume level.	
39 AUDIO IN center cancel	Off, On (Initial Default: Off)	Cancels the center part of audio input using the AUDIO IN jack or Bluetooth audio.	<ul style="list-style-type: none"> Each press of the keyboard key sounds a tone that lets you know what setting was selected. High tone: On Low tone: Off
40 Initialize	–	Returns all settings to their factory defaults.	Long-press: Prepare to execute Short-press (after long-press): Execute

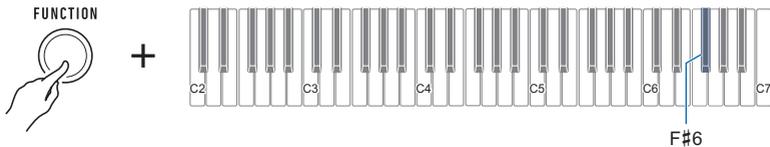
Item	Setting Options	Description	Remarks
④1 Notification tone	Off, On (Initial Default: On)	When this setting is disabled, a tone does not sound when a keyboard key is pressed while holding down FUNCTION .	

! IMPORTANT!

- Turning power off and back on again returns tone and other settings to their initial defaults (page EN-13).
- The settings below are retained even when power is turned off.
 - MIDI OUT Channel (main part, layer part)
 - Bluetooth
 - MY SETUP power on recall
 - Auto Power Off
 - Battery type

Returning Settings to Their Initial Factory Defaults

1. While holding down **FUNCTION**, long press the F#6 keyboard key.



This sounds a notification tone and prepares for initialization.

- While continuing to hold down **FUNCTION**, release the F#6 keyboard key.

2. With **FUNCTION** still held down, press the F#6 keyboard key again.

This sounds a notification tone and executes initialization. Then the Digital Keyboard will restart.

3. Release **FUNCTION** to complete the setting operation.

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.

- Use the lesson functions of an app on the smart device, playing notes on the Digital Keyboard.
- Use the Digital Keyboard sound source to sound music data played using an app on the smart device.

IMPORTANT!

- **Configure the settings of your smart device (Airplane Mode, etc.) to enable data communication.**

■ **Downloading the Smart Device App**

Download the CASIO MUSIC SPACE from the CASIO website and install it on the smart device.

<https://support.casio.com/global/en/emi/manual/CT-S1/>



Connecting with a Smart Device

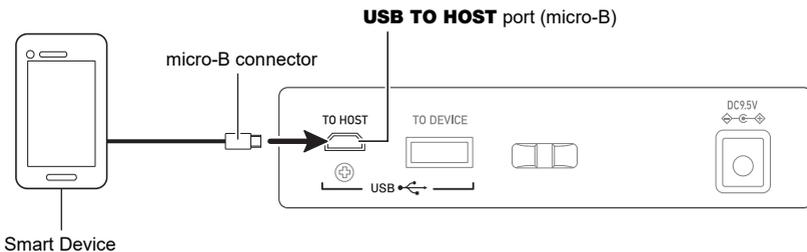
There are two ways to connect with a smart device: using a commercially available USB cable and connection via Bluetooth.

■ 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-59), install the app on the smart device.
2. Use a commercially available USB cable to connect the smart device port to the **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.



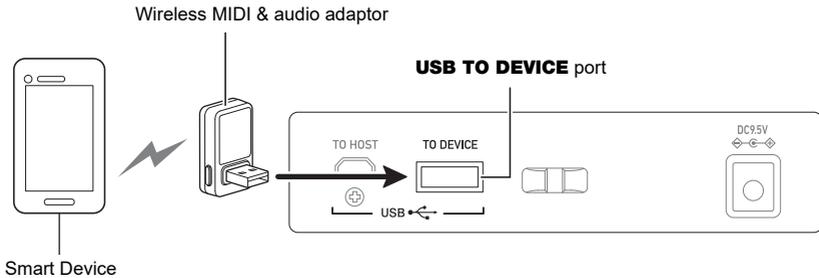
⚠ IMPORTANT!

