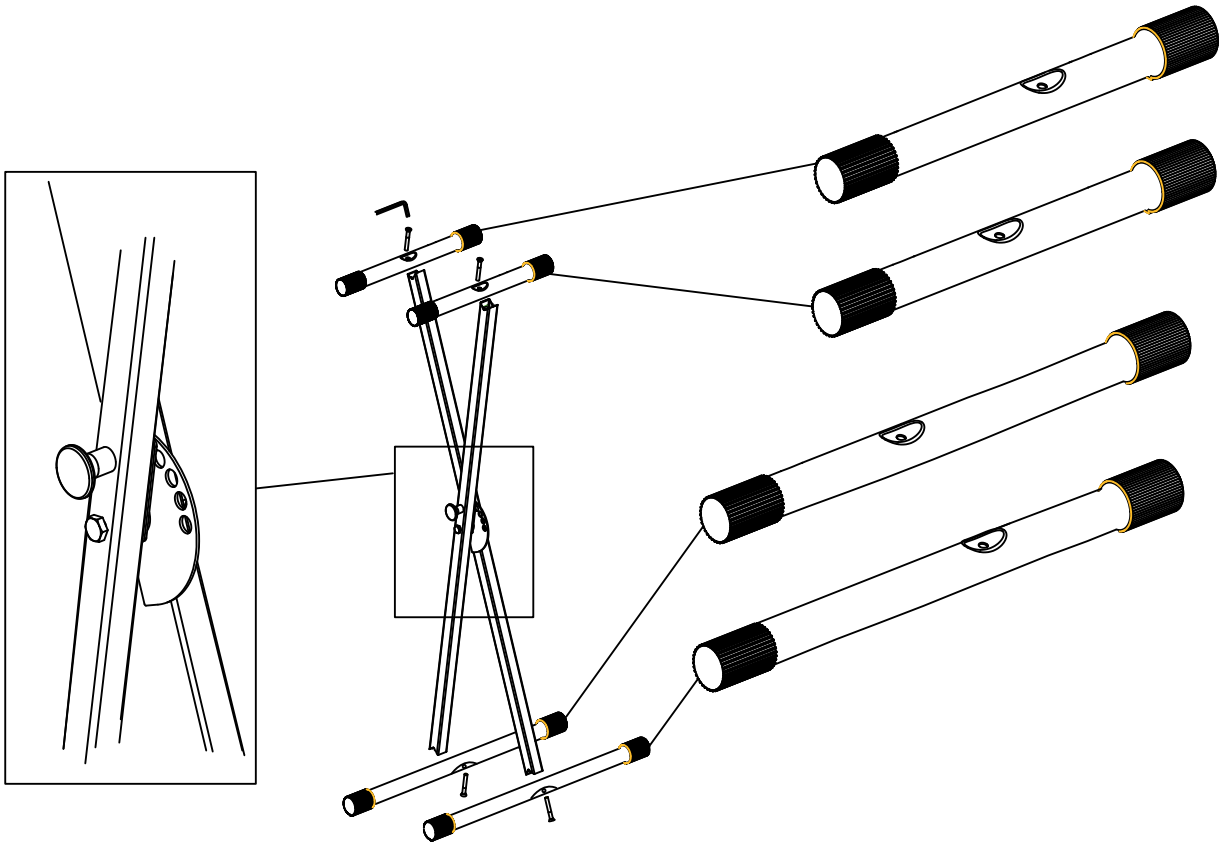
X-Keyboardständer einstrebig



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We love music!

Musikhaus Kirstein GmbH
Bernbeurener Str. 11
86956 Schongau
www.kirstein.de

Art. 00009812 /00062730
Version 10/2019

KH-10

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REINIGUNG: Verwenden Sie zur Reinigung ein fusselfreies, trockenes oder nur leicht angefeuchtetes Tuch.

TECHNISCHE DATEN: System: dynamischer Kopfhörer Stereo, Nennimpedanz: 32Ohm +/- 10%, Frequenzbereich: 20-20000Hz, Empfindlichkeit: 103dB S.P.L. bei 1kHz +/- 2%

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PRECAUTIONS (PLEASE READ CAREFULLY). Children should be supervised to ensure that they do not use this product as a toy. Never allow children to play with the packaging material unsupervised. Warnings: Read these instructions and keep these instructions in a safe place. Do not use this appliance in water. Precautions: To avoid damage to the product, do not place it in places with high temperatures or a lot of dust, very low or high humidity, do not place it directly next to an air conditioner and avoid direct sunlight. Do not use force when handling the product. Location: Do not expose the product to the following conditions to avoid deformation, discoloration or major damage: Direct sunlight, extreme temperature or humidity, excessively dusty or dirty place. Cleaning: Only clean the product with a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids or chemically impregnated wiping cloths. We reserve the right to make technical changes and changes in appearance. All information is correct at the time of printing. Musikhaus Kirstein GmbH accepts no liability for the accuracy and completeness of the descriptions, illustrations and information contained herein. Colors and specifications shown may differ slightly from the product. Musikhaus Kirstein GmbH products are only available through authorized dealers. Distributors and dealers are not authorized agents of Musikhaus Kirstein GmbH and have no authority to legally bind Musikhaus Kirstein GmbH in any way, whether expressly or by implication. These operating instructions are protected by copyright. Any duplication or reprinting, even in part, and any reproduction of the illustrations, even in modified form, is only permitted with the written consent of Musikhaus Kirstein GmbH.

WARNING: Ensure an appropriate volume level! Listening at too high a volume level can permanently damage your hearing!



FUNCTION AND HANDLING The headphones can be used with all commercially available playback devices such as CD players, stereo systems and mobile music players that have a headphone output with a 3.5mm stereo jack. If your sound source is equipped with a headphone output with a 6.3 mm stereo jack, use the supplied adapter (6.3 mm to 3.5 mm stereo jack).

MAINTENANCE: Your appliance does not require any special maintenance. In the event of a malfunction, contact an approved service center or the manufacturer directly.

CLEANING: Use a lint-free, dry or slightly damp cloth for cleaning.

TECHNICAL DATA: System: dynamic stereo headphones, nominal impedance: 32Ohm +/- 10%, frequency range: 20-20000Hz, sensitivity: 103dB S.P.L. at 1kHz +/- 2%

WEEE declaration (Waste of Electrical and Electronic Equipment) Your product has been developed and manufactured using high-quality materials and components that are recyclable and reusable. This symbol means that electrical and electronic equipment must be disposed of separately from household waste at the end of its life. Please dispose of this appliance at your local municipal collection point or recycling center. Please help to protect the environment in which we all live.

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CT-FS1 Casiotone

USER'S GUIDE

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Turning the power on or off

Connecting headphones (sold separately)

Selecting Tones

Changing the Pitch in Semitone Units (Transpose)

Layering Two Tones

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Overview of the Digital Keyboard

Features of the CT-FS1

The CT-FS1 is a Digital Keyboard that features five octaves of piano-sized keys. This Digital Keyboard lets you play 61 different tones, including keyboard instruments such as pianos and organs, as well as string and wind instruments and synth sounds.

You can easily adjust the pitch of notes on the keyboard (tuning, transpose, etc.) and change the effects applied to the sound (sustain, reverb, etc.), which are functions unique to electronic musical instruments. Also, music played back on your smart device* can be wirelessly played from the speakers, so you can easily enjoy playing the keyboard together with the music.

In addition, the “Feel Sync” function, introduced for the first time on the CT-FS1, lets users easily enjoy the feeling of playing the keyboard even if they have no prior playing experience.

* Smartphone or tablet (iOS, Android)

Feel Sync function: enjoy a new playing experience!

The Feel Sync function plays notes by correcting the pitches to match the chord progression of the song that’s playing back while you are playing the keys. By simply playing the keyboard to the rhythm of the song, you can enjoy the experience of playing along with the flow, as if you were playing the harmony yourself. This function can be used with songs played on the Feel Sync app for smart devices, or with the demo songs built into the Digital Keyboard.

For details, refer to “Enjoy Playing with Ease (Feel Sync Function)”.

Main functions: what you can do with this Digital Keyboard

This section introduces the main functions of the Digital Keyboard.

■Demo song playback function

Five pre-arranged demo songs with famous melodies are built in. While playing the demo songs, you can enjoy playing the keyboard using the Feel Sync function.

Enjoy Playing with Ease (Feel Sync Function)

■61 instrument tones

This Digital Keyboard is equipped with 61 instrument tones. The five main tones can be selected using the buttons on the front panel, and all 61 tones can be selected using the keyboard.

Selecting Tones

Tone List

■Layer function

This function lets you select two tones and play them over one another. The volume balance between the two tones can be adjusted, and each tone can be shifted up or down in octave units.

Layering Two Tones

■Touch Response function

The Touch Response function changes the volume according to the strength (velocity) at which you play the keys. You can also adjust the sensitivity of Touch Response or turn it off (making the volume stay the same).

Playing with Touch Response

■Various functions to adjust the pitch

The following functions are available.

Octave Shift	You can raise or lower the pitch of the notes on the keyboard in octave units. Changing the Pitch in Octave Units (Octave Shift)
Transpose	You can raise or lower the pitch of the notes on the keyboard in semitones. Changing the Pitch in Semitone Units (Transpose)
Tuning	The pitch of the entire keyboard can be fine-tuned in 0.1 Hz increments. Fine Tuning (Tuning)
Scale Tuning*	In addition to equal temperament, you can use scale tunings heard in classical music, Indian music, Arabic music, and more. Changing the Keyboard Scale Tuning

* A scale tuning refers to the system used for the tuning of the pitches on an instrument. Modern pianos generally use equal temperament.

■Various functions for applying effects to the sound

The following functions are available.

Sustain	Makes the sound linger after a key is released. Sustaining Notes After Keyboard Keys Are Released
Reverb	Various reverberations (such as the echoing sound of a stadium) can be added to the sound. Playing with Reverb
Surround	This adds a multi-dimensional spaciousness to the sound from the speakers of the Digital Keyboard. Playing with a Multi-dimensional Expanded Sound (Surround)
Equalizer	This effect lets you choose settings to adjust the tonal character, such as emphasizing a certain tonal range, giving the sound a softer quality and so forth. Using the Equalizer (Equalizer)

■Metronome function

This Digital Keyboard has a built-in electronic metronome. The metronome lets you practice playing at a constant tempo.

Using the Metronome

■MY SETUP function (saving and recalling settings)

The current settings including the selected tone, the on/off state of the layer function and so forth can be saved together as “MY SETUP”. Once you have saved the settings for playing a particular song, you can recall them from MY SETUP when you play that song again.

Saving and Recalling a Setup (MY SETUP)

Advanced functions: what you can do by connecting to external devices

Here is what you can do when connecting the Digital Keyboard to an external device (such as a smart device* or a computer).

* Smartphone or tablet (iOS, Android)

■Connect to the dedicated apps

Feel Sync
Using the dedicated Feel Sync app, users can enjoy playing the keyboard along with the Feel Sync function, while playing audio files (MP3, WAV, etc.) on their smart device or songs from content services provided by the app.

Using the Feel Sync Function While Playing a Song on the Dedicated App

CASIO MUSIC SPACE
The CASIO MUSIC SPACE dedicated app can be used along with the Digital Keyboard to enjoy in a variety of ways.
Main functions
- Remote Controller
- Piano Roll
- Score Viewer
- Music Player
- Live Concert Simulator
- Data Center

Using the Dedicated CASIO MUSIC SPACE App

■Wirelessly play the sound from smart devices via the Digital Keyboard

Connect the Digital Keyboard wirelessly to your smart device and play the sound from the smart device through the speakers of the Digital Keyboard. The Digital Keyboard can be used as a Bluetooth speaker.

Connecting via Bluetooth Audio
When a song with vocals is playing back on your smart device, you can cut (remove or reduce the volume of) the vocals from the sound that plays from the Digital Keyboard.

Switching AUDIO IN Center Cancel On/Off

■Send/receive MIDI data

MIDI data*1 can be sent and received by connecting the Digital Keyboard to a computer or smart device. For example, you can send MIDI data from this Digital Keyboard to a computer or smart device and record what you play on the keyboard using MIDI-compatible music software or music apps (commercially available). *2

Making a Bluetooth Low Energy MIDI Connection (Wireless MIDI Connection)

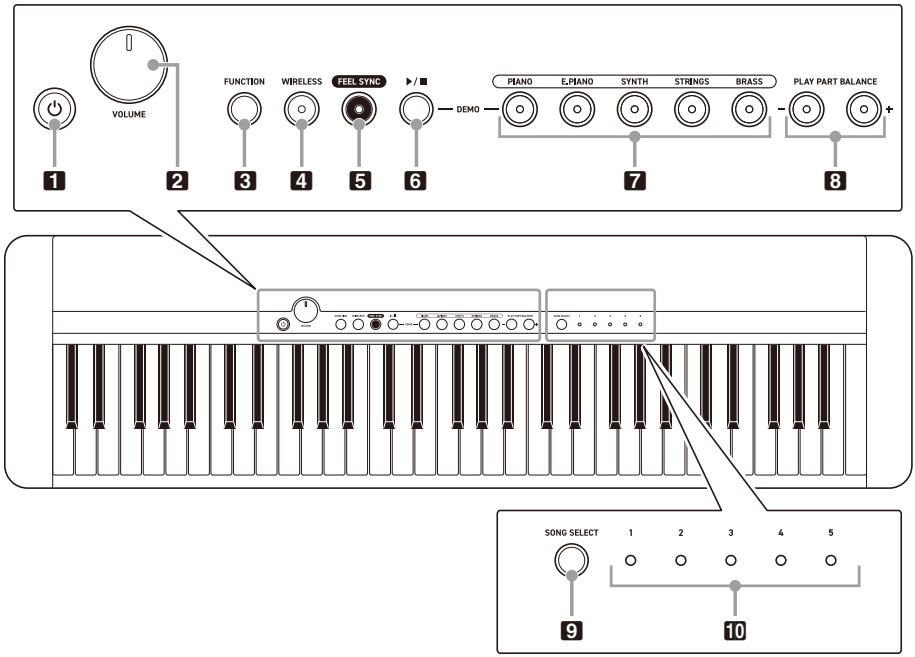
Connecting to a Computer or Smart Device via Cable (MIDI Data Transmission/Reception)

*1 MIDI is an abbreviation for Musical Instrument Digital Interface. This is a unified standard that allows performance information (keys pressed and released, touch strength, etc.) to be exchanged between electronic musical instruments or between electronic musical instruments and computer equipment, regardless of manufacturer. The performance information exchanged is called MIDI data.

*2 The things you can do with MIDI depend on the music software and music apps you use.

Part Names and Functions

Front panel



1 ⏻**(Power)** button
Press to turn on the power. Press and hold to turn off the power.

2 **VOLUME** knob
Turn this knob to change the master volume.

3 **FUNCTION** button
You can change settings on the Digital Keyboard by pressing and holding this button and pressing a specific key.

4 **WIRELESS** button
Press this button briefly to toggle the Digital Keyboard's Bluetooth® function on/off. Press and hold for audio pairing with a smart device.
(Refer to "Pairing for Bluetooth audio")

5 **FEEL SYNC** button
Each time you press this button, the Feel Sync function toggles on/off.

6 ▶/■ button
Press to play back the selected demo song, and press again to stop. Press this button and the **PIANO** button at the same time to enter the "Feel Sync Demo Mode", which plays all of the demo songs repeatedly.

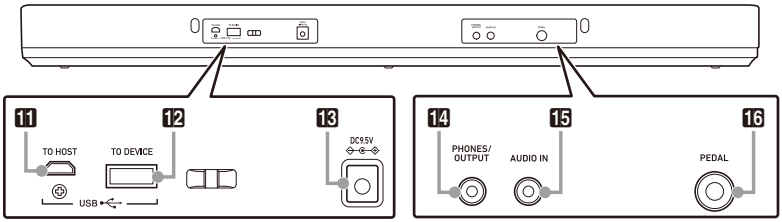
7 Main tone buttons
The tone changes according to the button you press.

8 **PLAY PART BALANCE** buttons
These adjust the balance between the playback volume of the song and what you play on the keyboard.

9 **SONG SELECT** button
Each press of this button switches in order from 1 to 5 for the demo song to play back.

10 **SONG SELECT** LEDs
The LED of the number of the currently selected demo song lights up.

Back



11 **USB Micro B** port

12 **USB Type A** port

13 Power terminal (**DC 9.5V**)

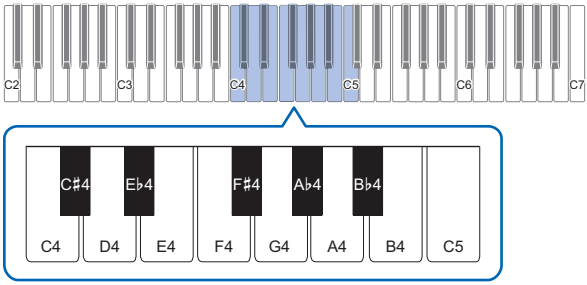
14 **PHONES/OUTPUT** jack

15 **AUDIO IN** jack

16 **PEDAL** jack

How the Key Names Are Labeled in This Manual (Note Name/Pitch)

Note names and pitches on the keyboard are indicated using the international system (middle C = “C4”), with the lowest C key named “C2” and the highest C key named “C7”.



Before Use

Preparation Before Playing

Getting the power supply ready (AC adaptor or batteries)

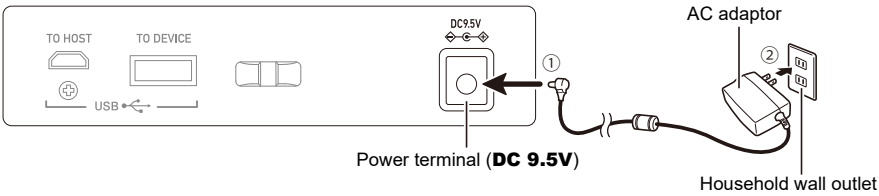
This Digital Keyboard can be powered by an AC adaptor or batteries. For stable performance, we recommend using an AC adaptor.

■Using the AC adaptor

Use the AC adaptor (JEITA standard, with unified polarity plug) supplied with the Digital Keyboard. Use of other AC adaptors may cause smoke or a malfunction.

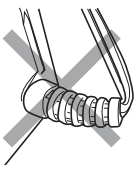
AC adaptor model: AD-E95100LE/LG/LJ/LU/LW (JEITA standard plug)

Connect the AC adaptor following the numbers ① to ② in the figure below in order.

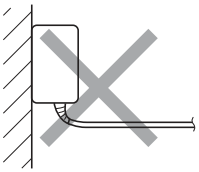


IMPORTANT!

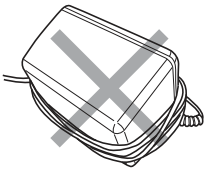
- **Never connect the AC adaptor supplied with the Digital Keyboard to any other device. Doing so may cause a malfunction.**
- **Always turn off the power of the Digital Keyboard before plugging in or unplugging the AC adaptor.**
- **The AC adaptor will heat up slightly after prolonged use, but this is not a malfunction.**
- **Unplug the AC adaptor from the power outlet when not using the Digital Keyboard for a long period of time.**
- **To prevent wire breakage, take care to apply as little strain as possible on the cord.**



Do not bend or flex the cord



Do not pull on the cord



Do not wrap the cord around anything

- **Be careful not to insert any metal pieces, pencils or the like into the power terminal (DC 9.5V) of the Digital Keyboard. If such objects get into the terminal, this may cause an accident.**

■Using batteries

IMPORTANT!

- **Always turn off the power to the Digital Keyboard before inserting batteries.**
- **Use commercially available AA alkaline batteries or AA eneloop batteries.**
- **When the batteries are depleted, the Digital Keyboard may not operate properly. If this occurs, replace the batteries with new ones or recharge the rechargeable batteries.**
- **When turning the Digital Keyboard over to insert batteries, note the following.**
  - **Be careful not to get your hand pinched under the Digital Keyboard. Failing to do so may cause injury.**
  - **Do not subject the Digital Keyboard to strong impact, such as by letting it accidentally fall over. This may cause damage to the VOLUME knob or keyboard.**
- **Even if there is no low battery indication, be sure to replace the batteries once a year. In particular, if depleted rechargeable batteries are left in the Digital Keyboard, this may cause them to deteriorate, so remove them immediately.**

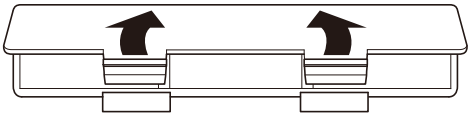
Rechargeable batteries

When using rechargeable batteries, note the following:

- Use AA eneloop rechargeable batteries manufactured by the Panasonic Group. Do not use any other kind of rechargeable batteries.
- Be sure to use a dedicated charger to charge rechargeable batteries.
- Rechargeable batteries cannot be recharged while they are inside the product that they are powering.
- Leaving depleted rechargeable batteries in the Digital Keyboard may cause them to deteriorate. When the low battery indication appears, remove the batteries immediately.
- When using rechargeable batteries and a dedicated charger, read the instruction manuals and notes that come with each product, and adhere to the conditions of use.

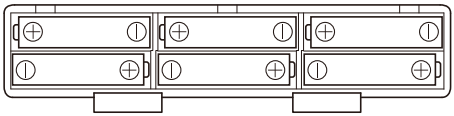
Inserting the batteries

1. Open the battery case lid on the back of the Digital Keyboard.

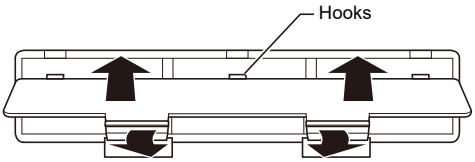


2. Place six commercially available AA batteries in the battery case.

- Insert the batteries in the correct +/– orientation.



3. Insert the hooks into the holes in the battery case and close the lid.



4. Refer to "Setting the Battery Type" to set the battery type.

Low battery indication

When the Digital Keyboard is used only with batteries without an AC adaptor connected, the LEDs on the **PLAY PART BALANCE** buttons blink if the batteries are running low.



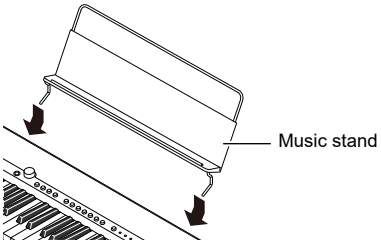
If the LEDs blink, replace the batteries with new ones. If you are using rechargeable batteries, recharge them before reinserting them into the Digital Keyboard. The LEDs show the status of the batteries, as shown in the table below.

LED display*	Battery status
Lights up	There is enough battery power remaining.
Blinks slowly	The batteries are running low. Battery replacement is recommended.
Blinks	It is time to replace the batteries. Replace the batteries immediately, or remove the depleted batteries and then connect the AC adaptor.

* The LEDs that light up and blink are the LEDs on one or both of the – and + buttons, depending on the setting. For details, see "Adjusting the Volume Balance Between the Song and Keyboard Performance".

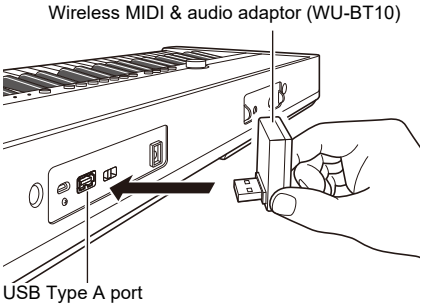
Setting up the music stand (accessory)

Insert the music stand into the holes on the back of the Digital Keyboard.



Plugging in the Wireless MIDI & audio adaptor (accessory)

Insert the Wireless MIDI & audio adaptor into the USB Type A port on the back of the Digital Keyboard, in the direction shown in the figure below.



■Connecting to Bluetooth audio-enabled devices

By making a Bluetooth audio connection between this Digital Keyboard and a smart device, you can play back sound from your smart device through this Digital Keyboard.

For details, see “Connecting via Bluetooth Audio”.

■Connecting to Bluetooth Low Energy MIDI-enabled devices

When you connect the Digital Keyboard to your smart device via Bluetooth Low Energy MIDI*, you can use a dedicated app to perform various operations.

* This is not guaranteed to work when using apps other than CASIO’s dedicated app.

For more information, see “Making a Bluetooth Low Energy MIDI Connection”.

■Using the Dedicated Feel Sync app

Connect your smart device to the Digital Keyboard and use CASIO’s dedicated Feel Sync app.

For details, see “Using the Feel Sync Function While Playing a Song on the Dedicated App”.

■Using the dedicated CASIO MUSIC SPACE app

Connect your smart device to the Digital Keyboard and use CASIO’s dedicated CASIO MUSIC SPACE app.

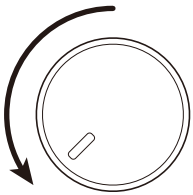
For details, refer to “Using the Dedicated CASIO MUSIC SPACE App”.

IMPORTANT!

- **When removing the Wireless MIDI & audio adaptor, turn off the Digital Keyboard.**

Turning the power on or off

1. Before turning on the power, turn the VOLUME knob to the position shown below.

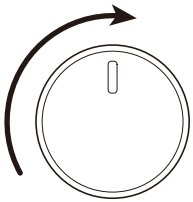


2. Press the ⏻(Power) button.



- Within a matter of seconds, several LEDs will light up and the Digital Keyboard will be ready to play.

3. Once the power is turned on, use the VOLUME knob to adjust the volume.



4. To turn off the power, press and hold the ⏻(Power) button until all LEDs turn off.

IMPORTANT!

- **When the Digital Keyboard is turned off, the various settings such as tones are reset. However, the following settings are saved.**
  - **MIDI out channel (main part, layered part)**
  - **Bluetooth function**
  - **MY SETUP at startup**
  - **Auto Power Off function**
  - **Battery type**

NOTE

- Even after the power is turned off with the ⏻**(Power)** button, the Digital Keyboard remains in standby mode and uses a small amount of current. Always disconnect the AC adaptor from the power outlet when you do not intend to use the Digital Keyboard for an extended period of time, or when there is a risk of lightning.

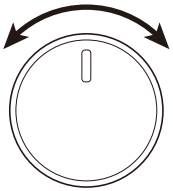
- You can make the settings that you saved beforehand be recalled and reused when you turn on the power. For more information, see “Automatically recalling from MY SETUP when the power is turned on”.

■Auto Power Off function

By default, the Digital Keyboard automatically turns off the power after about 20 minutes of inactivity, to prevent unnecessary power consumption. This is called the Auto Power Off function. If necessary, this function can be disabled so that the power does not automatically turn off. For details, refer to “Turning the Auto Power Off function on/off”.

Adjusting the volume level

The volume of the entire Digital Keyboard is controlled by the **VOLUME** knob.