- 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 a CASIO smart device app.

■ Using Bluetooth to Link the Digital Keyboard with a Smart Device

You can use the Wireless MIDI & audio adaptor (Option: WU-BT10) for Bluetooth linking.

1. Referring to “[Downloading the Smart Device App](#)” (page EN-59), install the app on the smart device.
2. Plug the Wireless MIDI & audio adaptor into the Digital Keyboard’s **USB TO DEVICE** port (page EN-11).
 - 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 a 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/CT-S1/>



■ Connecting to a Computer

⚠ IMPORTANT!

- 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!

- 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/CT-S1/>



■ Configuring MIDI Settings

For about the MIDI settings below, see the "Keyboard Keys Used for Configuring Settings" (page EN-49).

- MIDI OUT Channel (main part, layer part)
- 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.

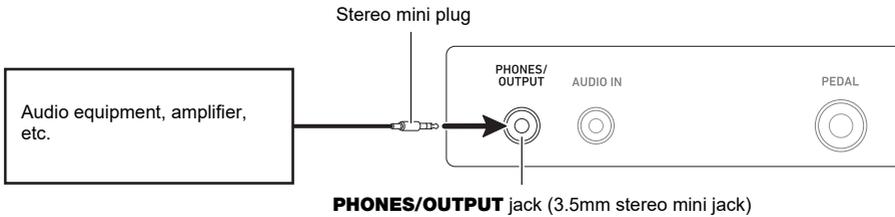
■ Sounding Output from the Digital Keyboard on an External Device

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.



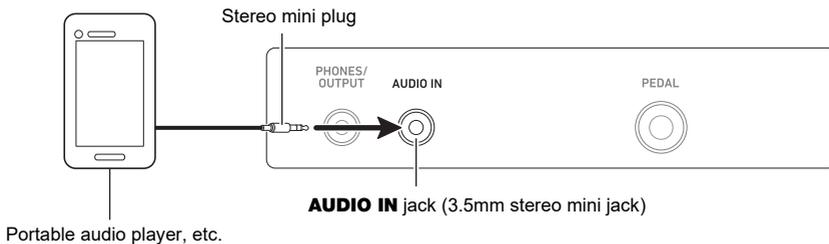
■ Sounding Input From an External Device on This Digital Keyboard

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 lower than the volume level of the notes you are playing on the keyboard, adjust the volume level of each Digital Keyboard part to balance them. See "[Adjusting the Volume Level of Each Part](#)" on page EN-33.
- 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 level 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 "[Keyboard Keys Used for Configuring Settings](#)" (pages EN-49 through 58).

NOTE

- Built-in effects (reverb) of the Digital Keyboard are not applied to **AUDIO IN** jack input.

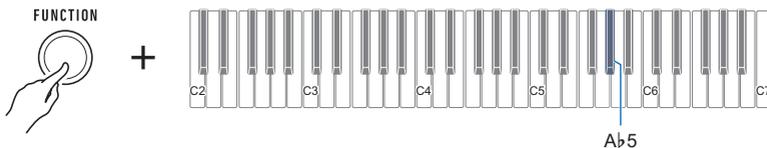
Sounding a Bluetooth Audio Capable Device (Bluetooth Audio Pairing)

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 lower than the volume level of the notes you are playing on the keyboard, adjust the volume level of each Digital Keyboard part to balance them. See “[Adjusting the Volume Level of Each Part](#)” on page [EN-33](#).
- 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 level 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-11](#)).
3. Press the  (Power) button to turn on the Digital Keyboard.
4. While holding down **FUNCTION**, long press the **A_b5** keyboard key.



This causes a tone to sound every few seconds, indicating the Bluetooth audio pairing mode.

- To exit the Bluetooth audio pairing mode, press the A_b5 keyboard key again.

This will stop the tone and exit the Bluetooth audio pairing mode.

5. Release **FUNCTION**.
6. Use the setting screen of the Bluetooth capable audio device to select “**WU-BT10 AUDIO**” to pair with this Digital Keyboard.

This causes a tone to sound and connects with the Bluetooth audio capable device.

7. Produce sound on the Bluetooth audio capable device.

Output from the audio Bluetooth capable device will sound from the Digital Keyboard's speakers.

NOTE

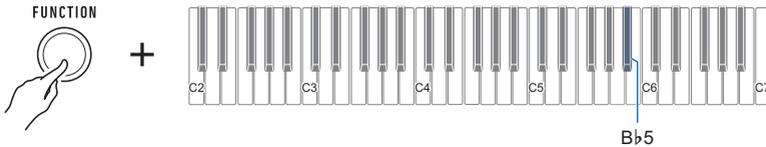
- Turn on Bluetooth on both this Digital Keyboard and on the Bluetooth audio capable device.
- For information about how to change this Digital Keyboard's Bluetooth settings, see "[Turning Off Bluetooth](#)" (page [EN-70](#)).
- Information about the last Bluetooth audio capable devices connected to 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-66).
- 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-11).
 - You will not be able to delete a Bluetooth audio pairing registration unless a Wireless MIDI & audio adaptor is connected to the Digital Keyboard.
3. Press the **⏻** (Power) button to turn on the Digital Keyboard.
4. While holding down **FUNCTION**, long press the **B♭5** keyboard key.



This sounds a notification tone and deletes the Bluetooth audio capable pairing registration.

5. Release **FUNCTION** to complete the setting 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 the  (Power) button to turn off the Digital Keyboard.
2. Plug the Wireless MIDI & audio adaptor into the **USB TO DEVICE** port (page [EN-11](#)).
3. Press the  (Power) button to turn on the Digital Keyboard.
4. Use the setting screen of app you installed on your Bluetooth capable MIDI device to select “WU-BT10 MIDI” and connect with the Digital Keyboard.

IMPORTANT!

- Do not perform any Digital Keyboard operation while it is in the process of connecting with a Bluetooth MIDI capable device.

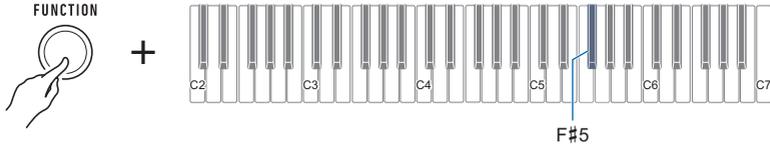
NOTE

- Turn on Bluetooth on both this Digital Keyboard and on the Bluetooth MIDI capable device.
- For information about how to change this Digital Keyboard's Bluetooth settings, see “[Turning Off Bluetooth](#)” (page [EN-70](#)).
- 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. While holding down **FUNCTION**, long-press the **F#5** keyboard key.



A tone will sound and Bluetooth will turn off.

- Long-pressing the F#5 keyboard key again will turn Bluetooth back on.
- Each long-press of the keyboard key sounds a tone that lets you know what setting was selected.

High tone: Enable*

Low tone: Disable

* If you are using the Wireless MIDI & audio adaptor, a standby tone will sound until Bluetooth becomes enabled.