NOTE

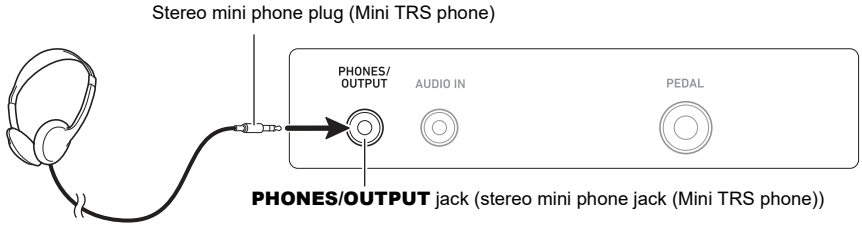
- Aside from the overall volume, the following volume levels can be set individually relative to the overall volume.
  - Balance between the volume of the song and keyboard performance (see “Adjusting the Volume Balance Between the Song and Keyboard Performance”)
  - Main and layered parts* (see “Adjusting the volume of each part (part volume)”)
  - Touch off velocity volume (see “Adjusting volume when Touch Response is off (touch off velocity)”)
  - Metronome volume (see “Changing the Metronome Volume”)

* For the main part and the layered part, see “Layering Two Tones”.

Connecting headphones (sold separately)

When headphones are used, no sound is emitted from the built-in speakers, so you can enjoy playing at night without worrying about your surroundings.

- Turn down the volume on the Digital Keyboard before connecting headphones.



NOTE

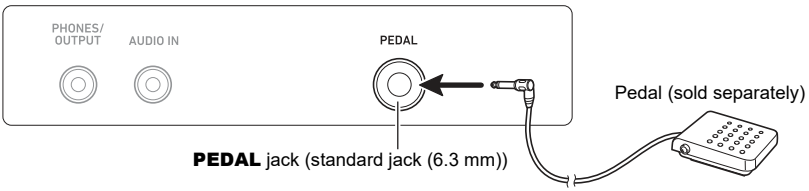
- Headphones are not included with this product.
- Headphones (CP-16, sold separately) or commercially available headphones can be used.
- The surround effect is not applied when headphones are used.

IMPORTANT!

- **Do not use headphones for long periods of time at high volume. This may damage your hearing.**
- **When connecting headphones to the stereo mini phone jack, be sure to use a stereo mini phone plug (Mini TRS phone).**
- **If the headphone plug does not fit in the jack, use a commercially available conversion plug.**
- **When unplugging the headphone cord from the Digital Keyboard, make sure to remove the conversion plug as well.**

Connecting a pedal (sold separately)

When using a pedal, connect it to the **PEDAL** jack on the rear panel.



This pedal works as a damper pedal when using the default settings. If you want to change this setting (to soft, sostenuto, etc.), see “Switching between pedal functions”.

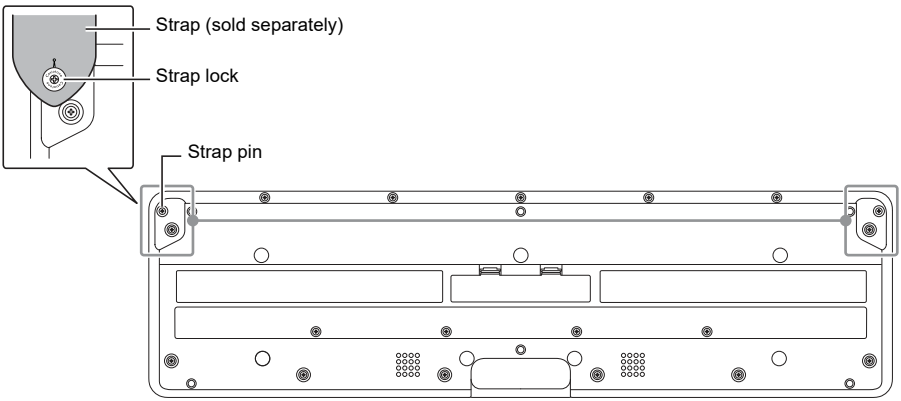
NOTE

- A pedal is not included with this product.
- Optional pedals (SP-3, SP-20) can be used.

Attaching a strap (commercially available)

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

2. Fit the strap locks onto the strap pins.



IMPORTANT!

- **After attaching the strap, make sure that the strap is securely fastened to the Digital Keyboard.**
- **Do not lift the Digital Keyboard by the strap alone. The Digital Keyboard may come loose from the strap and fall.**
- **The indented area on the bottom of the Digital Keyboard is not meant to be a grip for carrying. When moving the Digital Keyboard, be sure to hold it with both hands.**
- **If a strap lock is deformed or damaged, replace it.**

Enjoy Playing with Ease (Feel Sync Function)

What is the Feel Sync function?

When a key is pressed during song playback, the Feel Sync function plays notes by correcting the pitches to match the chord progression of the song that's playing back. Even if you don't have experience playing the keyboard, simply play along with the rhythm and enjoy the feeling of harmonizing with the flow of the song. Songs compatible with the Feel Sync function are as follows.

■Demo songs built into this Digital Keyboard

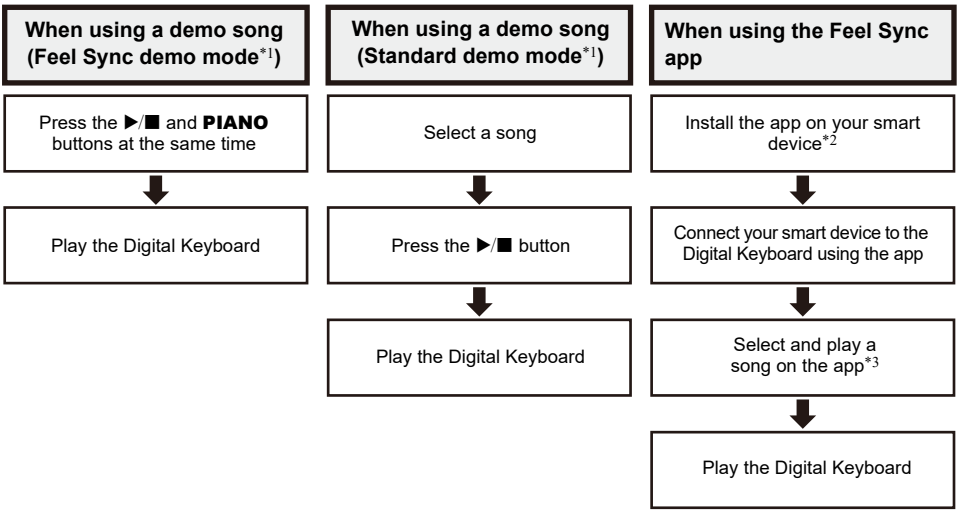
The demo songs are useful for easily experiencing the Feel Sync function. Five demo songs pre-arranged for Feel Sync with famous melodies can be played back (see "Demo Song List" for the song titles).
For more information, see "Using the Feel Sync Function While Playing Demo Songs".

■Songs played using the Feel Sync app for smart devices

The Feel Sync app is a dedicated app for using the Feel Sync function. This lets you play back audio files (MP3, WAV, etc.) on smart devices, or songs from content services provided on the app. We invite you to experience the Feel Sync function with your favorite songs by using the app.
For details, see "Using the Feel Sync Function While Playing a Song on the Dedicated App".

Feel Sync function operation flow

The general flow of operations according to how you use the Feel Sync function is shown below.



*1 see "Using the Feel Sync Function While Playing Demo Songs".
*2 This operation is required only for the first time.
*3 If the Digital Keyboard and the smart device are not audio-paired, playback sound is heard from the smart device's speakers. If you want to hear sound through the Digital Keyboard, you must perform the "Pairing for Bluetooth audio" operation.

Using the Feel Sync Function While Playing Demo Songs

You can enjoy playing the keyboard using the Feel Sync function while the demo songs built into the Digital Keyboard play back. Refer to “Demo Song List” for the song titles of the demo songs.

About the demo modes

There are two ways to play demo songs: Feel Sync demo mode and standard demo mode. The features of each are as follows.

■Feel Sync demo mode

This is the demo mode with the recommended settings for experiencing the appeal of the Feel Sync function.
Press the ▶/■ and **PIANO** buttons at the same time to enter Feel Sync demo mode. The demo songs 1–5 play back repeatedly.

In this mode:

- The Feel Sync function is always on (the **FEEL SYNC** button blinks).
- Tones used for the keyboard are automatically set according to the demo song.
- You can play the keyboard and select songs, but operations that change the Digital Keyboard’s settings (such as changing tones and volume balance) are limited.

■Standard demo mode

This demo mode lets you experience the Feel Sync function with any settings.
Pressing the ▶/■ button alone will enter the standard demo mode and play one selected demo song.

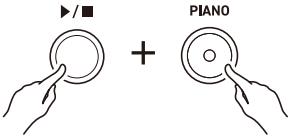
In this mode:

- The volume balance between the song and keyboard performance can be adjusted.
- A precount can be played before playback begins.
- You can select the range of keys for which the Feel Sync function is enabled.
- Various settings can be changed, including the tone.
- You can also turn the Feel Sync function on and off at any time by pressing the **FEEL SYNC** button.

Playing the keyboard to the rhythm of the song in Feel Sync demo mode

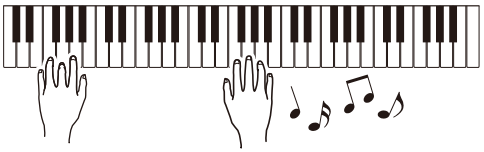
In Feel Sync demo mode, you do not need to set the tones and other settings yourself. With the recommended settings for the demo song, you can immediately try out the performance experience using the Feel Sync function.

1. Press the ▶/■ and **PIANO** buttons at the same time.



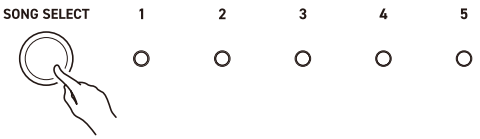
- This enters Feel Sync demo mode. Demo song number 1 will start playing.
- The **FEEL SYNC** button LED and the LED for the song number currently playing will blink, and all other LEDs will be off.

2. Play the keyboard.



- Play freely along with the rhythm. Chords and single notes played on the keyboard are corrected by the Feel Sync function to match the chord progression of the song.
- When the end of the song is reached, playback of the next demo song begins.

3. To switch between demo songs, press the **SONG SELECT** button to light the LED corresponding to the number of the song you want to play.



- Refer to “Demo Song List” for the song titles of song numbers 1–5.

4. To end playback of the demo song, press the ▶/■ button.

Playing the keyboard with the rhythm of the song in standard demo mode

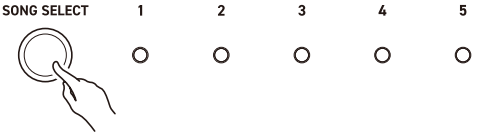
When using the Feel Sync function in standard demo mode, you can change the settings of the Digital Keyboard, such as by selecting the tones you want to play.

1. Make sure the Feel Sync function is turned on.

- If the **FEEL SYNC** button is off, press the button to turn it on.



2. Press the SONG SELECT button to light the LED corresponding to the number of the song you want to play.



- Refer to "Demo Song List" for the song titles of song numbers 1–5.

3. If necessary, refer to the following to change the settings of the Digital Keyboard.

- "Selecting Tones"
- "Changing the tempo of the demo song"
- "Making a precount sound before the demo song playback starts"
- "Selecting the range of keys for which the Feel Sync function is enabled"
- "Adjusting the Volume Balance Between the Song and Keyboard Performance" (it is recommended to adjust the volume while playing the keyboard in step 5)

4. Press the ▶/■ button to start playing the demo song.

5. Play the keyboard.



- Play freely along with the rhythm. Chords and single notes played on the keyboard are corrected by the Feel Sync function to match the chord progression of the song.
- You can switch between songs using the same operation as in step 2 or change settings using the operation in step 3, even while a song is playing.
- When the end of the song is reached, playback stops. To stop playback while a song is playing, press the ▶/■ button.

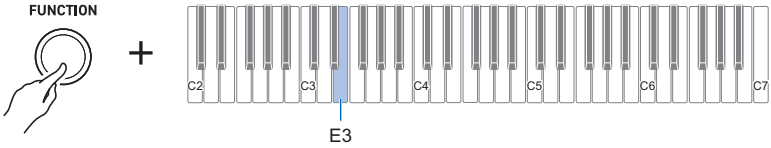
■Changing the tempo of the demo song

The tempo value (beats per minute) of the demo song can be set between 20 and 255.

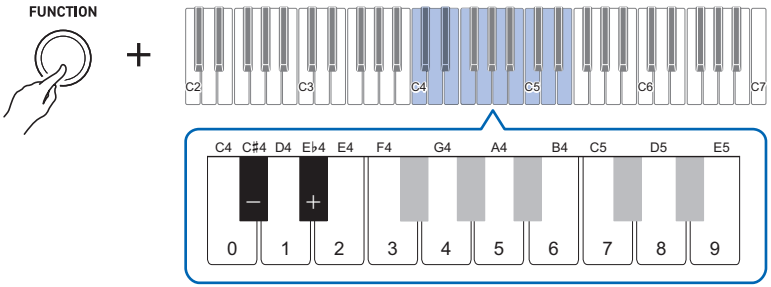
1. Press the SONG SELECT button to light the LED corresponding to the number of the song you want to play at a different tempo.