2. Release **FUNCTION** to complete the setting operation.

Troubleshooting

Symptom	Required Action
Included Accessories	
I can't find included items during unpacking.	Carefully check inside all of the packing materials.
Power Requirements	
Power does not turn on.	<ul style="list-style-type: none"> • Check the AC adaptor or make sure that the batteries are facing correctly (page EN-6). • Replace the batteries with new ones. Or use AC adaptor power (page EN-6).
The Digital Keyboard suddenly turns off after outputting a loud sound.	<ul style="list-style-type: none"> • Replace the batteries with new ones. Or use AC adaptor power (page EN-6). • Lower the volume setting of the external device.
The Digital Keyboard suddenly turns off after about 30 minutes.	Disable Auto Power Off (page EN-14).
Sound	
Nothing happens when I press a keyboard key.	<ul style="list-style-type: none"> • Adjust the volume level (page EN-15). • Confirm that nothing is plugged into the PHONES/ OUTPUT jack on the back of the Digital Keyboard. • Try turning this Digital Keyboard off and then back on again (page EN-13) to initialize settings.
The metronome does not sound.	<ul style="list-style-type: none"> • Check and adjust the metronome volume level (page EN-15). • Try turning this Digital Keyboard off and then back on again (page EN-13) to initialize settings.
Notes keep sounding, without stopping.	<ul style="list-style-type: none"> • Try turning this Digital Keyboard off and then back on again (page EN-13) to initialize settings. • Replace the batteries with new ones. Or use AC adaptor power (page EN-6).
Some notes are cut off while they are playing.	This happens whenever the number of notes being sounded exceeds the maximum polyphony value of 64 (32 for some tones). It does not indicate malfunction.
The volume level or tone setting I configured has changed.	<ul style="list-style-type: none"> • Adjust the volume level (page EN-15). • Try turning this Digital Keyboard off and then back on again (page EN-13) to initialize settings. • Replace the batteries with new ones. Or use AC adaptor power (page EN-6).
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.
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.

Symptom	Required Action
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"> • Check and adjust the transpose setting (page EN-36) and tuning setting (page EN-37). • Try turning this Digital Keyboard off and then back on again (page EN-13) to initialize settings.
The reverb of notes seems to change suddenly.	<ul style="list-style-type: none"> • Check and adjust the reverb setting (page EN-30). • Try turning this Digital Keyboard off and then back on again (page EN-13) to initialize settings.
Connecting to a computer	
I can't send or receive MIDI data.	<ul style="list-style-type: none"> • Check to make sure that the USB cable is connected to this Digital Keyboard and your computer, and that the correct device is selected with your computer's music software (page EN-62). • Turn off this Digital Keyboard and then exit the music software on your computer. Next, turn this Digital Keyboard back on and then restart the music software on your computer.

Product Specifications

Model	CT-S1BK/CT-S1WE/CT-S1RD
Keyboard	61 keys
Touch Response	3 levels, Off
Maximum Polyphony	64 notes
Tones	
Preset Tones	61 tones, main tone buttons, advanced tones
Other	Layer, Sustain, Tone Memory
Effects	Reverb (24 types, Tone, Off); Chorus (built into tones); Delay (built into tones); DSP (built into some tones)
Master Effects	Equalizer (10 presets)
Active Effects	Volume sync equalizer, surround
External Input Effects	Vocal Cut. Cancels the vocal (center) part in audio input using the AUDIO IN terminal or Bluetooth audio.
Metronome	
Beat	Beat chime off, 1 to 16 beats
Tempo	20 to 255
MIDI Recorder	Real-time recording, playback
Number of Songs	1
Capacity	Approximately 40,000 notes (per song)
Demo Function	1 demo song; 10 piano demo songs
Function Volume Adjustment	Metronome
Other Functions	
Transpose	±1 octave (–12 to 0 to +12 semitones)
Octave Shift	Main part, layer part, ±3 octaves
Tuning	A4 = 415.5 to 465.9 Hz (Initial Default: 440.0 Hz)
Scales	17 preset scales
MIDI Function	16-channel multi-timbre receive; GM Level 1 standard
APP Function	
Supported Devices	iOS, Android (USB terminal connection)

Jacks	
PHONES/OUTPUT jack	Stereo mini jack (3.5 mm)
AUDIO IN jack	Stereo mini jack (3.5 mm) (Input impedance: 10 k Ω ; 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, metronome)
AC adaptor terminal	9.5V DC
Power Requirements	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)* Actual continuous operation time may be shorter due to battery type, performance type, and usage environment.
AC adaptor	AD-E95100L (JEITA Standard with unified polarity plug)
Auto Power Off	After approximately 30 minutes of non-operation; Can be disabled.
Speakers	13 cm \times 6 cm (oval) \times 2 (Output: 2.5 W + 2.5 W)
Power Consumption	9.5 V \approx 7.5 W
Dimensions	93.0 (W) \times 25.8 (D) \times 8.3 (H) cm (36 5/8 \times 10 3/16 \times 3 1/4 inch)
Weight	Approximately 4.5 kg (9.9 lbs) (Excluding batteries)

* 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.



Tone List

No.	Keyboard Key Note Name	Tone Name*1	Tone Variation	Program Change	Bank Select MSB	Bank Select LSB*2	DSP Tone *3	Advanced Layer Tone*4	Part Octave Shift
PIANO									
1	C2	STAGE PIANO	STANDARD	0	2	0/64	✓		0
2	C#2	PIANO PAD	ADVANCED	1	2	0/64		✓	0
3	D2	DYNAMIC PIANO	MODERN	2	2	0/64	✓		0
4	E \flat 2	CLASSIC GRAND	VINTAGE	3	2	0/64			0
5	E2	ROCK PIANO	STANDARD	4	2	0/64	✓		0
6	F2	BALLAD PIANO	MODERN	5	2	0/64	✓		0
7	F#2	HONKY-TONK	VINTAGE	6	2	0/64			0
8	G2	MELLOW PIANO	VINTAGE	7	2	0/64	✓		0
9	A \flat 2	BREEZING PIANO	MODERN	8	2	0/64	✓		0
10	A2	BASS/PIANO	STANDARD	9	2	0/64	✓		0
E.PIANO 1									
11	B \flat 2	STAGE E.PIANO	STANDARD	10	2	0/64	✓		0
12	B2	PHASER E.PIANO	ADVANCED	11	2	0/64	✓		0
13	C3	DYNO E.PIANO	MODERN	12	2	0/64	✓		0
14	C#3	ELECTRIC GRAND	VINTAGE	13	2	0/64	✓		0
E.PIANO 2									
15	D3	DIGITAL E.PIANO	STANDARD	14	2	0/64	✓		0
16	E \flat 3	AMP 60's E.PIANO	ADVANCED	15	2	0/64	✓		0
17	E3	GALAXIA E.PIANO	MODERN	16	2	0/64	✓		0
18	F3	TREMOLO 60's E.PIANO	VINTAGE	17	2	0/64	✓		0
19	F#3	CRUNCH E.PIANO	VINTAGE	18	2	0/64	✓		0
20	G3	LUCENT E.PIANO	MODERN	19	2	0/64	✓		0
21	A \flat 3	AUTO PAN E.PIANO	VINTAGE	20	2	0/64	✓		0
22	A3	DIGITAL E.PIANO 2	MODERN	21	2	0/64	✓		0
ORGAN									
23	B \flat 3	JAZZ ORGAN	STANDARD	22	2	0/64	✓		0
24	B3	VELO.ORGAN	ADVANCED	23	2	0/64	✓		0
25	C4	ROCK ORGAN	MODERN	24	2	0/64	✓		0
26	C#4	PIPE ORGAN	VINTAGE	25	2	0/64	✓		0
27	D4	AMP ORGAN	ADVANCED	26	2	0/64	✓		0
28	E \flat 4	REED ORGAN	STANDARD	27	2	0/64	✓		0
29	E4	GOSPEL ORGAN	MODERN	28	2	0/64	✓		0
30	F4	F-ORGAN	VINTAGE	29	2	0/64	✓		0
31	F#4	V-ORGAN	VINTAGE	30	2	0/64	✓		0
32	G4	CATHEDRAL ORGAN	STANDARD	31	2	0/64	✓		0
KEYBOARD									
33	A \flat 4	HARPSICHORD	STANDARD	32	2	0/64	✓		0
34	A4	WAH CLAVI	ADVANCED	33	2	0/64	✓		0
35	B \flat 4	CLAVI	MODERN	34	2	0/64	✓		0
36	B4	TAPE FLUTE	VINTAGE	35	2	0/64	✓		0