2. Press and hold the FUNCTION button, and press the E3 key.

- Do not release the **FUNCTION** button until step 3.



3. Use the C4 to E5 keys to change the tempo value.



To do this:	Operate as follows:
Lower the tempo by 1	Press the C♯4 (–) key.*1
Increase the tempo by 1	Press the E♭4 (+) key.*1
Input the tempo directly	Use the C4 (0) to E5 (9) keys to enter a three-digit value. For 20, press “0-2-0”. For 120, press “1-2-0”. The tempo changes when the third digit is entered.*2
Restore the default value	Press the C♯4 (–) key and the E♭4 (+) key at the same time.

*1 Press and hold to change the value continuously.

*2 Even if you have only entered two digits or less, releasing the **FUNCTION** button will confirm the value already entered (e.g., if you press “7-2” and release the **FUNCTION** button, the tempo value will be 72).

4. To exit the settings, release the FUNCTION button.

5. To start the demo song at the changed tempo, press the ▶/■ button.

NOTE

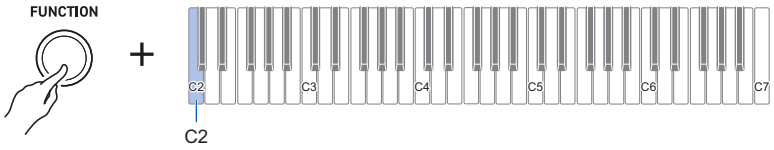
- Each time you press the **SONG SELECT** button to switch the song number, the tempo of the demo song will return to the song’s default setting.
- The tempo of the demo song can be changed only when the demo song is played in standard demo mode. This cannot be changed in Feel Sync demo mode.

■Making a precount sound before the demo song playback starts

You can make an audible countdown play to indicate when the demo song playback starts, or you can make the LED blink without playing a countdown sound.

1. Press and hold the **FUNCTION** button, and press the C2 key.

- Do not release the **FUNCTION** button until step 2.



- Each time the C2 key is pressed, the setting changes in the order shown in the table below. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting	Details
High note plays once	On	A precount tone will sound one measure before the demo song starts playing.
High note plays twice	Silent	The **SONG SELECT** LED of the currently selected song blinks from one measure before the demo song starts playing.
Low note plays once	Off (default setting)	There is no precount sound or LED blinking before the demo song plays back.

2. To exit the settings, release the **FUNCTION** button.

NOTE

- The precount setting is valid only when playing demo songs in standard demo mode. This has no effect in Feel Sync demo mode.

Using the Feel Sync Function While Playing a Song on the Dedicated App

Use the dedicated Feel Sync app to enjoy the experience of playing with the Feel Sync function while playing songs.

Install the Feel Sync app on your smart device and connect it to the Digital Keyboard

1. Plug the supplied Wireless MIDI & audio adaptor into the USB Type A port.

- see “Plugging in the Wireless MIDI & audio adaptor (accessory)”.

2. Install the Feel Sync app on your smart device.

- See the Feel Sync Downloads section of the website below.
  https://support.casio.com/global/en/emi/manual/CT-FS1/

3. Launch the Feel Sync app.

4. Go to the screen for connecting your instrument, and tap “WU-BT10 MIDI”.

- The smart device initiates a connection with the Digital Keyboard. Do not operate the Digital Keyboard while it is waiting to connect to a smart device.
- When the connection is complete, the **WIRELESS** button on the Digital Keyboard blinks twice and a notification tone will sound, after which the **WIRELESS** button will light up.
- At this time, the smart device and the Digital Keyboard are connected via Bluetooth Low Energy MIDI, and a message indicating that the connection has been established appears on the app screen. For details on this connection, refer to “Wireless Connections”.

The Feel Sync app is now linked with the Digital Keyboard for use.

To enjoy the experience of playing with the Feel Sync app, follow the steps shown in “Playing the keyboard to the rhythm of the song played back by the Feel Sync app” (step 3 and onward).

■Playing the playback sound from a smart device (Feel Sync app) through the Digital Keyboard’s speakers

Create an audio pairing between your smart device and the Digital Keyboard. For details, refer to “Pairing for Bluetooth audio”.

NOTE

- Simply performing the operations in “Install the Feel Sync app on your smart device and connect it to the Digital Keyboard” will not make sound from your smart device play through the speakers of this Digital Keyboard (the sound will come from the speaker of the smart device). By creating an audio pairing (Bluetooth audio connection) between your smart device and the Digital Keyboard, you can make the sound of the smart device play through the Digital Keyboard’s speakers.

Playing the keyboard to the rhythm of the song played back by the Feel Sync app

The Feel Sync function can be used along with songs that play back in the app, by performing the following operations.
Note that steps 1–2 below are unnecessary if the operation is performed immediately after following the steps in "Install the Feel Sync app on your smart device and connect it to the Digital Keyboard". Start with step 3.

1. Launch the Feel Sync app on your smart device.

2. Go to the screen for connecting your instrument, and tap "WU-BT10 MIDI".

- When the smart device and the Digital Keyboard have connected, a message indicating that the connection has been established appears on the app screen.
- The **WIRELESS** button on the Digital Keyboard blinks twice and a notification tone will sound, after which the **WIRELESS** button lights up.

3. Display the library screen in the Feel Sync app.

- The library screen contains a trial song labeled "DEMO" by default. Refer to the in-app instructions and help on how to add songs.

4. Tap the song you want to play on the library screen.

- The player screen for the song you tapped appears.

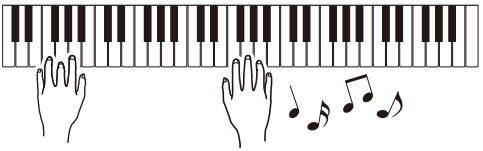
5. Select the tones you want to play as necessary.

- For details, see "Selecting Tones".

6. Tap ▶ on the app's player screen.

- Song playback starts. If audio pairing between the Digital Keyboard and a smart device* has been completed, the playback sound can be heard from the speakers of the Digital Keyboard.

7. Play the keyboard.



- Play freely along with the rhythm. Chords and single notes played on the keyboard are corrected by the Feel Sync function to match the chord progression of the song.
- To play another song, close the player screen and start again from step 4.

* For details, refer to "Pairing for Bluetooth audio".

NOTE

- If you feel that the timing at which the keyboard performance is corrected is slightly off (delayed) in relation to the chord changes in the song being played, try adjusting the "delay correction" value in the Feel Sync app. For details, refer to the in-app instructions and help in the app.

Adjusting the Volume Balance Between the Song and Keyboard Performance

The balance between the volume of the song being played and the volume of your keyboard performance can be adjusted in ±5 steps (within a –5 to +5 range). The higher the value, the louder the keyboard will be compared to the song volume; and the lower the setting value, the quieter the keyboard will be compared to the song volume.

Setting values	–5	to	0 (default value)	to	+5
Song volume					
Keyboard volume					

■Adjusting the volume balance

Press the PLAY PART BALANCE + or – button.



To do this:	Operate as follows:
Lower the volume balance setting by 1	Press the – button.
Increase the volume balance setting by 1	Press the + button.
Restore the default value	Press both buttons at the same time.

- When the setting value is 0, both the – and + buttons light up. Also, only the + button lights up when the setting value is positive, and only the – button lights up when the setting value is negative.

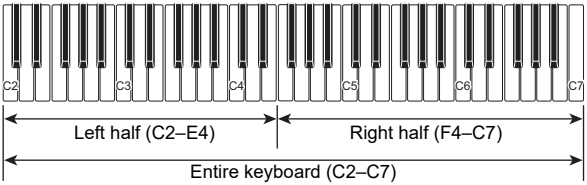
NOTE

- The “song volume” is the volume of the following playback sounds.
  – Demo song playback sound
  – Playback sound from external devices connected via Bluetooth audio

  For details, refer to “Playing sound from devices supporting Bluetooth audio via the Digital Keyboard (Bluetooth audio pairing)”.
- In Feel Sync demo mode, volume balance adjustment is disabled.

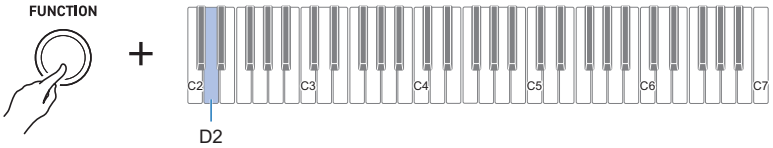
Selecting the range of keys for which the Feel Sync function is enabled

The Feel Sync function is enabled for the entire keyboard by default, but can be enabled for only the right or left half as well. Use this function when you want the Feel Sync function to correct your sound on half of the keys, but produce the sound of the actual notes that you play on the other half.



1. Press and hold the **FUNCTION** button, and press the D2 key.

- Do not release the **FUNCTION** button until step 2.



- Each press of the D2 key changes the setting in the order shown in the table below. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting
Plays once	Entire keyboard (default setting)
Plays twice	Left half
Plays three times	Right half

2. To exit the settings, release the **FUNCTION** button.

NOTE

- In Feel Sync demo mode, the Feel Sync function is always enabled for the entire keyboard.

Turning the Feel Sync Function On/Off

The Feel Sync function automatically turns on when the Digital Keyboard is turned on. Each press of the **FEEL SYNC** button toggles the Feel Sync function on (button lit) and off (button unlit).



NOTE

- In Feel Sync demo mode, the Feel Sync function is always on.

Selecting Tones

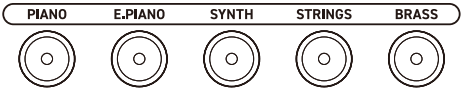
Selecting a Single Tone

This Digital Keyboard can play a variety of tones, including piano and other keyboard instruments, strings, wind instruments and synth sounds. By switching to different tones even while still playing the same piece, you can enjoy greater variety in your performance.

Choosing one of the five main tones

Press one of the main tone buttons.

- The button you pressed lights up, and the sound switches to that tone.



- The tone names you can select according to the buttons you press are shown in the table below.

Button	Tone name	Key*
PIANO	STAGE PIANO	C2
E.PIANO	DIGITAL E.PIANO	B♭2
SYNTH	SYNTH PLUCK	A♭4
STRINGS	STRINGS	E5
BRASS	SYNTH BRASS	F♯6

* Following the steps in “Choosing a single tone from 61 tones”, pressing one of these keys selects the same tone as when the respective button is pressed.

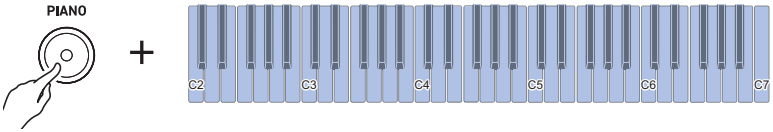
NOTE

- Selecting a tone using the main tone buttons returns the following settings to their default values.
  - Layer
  - Part volume (main part)
  - Sustain
  - Sustain time (main part)
  - Reverb
  - Pedal effect (main part)

Choosing a single tone from 61 tones

1. Press and hold the PIANO button* and then press any one of the C2 to C7 keys.

- Each time you press a key, the selected tone is heard. While holding down the **PIANO** button*, you can change tones as many times as you like by pressing the keys.



- For the tones assigned to each key, see "Tone List".

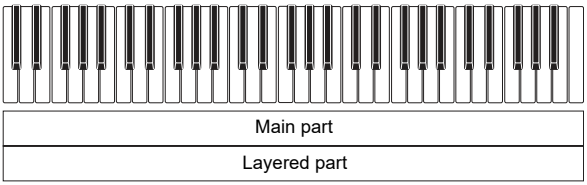
2. Release the PIANO button.*

- The tone corresponding to the last key you pressed is selected.

* Any of the other main tone buttons (E.PIANO, SYNTH, STRINGS and BRASS buttons) can be used in the same way.

Layering Two Tones

You can layer two tones on top of each other. The part used when playing only one tone is called the main part, and the second part used when layering two tones is called the layered part.



NOTE

- The following settings can be changed for the main and layered parts respectively.
  - Tone (see "Layering and playing two tones")
  - Volume (see "Adjusting the volume of each part (part volume)")
  - Part octave shift (see "Changing the pitch of each part in octave units (part octave shift)")
  - Sustain time (see "Changing the sustain length of each part's sound (sustain time)")
  - Turn on/off the pedal effect (see "Turn off the pedal effect for each part")
  - MIDI out channel (see "Changing the MIDI out channel")

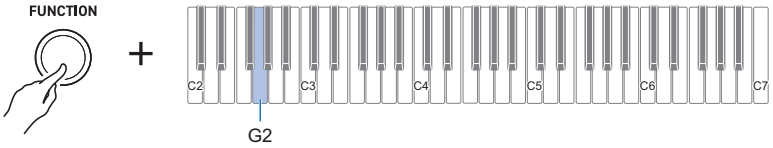
Layering and playing two tones

To play two tones layered on each other, you must switch the layer on.

1. Select the first tone (main part tone).

- Refer to "Selecting a Single Tone" for how to select a tone.

2. Press and hold the **FUNCTION** button, and press the G2 key.



- Each press of the G2 key toggles between on and off. A notification tone signals which setting you have switched to after you press a key.

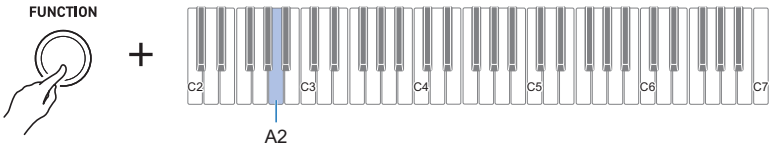
Notification tone	Setting
High note plays	On
Low note plays	Off (default setting)

- Once you confirm that the layer has been switched on, you can release the **FUNCTION** button. You can also hold the **FUNCTION** button down and proceed to step 3.