No.	Keyboard Key Note Name	Tone Name* ¹	Tone Variation	Program Change	Bank Select MSB	Bank Select LSB* ²	DSP Tone * ³	Advanced Layer Tone* ⁴	Part Octave Shift
SYNTH									
37	C5	SYNTH-BRASS	STANDARD	36	2	0/64	✓		0
38	C#5	MAGNI SYNTH-PAD	ADVANCED	37	2	0/64	✓	✓	0
39	D5	SYNTH-STRINGS	MODERN	38	2	0/64			0
40	E♭5	SAW LEAD	VINTAGE	39	2	0/64	✓		0
41	E5	VOCODER	ADVANCED	40	2	0/64	✓		0
42	F5	SYNTH-CHOIR	MODERN	41	2	0/64	✓		0
OTHERS									
43	F#5	STRINGS	STANDARD	42	2	0/64	✓		0
44	G5	GUITAR PAD	ADVANCED	43	2	0/64		✓	0
45	A♭5	VIBRAPHONE	MODERN	44	2	0/64	✓		0
46	A5	SYMPHONIC BRASS	VINTAGE	45	2	0/64			0
47	B♭5	FRENCH ACCORDION	STANDARD	46	2	0/64	✓		0
48	B5	BRASS VELO.FALL	ADVANCED	47	2	0/64			0
49	C6	SOUND TRACK	VINTAGE	48	2	0/64	✓		0
50	C#6	VL-TONE	VINTAGE	49	2	0/64			0
51	D6	CT E.PIANO	VINTAGE	50	2	0/64			0
52	E♭6	CT HARP	VINTAGE	51	2	0/64			0
53	E6	CZ BASS	VINTAGE	52	2	0/64			-1
54	F6	CZ TRUMPET	VINTAGE	53	2	0/64			0
55	F#6	CZ VIOLIN	VINTAGE	54	2	0/64			0
56	G6	CZ E.PIANO	VINTAGE	55	2	0/64			0
57	A♭6	CZ GUITAR	VINTAGE	56	2	0/64			0
58	A6	VZ SEEGOD	VINTAGE	57	2	0/64			0
59	B♭6	VZ BRASS	VINTAGE	58	2	0/64			0
60	B6	VZ BASS	VINTAGE	59	2	0/64			-1
61	C7	VZ HARP	VINTAGE	60	2	0/64			0

• Tones numbered 50 to 61 are CASIO CLASSIC TONES, which are reproductions of tones from classical CASIO musical instruments.

*1 Blue tones are main tones that can be selected using a button operation (page EN-21).

*2 When 64 is received, the chorus and reverb types change with the tone. There is no change when 0 is received.

*3 These tones use special effects.

*4 This function superimposes different sound only on a chord produced when the keys for three or more notes are held down at the same time. This produces chords with more depth, which are effective when playing a melody with a simple tone.

■ VL-TONE (Tone List No. 50) Keyboard Key List

Keyboard Key Note Name	Sound	
C1-B1	-	
C2	Rhythm	March
C#2		Waltz
D2		4-Beat
E♭2		Swing
E2		Rock 1
F2		Rock 2
F#2		Bossanova Part A
G2		Bossanova Part B
A♭2		Samba Part A
A2		Samba Part B
B♭2		Rhumba Part A
B2		Rhumba Part B
C3		Beguine
C#3		"Po"
D3		"Pj"
E♭3		"Sha"
E3 - G9	Violin	

- Selecting VL-TONE assigns rhythm tones to keyboard keys C2 through E♭3, and violin tones to keys E3 through G9 as shown above.