3. Select the second tone (layered part tone) to be layered.

(1) Press and hold the **FUNCTION** button, and press the A2 key.

- Do not release the **FUNCTION** button until step (3).



(2) Press a key from C2 to C7 to select a tone.

- Each time you press a key, the selected tone is heard. As long as the **FUNCTION** button is held down, you can change the tone as many times as you want by pressing the keys.
- For the tones assigned to each key, see "Tone List".

(3) To exit the settings, release the **FUNCTION** button.

- The tone corresponding to the last key pressed becomes the tone of the layered part.
- When you play a key, the main part and the layered part (two tones) play together.

NOTE

- Even while the layer is on, you can change the tone of the main part by following the steps in "Choosing a single tone from 61 tones". Pressing any one of the main tone buttons will turn off the layer (the sound will switch to the tone of the button pressed).

■Turning off the layer

When the layer is on, hold down the FUNCTION button and press the G2 key.

- When you play a key, only the main part sounds.

NOTE

- Pressing any one of the main tone buttons will turn off the layer (the sound will switch to the tone of the button pressed).

Adjusting the volume of each part (part volume)

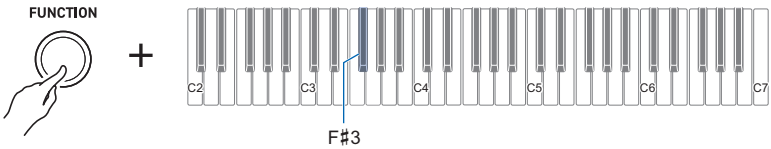
The respective volumes for the main and layered parts* can be set to a value from 0 to 127 (default value for the main part: 127, default value for the layered part: 80).

* For the main part and the layered part, see “Layering Two Tones”.

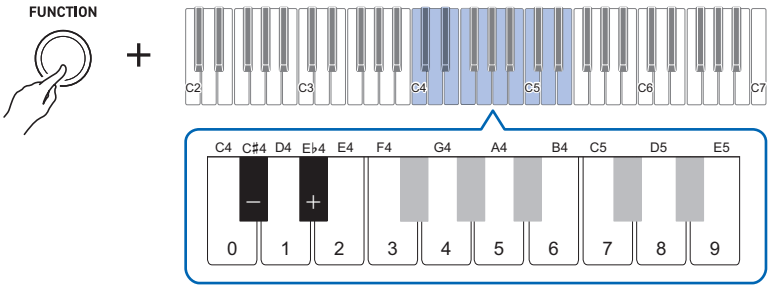
■Adjusting the volume of the main part

1. Press and hold the FUNCTION button, and press the F♯3 key.

- Do not release the **FUNCTION** button until step 3.



2. Use the C4 to E5 keys to change the volume setting.



To do this:	Operate as follows:
Lower the volume setting by 1	Press the C♯4 (–) key.*1
Raise the volume setting by 1	Press the E♭4 (+) key.*1
Directly input the volume setting	Use the C4 (0) to E5 (9) keys to enter a three-digit value. For 20, press “0-2-0”. For 120, press “1-2-0”. The volume setting changes when the third digit is entered.*2
Restore the default value	Press the C♯4 (–) key and the E♭4 (+) key at the same time.

*1 Press and hold to change the value continuously.

*2 Even if you have only entered two digits or less, releasing the **FUNCTION** button will confirm the value already entered (e.g., if you press “1-2” and then release the **FUNCTION** button, the volume value will be 12).

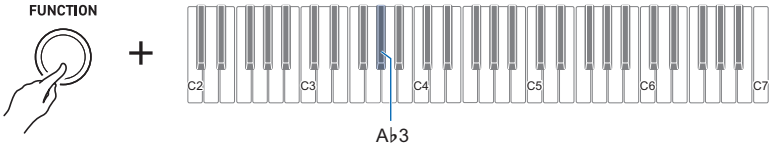
Note:

Even while the **FUNCTION** button is held down, playing any key other than C4 to E5 will produce an instrument sound. You can check the volume by playing the keyboard while making this setting.

3. To exit the settings, release the **FUNCTION** button.

■Adjusting the volume of the layered part

In step 1 of “Adjusting the volume of the main part”, press the A♭3 key instead of the F♯3 key.



After that, the operation is the same as that for the main part.

Changing the pitch of each part in octave units (part octave shift)

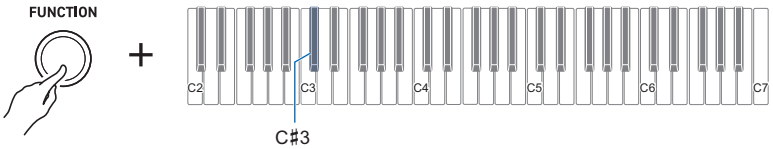
You can raise or lower the pitch of the main part and layered part* respectively, from –3 to +3 octaves (default value: 0).

* For the main part and the layered part, see “Layering Two Tones”.

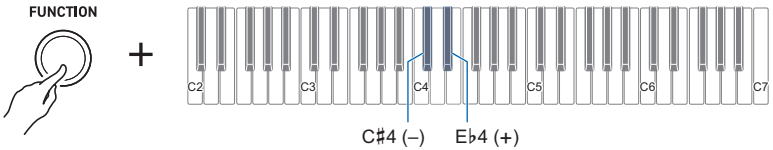
■Changing the pitch of the main part in octave units

1. Press and hold the **FUNCTION** button, and press the C♯3 key.

- Do not release the **FUNCTION** button until step 3.



2. Press the C♯4 or E♭4 key.



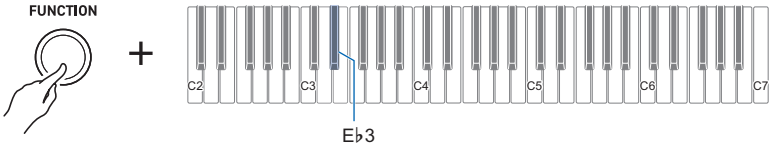
To do this:	Operate as follows:
Lower the pitch one octave	Press the C♯4 (–) key.*
Raise the pitch one octave	Press the E♭4 (+) key.*
Restore the default value	Press the C♯4 (–) key and the E♭4 (+) key at the same time.

* If the value is 0, a reference tone is played.

3. To exit the settings, release the **FUNCTION** button.

■Changing the pitch of the layered part in octave units

Using step 1 of "Changing the pitch of the main part in octave units", press the E♭3 key instead of the C♯3 key.



After that, the operation is the same as that for the main part.

NOTE

- If you have changed both the part octave shift and octave shift settings, the shift values from each setting are added. For information about the octave shift, see "Changing the Pitch in Octave Units (Octave Shift)".

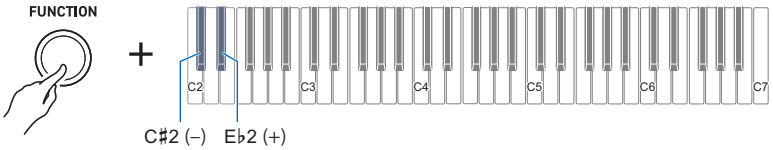
Adjusting the pitch (transposing, tuning, etc.)

Changing the Pitch in Octave Units (Octave Shift)

The pitch of the entire keyboard can be raised or lowered from –3 to +3 octaves (default value: 0).

1. Press and hold the FUNCTION button, and press the C♯2 key or the E♭2 key.

- Do not release the **FUNCTION** button until step 2.



To do this:	Operate as follows:
Lower the pitch one octave	Press the C♯2 (–) key.*
Raise the pitch one octave	Press the E♭2 (+) key.*
Restore the default value	Press the C♯2 (–) key and the E♭2 (+) key at the same time.

* If the value is 0, a reference tone is played.

2. To exit the settings, release the FUNCTION button.

NOTE

- The above settings are valid for both the main part and the layered part*. Also, if you want to raise or lower the pitch of each part separately, refer to “Changing the pitch of each part in octave units (part octave shift)” for details.
- If you have changed both the octave shift and the part octave shift setting, the shift values from each setting are added.

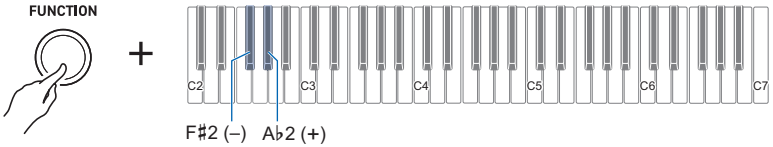
* For the main part and the layered part, see “Layering Two Tones”.

Changing the Pitch in Semitone Units (Transpose)

The pitch of the entire keyboard can be raised or lowered in semitones. This is useful when you want to play a song in a difficult key by using a key you are more familiar with, or when you want to raise or lower the key of the accompaniment to match the pitch of the singer's voice.
The transpose value can be set in semitones from –12 to +12 (default value: 0).

1. Press and hold the **FUNCTION** button, and press the F♯2 key or the A♭2 key.

- Do not release the **FUNCTION** button until step 2.



To do this:	Operate as follows:
Lower the pitch a semitone	Press the F♯2 (–) key.*
Raise the pitch a semitone	Press the A♭2 (+) key.*
Restore the default value	Press the F♯2 (–) key and the A♭2(+) key at the same time.

* If the value is 0, a reference tone is played.

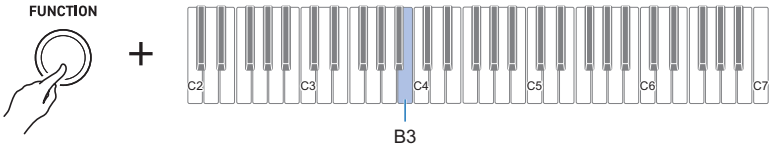
2. To exit the settings, release the **FUNCTION** button.

Fine Tuning (Tuning)

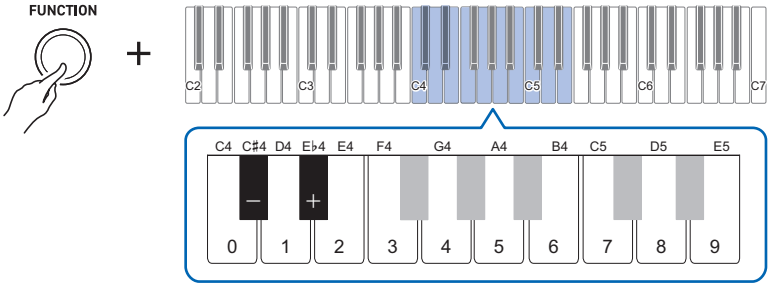
Here's how to shift the overall pitch of the Digital Keyboard slightly. You can set the frequency of the A4 note from 415.5 to 465.9 Hz (default value: 440.0 Hz).

1. Press and hold the **FUNCTION** button, and press the B3 key.

- Do not release the **FUNCTION** button until step 3.



2. Use the C4 to E5 keys to set the pitch (frequency value) of the notes.



To do this:	Operate as follows:
Decrease frequency by 0.1 Hz	Press the C♯4 (–) key.*1
Increase frequency by 0.1 Hz	Press the E♭4 (+) key.*1
Input the frequency directly	Enter a four-digit value (no decimals) using the C4 (0) to E5 (9) keys. For 442.2 Hz, press “4-4-2-2”. The frequency changes when the fourth digit is entered.*2
Restore the default value	Press the C♯4 (–) key and the E♭4 (+) key at the same time.

*1 Press and hold to change the value continuously. Also, when the frequency reaches an integer (such as 440 or 441), a reference tone is played.

*2 If you enter only three digits and release the **FUNCTION** button, the decimal value will be zero (e.g., if you press “4-4-2” and release the **FUNCTION** button, the frequency will be 442.0 Hz).

3. To exit the settings, release the **FUNCTION** button.

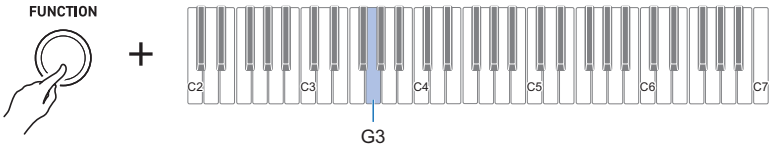
Changing the Keyboard Scale Tuning

A scale tuning refers to the system used for the tuning of the pitches on an instrument. Modern pianos generally use equal temperament. This Digital Keyboard has 17 preset scale tunings, including equal temperament. By changing the scale tuning, you can play music that uses various scale tunings (Indian music, Arabic music, classical music, etc.).

Changing the scale tuning

1. Press and hold the **FUNCTION** button, and press the G3 key.

- A notification tone sounds, and the Digital Keyboard waits for you to select the scale tuning.
- Do not release the **FUNCTION** button until step 3.



2. Select the scale tuning using the C2 to E3 keys.

To choose this scale tuning:		Press this key:
Classical and contemporary music	Equal Temperament (default setting)	C2
Classical music	Pure Major Temperament	C♯2
	Pure Minor Temperament	D2
	Pythagorean Temperament	E♭2
	Kirnberger 3 Temperament	E2
	Werckmeister Temperament	F2
	Mean-Tone Temperament	F♯2
Music of Arabia and the Middle East	Rast	G2
	Bayati	A♭2
	Hijaz	A2
	Saba	B♭2
	Dashti	B2
	Chahargah	C3
	Segah	C♯3
Indian music	Gurjari Todi	D3
	Chandrakauns	E♭3
	Charukeshi	E3

- When a key is pressed, a notification tone sounds and the corresponding scale tuning is selected.
- Even while the **FUNCTION** button is held down, playing any key other than C2 to E3 will produce an instrument sound. While making this setting, you can play the keyboard to hear how the notes sound with the selected scale tuning.