Setting Item List

C2		C2	Reverb
		C#2	Battery type
		D2	Reverb type
		Eb2	Auto Power Off
		E2	Equalizer
		F2	Scale tuning type
		F#2	Local Control
		G2	Scale tuning base note
		Ab2	MIDI OUT Channel (main part)
		A2	Piano Stretch Tuning
		Bb2	MIDI OUT Channel (layer part)
		B2	Program Change Send
	C3		C3
		C#3	Octave shift –
		D3	Main tone
		Eb3	Octave shift +
		E3	Layer tone
		F3	Part octave shift (main)
		F#3	Transpose –
		G3	Part octave shift (layer)
		Ab3	Transpose +
		A3	Part volume (main)
		Bb3	Tuning
		B3	Part volume (layer)
C4			C4
		C#4	– and + keyboard keys (–)
		D4	Keyboard key 1
		Eb4	– and + keyboard keys (+)
		E4	Keyboard key 2
		F4	Keyboard key 3
		F#4	
		G4	Keyboard key 4
		Ab4	
		A4	Keyboard key 5
		Bb4	
		B4	Keyboard key 6
	C5		C5
		C#5	
		D5	Keyboard key 8
		Eb5	
		E5	Keyboard key 9
		F5	Touch Response
		F#5	Bluetooth
		G5	Touch off velocity
		Ab5	Bluetooth audio pairing
		A5	
		Bb5	Delete Bluetooth audio pairing history
		B5	
C6			C6
		C#6	Recorded song volume
		D6	Sustain time (main part)
		Eb6	AUDIO IN center cancel
		E6	Sustain time (layer part)
		F6	Pedal
		F#6	Initialize
		G6	Pedal effect part (main)
		Ab6	
		A6	Pedal effect part (layer)
		Bb6	Notification tone
		B6	MY SETUP power on recall
	C7		C7

MIDI Implementation Chart

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1	1 - 16	
	Changed	1 - 16	1 - 16	
Mode	Default	Mode 3	Mode 3	
	Messages Altered	X *****	X *****	
Note Number	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
After Touch	Key's	X	X	
	Ch's	X	O	
Pitch Bender		X	O	
Control Change	0	O	O	Bank select MSB
	1	X	O	Modulation
	5	X	O	Portamento Time
	6, 38	X	O *3	Data entry MSB, LSB
	7	X	O	Channel Volume
	10	X	O	Fan
	11	X	O	Expression
	64	O *2	O	Damper Pedal (Sustain)
	65	X	O	Portamento Switch
	66	O *2	O	Sostenuto
	67	O *2	O	Soft pedal
	71	X	O	Filter resonance
	72	X	O	Release time
	73	X	O	Attack time
	74	X	O	Filter Cutoff Frequency
	76	X	O	Vibrato rate
	77	X	O	Vibrato depth
	78	X	O	Vibrato delay
84	X	O	Portamento Control	
91	X	O	Reverb send level	
100, 101	X	O *3	RPN LSB, MSB	
Program Change	True #	O *****	O 0 - 127	
		O *3	O *3	
Exclusive		O *3	O *3	
System Common	Song Pos	X	X	
	Song Sel	X	X	
	Tune	X	X	
System Real Time	Clock	X	X	
	Commands	X	X	
Aux Messages	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	
Remarks	*1: Depends on tone. *2: Select using the pedal function. *3: For details about RPN and system exclusive messages, see MIDI Implementation at https://support.casio.com/global/en/emi/manual/CT-S1/ • The MIDI messages marked with "x" in the "Transmitted" column of the above chart may be output along with certain operations.			

Mode 1 : OMNI ON, POLY
 Mode 3 : OMNI OFF, POLY

Mode 2 : OMNI ON, MONO
 Mode 4 : OMNI OFF, MONO

O : Yes
 X : No

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