3. To exit the settings, release the **FUNCTION** button.

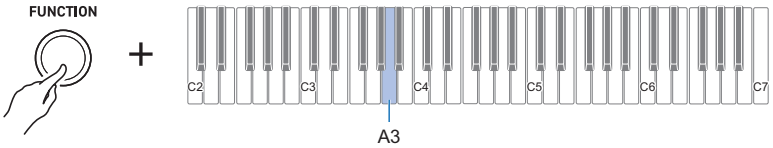
Selecting the scale tuning base note

The base note determines from which note the tuning will begin. When using a tuning other than equal temperament*, select a base note according to the key you wish to play in.

* Equal temperament lets you play in the same way even if the key changes, regardless of the base note.

1. Press and hold the **FUNCTION** button, and press the A3 key.

- A notification tone sounds, and the Digital Keyboard waits for you to select the base note.
- Do not release the **FUNCTION** button until step 3.



2. Select the base note using the C2 to B2 keys.

To select this base note:	Press this key:
C (default setting)	C2
C♯	C♯2
D	D2
E♭	E♭2
E	E2
F	F2
F♯	F♯2
G	G2
A♭	A♭2
A	A2
B♭	B♭2
B	B2

- When a key is pressed, a notification tone sounds and the corresponding base note is selected.

3. To exit the settings, release the **FUNCTION** button.

NOTE

- Although the terms “scale tuning” and “base note” are explained very simply in this manual, there are actually more rigorous musical and mathematical definitions. For more detailed information, refer to music dictionaries and specialized books.

Applying Effects (Reverb, Equalizer, etc.)

Sustaining Notes After Keyboard Keys Are Released

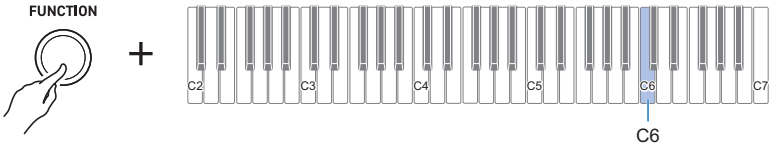
When Sustain is turned on, the sound will be audible for longer than usual after the key has been released.

Turning sustain on/off

The default setting for sustain on this Digital Keyboard is off. Follow the steps below to switch the setting on/off.

1. Press and hold the FUNCTION button, and press the C6 key.

- Do not release the **FUNCTION** button until step 2.



- Each time you press the C6 key, the setting toggles between on and off. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting
High note plays	On
Low note plays	Off (default setting)

2. To exit the settings, release the FUNCTION button.

Changing the sustain length of each part's sound (sustain time)

The length that the sound sustains (sustain time) when sustain is on can be changed separately for the main part and the layered part*.

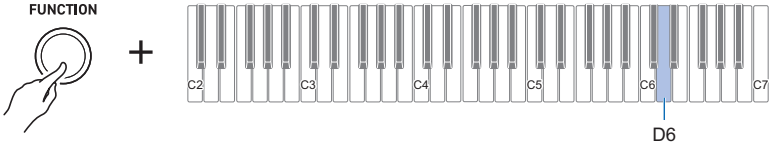
The sustain time value can be set from 0 to 9 (default value: 5). A value of 0 almost completely removes the sustaining sound, and a value of 9 produces the longest sustaining sound.

* For the main part and the layered part, see "Layering Two Tones".

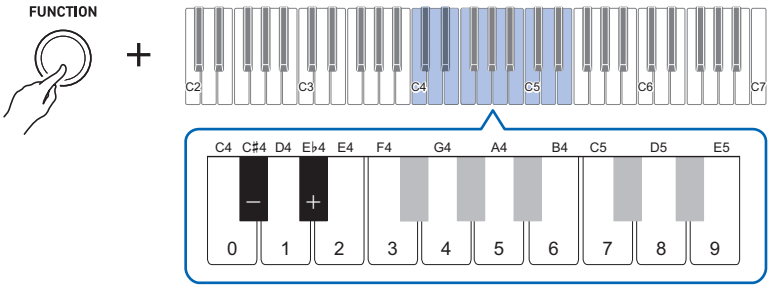
■Changing the sustain time of the main part

1. Press and hold the **FUNCTION** button, and press the D6 key.

- Do not release the **FUNCTION** button until step 3.



2. Use the C4 to E5 keys to change the sustain time setting.



To do this:	Operate as follows:
Lower the setting by 1	Press the C♯4 (–) key.*
Raise the setting by 1	Press the E♭4 (+) key.*
Directly input the value	Use the C4 (0) to E5 (9) keys to input the value.
Restore the default value	Press the C♯4 (–) key and the E♭4 (+) key at the same time.

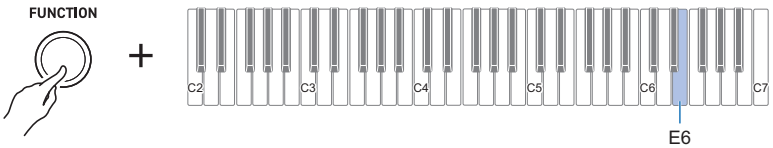
* If the value is 0, a reference tone is played.

Note:
Even while the **FUNCTION** button is held down, playing any key other than C4 to E5 will produce an instrument sound. You can check the sustaining sound by playing the keyboard while making this setting.

3. To exit the settings, release the **FUNCTION** button.

■Changing the sustain time of the layered part

Press the E6 key instead of the D6 key in step 1 of “Changing the sustain time of the main part”.



After that, the operation is the same as that for the main part.

Playing with Reverb

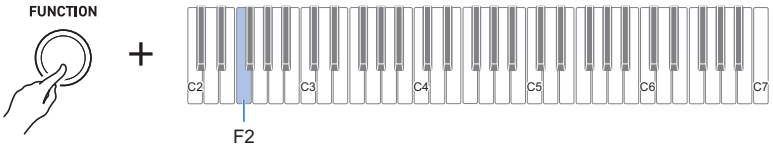
A reverberation effect (reverb) type that is appropriate for each tone is added to the tones on the Digital Keyboard by default. By changing the reverb type, you can change how the tone reverberates. The reverb can also be turned off* to eliminate any resulting reverberations.

* The default setting for the reverb on this Digital Keyboard is on.

Changing the reverb type

1. Press and hold the **FUNCTION** button, and press the F2 key.

- A notification tone sounds, and the Digital Keyboard waits for you to select the reverb type.
- Do not release the **FUNCTION** button until step 3.



2. Use the C2 to C4 keys to select the reverb type.

To select this reverb type:	Press this key:
(Default setting for each tone)	C2
Room 1–5	C♯2–F2
Large Room 1–2	F♯2–G2
Hall 1–6	A♭2–C♯3
Stadium 1–3	D3–E3
Plate 1–2	F3–F♯3
Delay	G3
Pan delay	A♭3
Long delay 1–2	A3–B♭3
Church	B3
Cathedral	C4

- When a key is pressed, a notification tone sounds and the reverb type corresponding to that key is selected.
- Even while the **FUNCTION** button is held down, playing any key other than C2 to C4 will produce an instrument sound. While making this setting, you can play the keyboard to hear how the sound is produced by the selected reverb type.

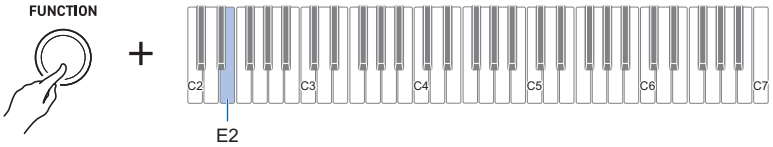
3. To exit the settings, release the **FUNCTION** button.

Switching the reverb on/off

The default setting for the reverb on this Digital Keyboard is on. Follow the steps below to switch the setting on/off.

1. Press and hold the **FUNCTION** button, and press the E2 key.

- Do not release the **FUNCTION** button until step 2.



- Each time you press the E2 key, the setting toggles between on and off. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting
High note plays	On (default setting)
Low note plays	Off

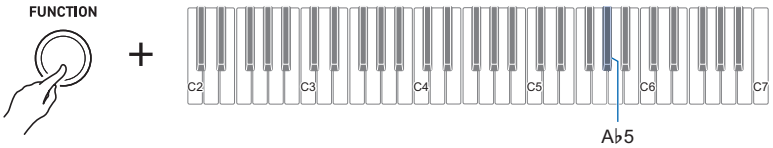
2. To exit the settings, release the **FUNCTION** button.

Playing with a Multi-dimensional Expanded Sound (Surround)

Turning on surround adds a multi-dimensional spaciousness to the sound from the speakers of the Digital Keyboard.

1. Press and hold the **FUNCTION** button, and press the A♭5 key.

- Do not release the **FUNCTION** button until step 2.



- Each press of the A♭5 key toggles the setting between on and off. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting
High note plays	On
Low note plays	Off (default setting)

2. To exit the settings, release the **FUNCTION** button.

NOTE

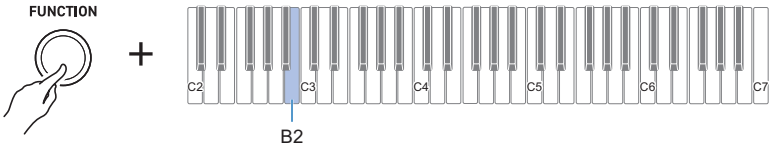
- The surround effect is not applied when headphones are used.
- When headphones are plugged into the headphone jack, surround is turned off.

Using the Equalizer (Equalizer)

You can select sound quality correction settings, such as emphasizing certain frequencies or softening the impression of a sound.

1. Press and hold the **FUNCTION** button, and press the B2 key.

- A notification tone sounds, and the Digital Keyboard waits for you to select the equalizer type.
- Do not release the **FUNCTION** button until step 3.



2. Select the equalizer type using the C2 to A2 keys.

To choose this type of equalizer:		Press this key:
Standard	(Normal setting)	C2
Bass+	(Emphasizes the bass frequencies)	C♯2
Treble+	(Emphasizes the treble frequencies)	D2
Loudness	(Intensifies the overall sound)	E♭2
Mellow	(Gives the sound a softer feeling)	E2
Bright	(Gives the sound a brighter feeling)	F2
Rock	(Setting appropriate for rock music)	F♯2
Dance	(Setting appropriate for dance music)	G2
Jazz	(Setting appropriate for jazz music)	A♭2
Classical	(Setting appropriate for classical music)	A2

- When a key is pressed, a notification tone sounds and the equalizer type corresponding to the key is selected.
- Even while the **FUNCTION** button is held down, playing any key other than C2 to A2 will produce an instrument sound. While making this setting, you can play the keyboard to hear how the selected equalizer type sounds.

3. To exit the settings, release the **FUNCTION** button.

Playing with Touch Response

Changing the Touch Response Settings

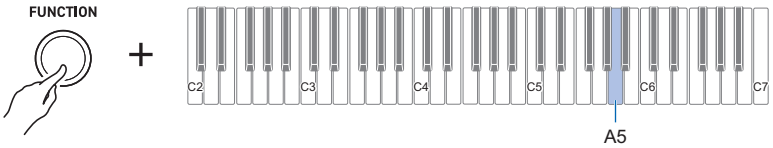
The Digital Keyboard has a Touch Response function that changes the volume according to how hard (fast) you press the keys. This function lets you play with dynamic expression, like playing an acoustic piano. The Digital Keyboard lets you change the sensitivity of the Touch Response, or adjust the volume when the Touch Response is turned off (which makes the sound play at the same volume, regardless of how hard you press the keyboard).

Changing the sensitivity of Touch Response

The Touch Response sensitivity can be selected from four levels.

1. Press and hold the FUNCTION button, and press the A5 key.

- Do not release the **FUNCTION** button until step 2.



- Each press of the A5 key changes the setting in the order shown in the table below. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting	Details
Low note plays once	Off	The volume does not change according to the strength of the key press.
High note plays once	Light	The sound will be louder than normal and the keys will feel lighter.
High note plays twice	Normal (default setting)	The standard setting.
High note plays three times	Heavy	The sound will be softer than normal, and the keys will feel heavier.

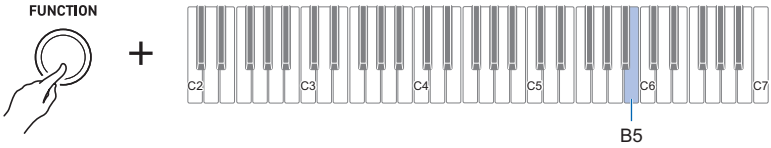
2. To exit the settings, release the FUNCTION button.

Adjusting volume when Touch Response is off (touch off velocity)

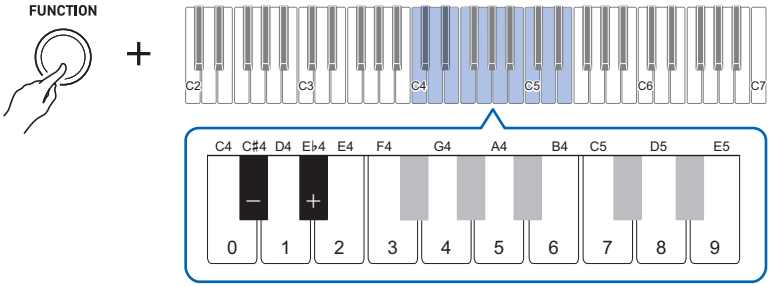
If you turn off the Touch Response setting by following the steps in "Changing the sensitivity of Touch Response", the sound will play at a constant volume regardless of how hard you press the keys. The volume (touch off velocity) at this time can be adjusted. The touch off velocity value can be set between 1 and 127 (default value: 100).

1. Press and hold the **FUNCTION** button, and press the B5 key.

- Do not release the **FUNCTION** button until step 3.



2. Use the C4 to E5 keys to change the volume setting.



To do this:	Operate as follows:
Lower the volume setting by 1	Press the C♯4 (–) key.*1
Raise the volume setting by 1	Press the E♭4 (+) key.*1
Directly input the volume setting	Use the C4 (0) to E5 (9) keys to enter a three-digit value. For 20, press "0-2-0". For 120, press "1-2-0". The volume setting changes when the third digit is entered.*2
Restore the default value	Press the C♯4 (–) key and the E♭4 (+) key at the same time.

*1 Press and hold to change the value continuously.

*2 Even if you have only entered two digits or less, releasing the **FUNCTION** button will confirm the value already entered (e.g., if you press "1-2" and release the **FUNCTION** button, the volume will be set to 12).

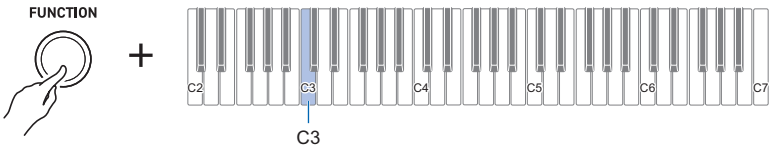
3. To exit the settings, release the **FUNCTION** button.

Using the Metronome

Starting or Stopping the Metronome

The metronome sounds at regular intervals. Using the metronome allows you to practice playing at a constant tempo. This allows you to practice at a tempo that suits you.

1. Press and hold the **FUNCTION** button, and press the C3 key.



- The metronome will start. Release the **FUNCTION** button.
- For information on setting the beat and tempo, see “Changing the Metronome Beat” and “Changing the Metronome Tempo”.

2. Press and hold the **FUNCTION** button, and press the C3 key.

- The metronome stops. Release the **FUNCTION** button.

NOTE

- The metronome can be started/stopped by pressing a pedal (sold separately) connected to the Digital Keyboard. For details, see “Using a Pedal”.

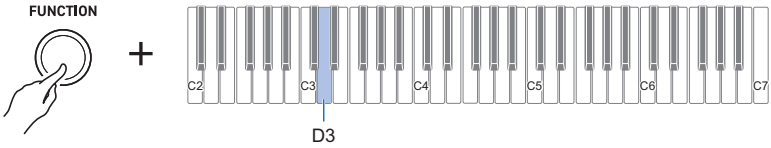
Changing the Metronome Beat

The metronome beat on the Digital Keyboard can be set between 0 and 16 (default value: 4). The sound plays according to the setting, as shown in the table below.

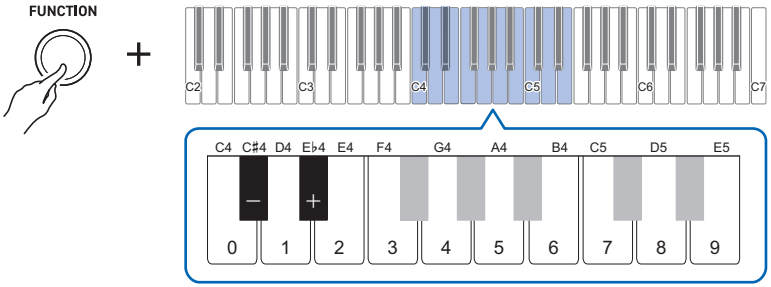
Setting value	Setting details
0	Only a click sound is heard on every beat.
1	A bell tone is heard on every beat.
2–16	Sets the beat for beats 2 to 16. A bell tone sounds on the first beat, and a click sound is heard on each remaining beat.

1. Press and hold the **FUNCTION** button, and press the D3 key.

- Do not release the **FUNCTION** button until step 3.



2. Use the C4 to E5 keys to change the metronome beat setting.



To do this:	Operate as follows:
Decrease the beat setting by 1	Press the C♯4 (–) key.*1
Raise the beat setting by 1	Press the E♭4 (+) key.*1
Directly input the beat setting	Use the C4 (0) to E5 (9) keys to enter a two-digit value. For 3 beats, press “0-3”; for 12 beats, press “1-2”. The setting changes when the second digit is entered.*2
Restore the default value	Press the C♯4 (–) key and the E♭4 (+) key at the same time.

*1 Press and hold to change the value continuously.

*2 Even if you have only entered one digit, releasing the **FUNCTION** button will confirm the value already entered (e.g., if you press “5” and release the **FUNCTION** button, the value will be five beats).

3. To exit the settings, release the **FUNCTION** button.

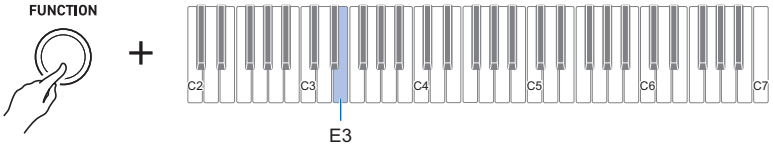
Changing the Metronome Tempo

The tempo (beats per minute) of the metronome and the demo songs* can be set between 20 and 255 (default value: 120).

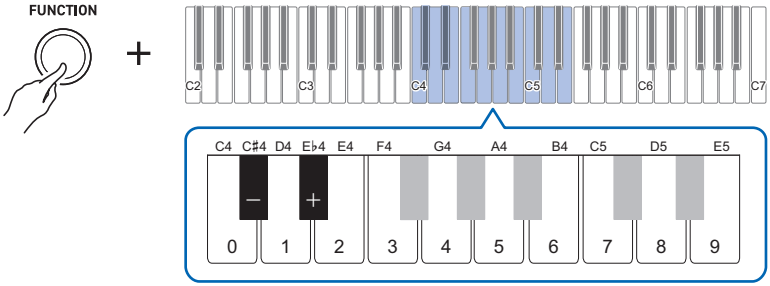
* The tempo of the demo song changes when the song is played in standard demo mode. In Feel Sync demo mode, the default setting of each demo song always determines the tempo for playback. For details on each demo mode, refer to "About the demo modes".

1. Press and hold the **FUNCTION** button, and press the E3 key.

- Do not release the **FUNCTION** button until step 3.



2. Use the C4 to E5 keys to change the tempo value.



To do this:	Operate as follows:
Lower the tempo by 1	Press the C♯4 (–) key.*1
Increase the tempo by 1	Press the E♭4 (+) key.*1
Input the tempo directly	Use the C4 (0) to E5 (9) keys to enter a three-digit value. For 20, press "0-2-0". For 120, press "1-2-0". The tempo changes when the third digit is entered.*2
Restore the default value	Press the C♯4 (–) key and the E♭4 (+) key at the same time.

*1 Press and hold to change the value continuously.

*2 Even if you have only entered two digits or less, releasing the **FUNCTION** button will confirm the value already entered (e.g., if you press "7-2" and then release the **FUNCTION** button, the tempo value will be 72).

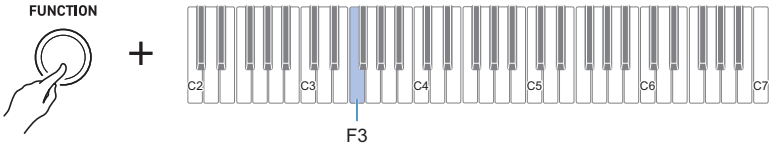
3. To exit the settings, release the **FUNCTION** button.

Changing the Metronome Volume

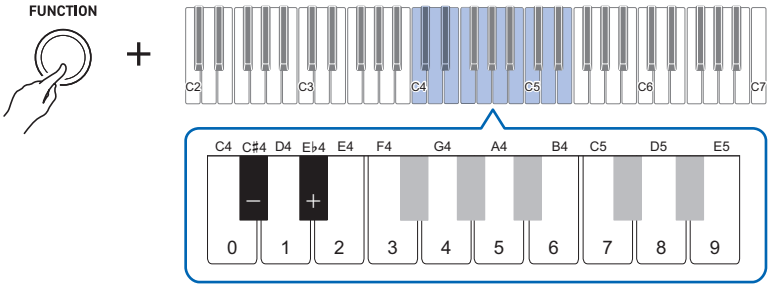
The metronome volume value can be set between 0 and 127 (default value: 110).

1. Press and hold the **FUNCTION** button, and press the F3 key.

- Do not release the **FUNCTION** button until step 3.



2. Use the C4 to E5 keys to change the volume setting.



To do this:	Operate as follows:
Lower the volume setting by 1	Press the C♯4 (–) key.*1
Raise the volume setting by 1	Press the E♭4 (+) key.*1
Directly input the volume setting	Use the C4 (0) to E5 (9) keys to enter a three-digit value. For 20, press “0-2-0”. For 120, press “1-2-0”. The volume setting changes when the third digit is entered.*2
Restore the default value	Press the C♯4 (–) key and the E♭4 (+) key at the same time.

*1 Press and hold to change the value continuously.

*2 Even if you have only entered two digits or less, releasing the **FUNCTION** button will confirm the value already entered (e.g., if you press “1-2” and then release the **FUNCTION** button, the volume value will be 12).

3. To exit the settings, release the **FUNCTION** button.

Saving and Recalling a Setup (MY SETUP)

Saving the current settings to MY SETUP

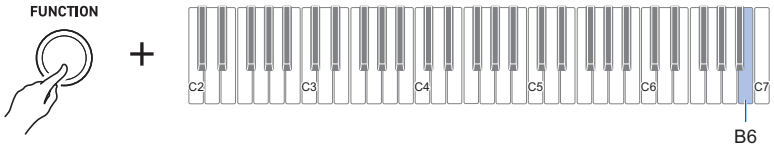
The current settings including the selected tone, the on/off state of the layer function and so forth can be saved together as “MY SETUP”. Once you have saved the settings for playing a particular song, you can recall them from MY SETUP when you play that song again.

Saving to MY SETUP

1. Set the tones, layer, transpose, reverb type, etc. according to the song you want to play.

- For settings that can be saved, see “Settings that can be saved”.

2. Press and hold the FUNCTION button, and press the B6 key.



- A notification tone sounds, and the current settings are saved.

3. Release the FUNCTION button.

Settings that can be saved

The following settings can be saved in MY SETUP.

- Tone (main part, layered part)
- Demo song number
- Volume balance between song and keyboard performance
- Key range over which Feel Sync is enabled
- Feel Sync function on/off
- Layer on/off
- Part volume (main part, layered part)
- Part octave shift (main part, layered part)
- Octave Shift
- Transpose
- Tuning
- Scale Tuning (type and base note)
- Sustain on/off
- Sustain time (main part, layered part)
- Reverb on/off
- Reverb type
- Surround on/off
- Equalizer
- Touch Response
- Touch off velocity

- Metronome (beat, tempo, volume)
- Pedal function
- Pedal effect (main part, layered part)
- AUDIO IN center cancel on/off

Recalling from MY SETUP

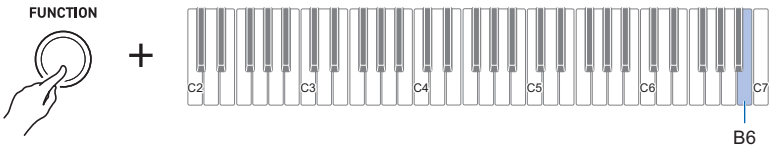
The MY SETUP that you saved can be recalled at any time while you are using the Digital Keyboard. Also, you can make MY SETUP be automatically recalled when the Digital Keyboard is turned on.

Recalling from MY SETUP right away

IMPORTANT!

- **If you long-press the B6 key during the following operation, the settings previously saved in MY SETUP will be overwritten, so do not long-press the B6 key.**

1. Press and hold the FUNCTION button, and press the B6 key.



- A notification tone sounds and the previously saved settings are recalled.

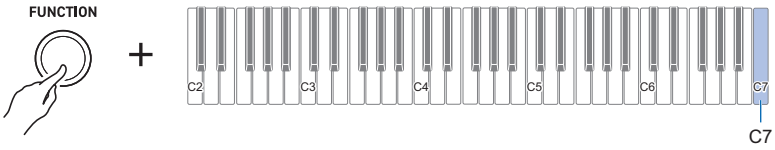
2. Release the FUNCTION button.

Automatically recalling from MY SETUP when the power is turned on

When you use the following operation to switch the auto-recall setting on, MY SETUP is automatically recalled each time the Digital Keyboard is turned on.

1. Press and hold the FUNCTION button, and press the C7 key.

- Do not release the **FUNCTION** button until step 2.



- Each time you press the C7 key, the setting toggles between on and off. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting
High note plays	On
Low note plays	Off (default setting)

2. To exit the settings, release the FUNCTION button.

Using the Dedicated Apps

Using the Dedicated Feel Sync App

Using the dedicated Feel Sync app, users can enjoy playing the keyboard along with the Feel Sync function, while playing audio files (MP3, WAV, etc.) on their smart device or songs from content services provided by the app. For details, see “Using the Feel Sync Function While Playing a Song on the Dedicated App”.

Using the Dedicated CASIO MUSIC SPACE App

Using the dedicated CASIO MUSIC SPACE app, you can use various functions in conjunction with the Digital Keyboard.

Main functions of the app

Function	What the function does
(1) Remote Controller	Control various keyboard settings while checking the list display on the app.
(2) Piano Roll	Practice songs on the piano roll screen (which displays the pitch and length of the notes) and receive a grade.
(3) Score Viewer	View a wide variety of music scores, and listen to the songs on the scores.
(4) Music Player	Play along with songs stored on your smart device or songs from music streaming services. Tempo change and repeat playback are also possible.
(5) Live Concert Simulator	This function gives you the feeling of playing in a stadium or classical music hall, on a beach and many other places.
(6) Data Center	Lets you check the total number of times you have played using functions (2) to (5) above, and view descriptions of songs.

See the CASIO MUSIC SPACE instruction manual for details on each function and other features.
https://web.casio.com/app/en/music_space/manual/

1. Installing CASIO MUSIC SPACE on your smart device

- See “CASIO MUSIC SPACE Download” at the following website.
  https://support.casio.com/global/en/emi/manual/CT-FS1/

2. Connect the Digital Keyboard to a smart device

- You can connect either wirelessly or with a cable. The available functions depend on the connection method.
- Do not make Bluetooth Low Energy MIDI connection and USB MIDI connection at the same time.

Main functions of the app	Wireless connection		Cable connection
	Bluetooth Low Energy MIDI connection*1	Bluetooth Audio connection*2	USB MIDI connection*3
Remote Controller	✓	–	✓
Piano Roll	✓	–	✓
Score Viewer	✓*4	✓	✓*4
Music Player	–	✓	–
Live Concert Simulator	✓	✓	✓
Data Center	✓*5	–	✓

*1 See “Making a Bluetooth Low Energy MIDI Connection”.
*2 See “Connecting via Bluetooth Audio”.
*3 See “Connecting to a smart device via USB MIDI”.
*4 This connection is required to switch between pages using a pedal.
*5 This connection is required to play back songs from the “Descriptions of Songs” page.

Wirelessly Connecting the Digital Keyboard to an External Device

Wireless Connections

The included Wireless MIDI & audio adaptor can be used to wirelessly connect the Digital Keyboard to an external device (such as a computer or smart device). This connection uses Bluetooth wireless technology, making the following two types of connections possible.

- Bluetooth Low Energy MIDI connectivity
  MIDI data is transmitted and received between the Digital Keyboard and an external device.
- Bluetooth audio connectivity
  The sound from an external device is played through this Digital Keyboard.

The **WIRELESS** button lights up when the Digital Keyboard is connected to an external device via one or both of the methods listed above. When a connection is not made using either of these methods, the light turns off.



Making a Bluetooth Low Energy MIDI Connection

By connecting the Digital Keyboard to an external device via Bluetooth Low Energy MIDI using the following steps, MIDI data can be transmitted and received between the Digital Keyboard and the external device.

IMPORTANT!

- **To connect via Bluetooth Low Energy MIDI, your smart device must support Bluetooth MIDI. Please check the product specifications of your smart device. If Bluetooth MIDI is not supported, try connecting via USB MIDI (see "Connecting to a smart device via USB MIDI").**

1. Plug the supplied Wireless MIDI & audio adaptor into the USB Type A port.

- See "Plugging in the Wireless MIDI & audio adaptor (accessory)".

2. Get your device that supports Bluetooth Low Energy MIDI connectivity ready.

- The following steps assume that the device to which you will connect is a smart device.

3. Open the Bluetooth settings screen of the smart device, and switch Bluetooth on if it is off.

4. Tap "WU-BT10 MIDI" on the settings screen of the app installed on your smart device to connect.

- For details on how to connect from the app, refer to the user's guide or help for the app you are using.
- Do not operate the Digital Keyboard while it is waiting to connect to a smart device.
- When the connection is complete, the **WIRELESS** button on the Digital Keyboard blinks twice and a notification tone will sound, after which the **WIRELESS** button will light up.

IMPORTANT!

- **When using CASIO's apps for smart devices via a Bluetooth Low Energy MIDI connection, do not use the USB Micro B port at the same time.**
- **When using the CASIO MUSIC SPACE app, a Bluetooth Low Energy MIDI connection may cause noticeable sound delays or distortion in the app's lesson functionality, depending on the connection and the performance of the smart device. If this happens, try the following.**
  - **Check the app's instructions for lesson usage and MIDI playback quality.**
  - **Use a cable to connect (see "Connecting to a smart device via USB MIDI").**

NOTE

- To connect via Bluetooth MIDI, Bluetooth must be activated on both the Digital Keyboard and the Bluetooth MIDI-enabled device.
- For information on turning on/off Bluetooth for the Digital Keyboard, refer to "Turning Bluetooth On/Off".
- Each time you use the app with a Bluetooth Low Energy MIDI connection, you must perform the operation described in step 4 above.
- Connecting the Digital Keyboard via both Bluetooth Low Energy MIDI and Bluetooth audio at the same time from an external device may result in unstable MIDI operations, depending on the external device and OS version. If this happens, disconnect Bluetooth audio on the external device.

Connecting via Bluetooth Audio

By following the steps below to connect the Digital Keyboard to an external device via Bluetooth audio, the sound of the external device can be played from the speakers of the Digital Keyboard.

Playing sound from devices supporting Bluetooth audio via the Digital Keyboard (Bluetooth audio pairing)

IMPORTANT!

- **When pairing, keep the volumes of the Digital Keyboard and the external device turned down to a low level.**
- **If the sound from the external device played through the Digital Keyboard is distorted, turn down the volume of the external device.**
- **If the external device is too loud, the power may automatically shut off to protect the Digital Keyboard. If this occurs, turn down the volume of the external device.**
- **Some latency (sound delay) may be heard, which is a characteristic of Bluetooth. If this bothers you, connect with a cable.**

■Pairing for Bluetooth audio

1. Plug the supplied Wireless MIDI & audio adaptor into the USB Type A port.

- See “Plugging in the Wireless MIDI & audio adaptor (accessory)”.

2. Have a device ready that supports Bluetooth audio connectivity.

- The following steps assume that the device to which you will connect is a smart device.

3. Open the Bluetooth settings screen of the smart device, and switch Bluetooth on if it is off.

4. Press and hold the WIRELESS button.



- The Digital Keyboard enters pairing standby, a notification tone sounds approximately every three seconds, and the **WIRELESS** button begins to blink in time with the notification tone.
- “WU-BT10 AUDIO” appears on the Bluetooth settings screen of the smart device.

5. Tap “WU-BT10 AUDIO” on the Bluetooth settings screen of the smart device to pair it with the Digital Keyboard.

- When pairing is complete, the Digital Keyboard’s **WIRELESS** button blinks twice and a notification tone sounds, after which the **WIRELESS** button lights up.

NOTE

- To make a Bluetooth audio connection, Bluetooth must be activated on both the Digital Keyboard and your Bluetooth audio-enabled device.
- For information on turning on/off Bluetooth for the Digital Keyboard, refer to “Turning Bluetooth On/Off”.
- The pairing information for the last external device connected via Bluetooth audio is registered in the Wireless MIDI & audio adaptor. From then on, a Bluetooth audio connection is automatically established without the need for Bluetooth audio pairing.
- If the sound of the external device played from the Digital Keyboard sounds quieter than what you’re playing on this Digital Keyboard, the keyboard volume may be set too loud. See “Adjusting the Volume Balance Between the Song and Keyboard Performance”.

■If the Bluetooth audio connection does not work properly

1. Delete the pairing registration for the Digital Keyboard.

- For details, see “Deleting a pairing registration”.

2. If pairing registration information from this Digital Keyboard remains on the external device, delete it.

- Delete “WU-BT10 AUDIO” from the Bluetooth settings screen of the external device. For how to do this, see the external device’s instruction manual.

3. Try the Bluetooth audio pairing again.

- Refer to “Pairing for Bluetooth audio”.

■Center localization cancellation of input audio (AUDIO IN center cancel)

The sound of vocals input to the Digital Keyboard from an external device can be cut (deleted or lowered in volume). For details, see “Switching AUDIO IN Center Cancel On/Off”.

Deleting a pairing registration

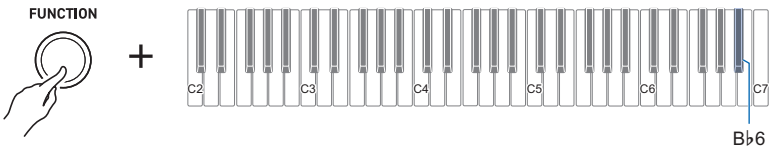
Here’s how to delete pairing registrations between the Digital Keyboard and external devices connected via Bluetooth audio.

NOTE

- After performing the following operation, delete the pairing registration with the Digital Keyboard on the Bluetooth audio-compatible device connected to the Digital Keyboard as well. Delete “WU-BT10 AUDIO” from the Bluetooth settings screen of the external device. For how to do this, see the external device’s instruction manual.

1. Plug the supplied Wireless MIDI & audio adaptor into the USB Type A port.

2. Press and hold the FUNCTION button, and press the B♭6 key.



- A notification tone will sound, and the Bluetooth audio pairing registration will be deleted.

3. Release the FUNCTION button.

Turning Bluetooth On/Off

By default, Bluetooth is turned on when the Digital Keyboard is turned on.

Bluetooth can be turned off as needed when the Wireless MIDI & audio adaptor is plugged into the USB Type A port without a wireless connection being made, or when you want to stop the signal.

Turning Off Bluetooth

Press the WIRELESS button.



- A low notification tone will play once, and Bluetooth turns off.
- If the **WIRELESS** button was lit, it will turn off, and the external device that was connected via Bluetooth will be disconnected.

NOTE

- The Bluetooth on/off setting is retained even when the Digital Keyboard is turned off. For this reason, once you turn off Bluetooth, it will remain off until it is turned on again, even if the Digital Keyboard is turned back on.

Turning Bluetooth back on

Press the WIRELESS button.

- A high notification tone sounds approximately every second, and the **WIRELESS** button blinks in time with the notification tone. A low notification tone will then play once, and Bluetooth turns on.

NOTE

- If there is an external device that was connected via Bluetooth before Bluetooth was turned off, the Digital Keyboard will automatically reconnect with that device after a few seconds. When reconnected, a high notification tone sounds once, and the **WIRELESS** button lights up.
  If Bluetooth does not reconnect after 10 seconds or more, press the **WIRELESS** button again. A low notification tone sounds once. For subsequent operations, see “If Bluetooth does not reconnect automatically”.

■If Bluetooth does not reconnect automatically

If the Digital Keyboard does not automatically reconnect to the external device even after Bluetooth is turned on again, the external device that was connected to the Digital Keyboard via Bluetooth might have been turned off, or Bluetooth may have been deactivated on the external device. Make sure that the external device is turned on and that Bluetooth is activated on the external device, and then try the following operations.

- Follow the instructions shown in “Turning Bluetooth back on” again.
- Turn off the Digital Keyboard, and then turn it back on.

Connecting the Digital Keyboard to an External Device via Cable

Connecting to a Computer or Smart Device via Cable (MIDI Data Transmission/Reception)

Use a USB cable to connect the Digital Keyboard to a computer or smart device. This makes it possible to transmit and receive performance information (MIDI data) between the Digital Keyboard and a computer or smart device. You can use music software on your computer or a smart device app to record your performance on this Digital Keyboard, or send data from your computer or smart device to this Digital Keyboard to play its sounds.

Connecting to a computer via USB

■Required operating environment

The operating environment required on your computer to transmit and receive MIDI data is as follows. Be sure to confirm your computer's environment in advance.

- Supported operating systems
  Windows 11
  macOS 14, 15, 26

- Other requirements:
  USB port
  MIDI-compatible music software (such as commercially available products)

NOTE

- For the latest information on compatible operating systems, refer to "Operating System Compatibility" at the website below.
  https://support.casio.com/global/en/emi/manual/CT-FS1/

■Connecting the Digital Keyboard to a computer via USB

IMPORTANT!

- **Before performing these steps, you must procure and install MIDI-compatible music software (such as a commercially available product) on your computer.**
- **Failure to connect using the correct steps may result in the inability to send and receive data. Make sure to follow the steps below when connecting.**
- **After connecting, be sure to turn on the Digital Keyboard before launching the music software on your computer.**

1. Turn off the Digital Keyboard and turn on your computer.

- Do not launch the music software on your computer yet.

2. Connect the USB Micro B port of the Digital Keyboard to your computer using a commercially available USB cable.

- Use a cable with a USB Micro B (USB 1.1 or 2.0) type plug on the Digital Keyboard side, which supports data transfer. Charging cables are not compatible.

3. Turn on the Digital Keyboard.

- When the Digital Keyboard is connected to a computer for the first time, the driver required to send and receive data is automatically installed on the computer.

4. Launch the music software on your computer.

5. In the music software settings of your computer, select “CASIO USB-MIDI” as the MIDI device.

- See the manual of your music software for information on how to select a MIDI device.

NOTE

- After successfully connecting once, the computer or the Digital Keyboard can be turned off and on again with the USB cable still plugged in.

Connecting to a smart device via USB MIDI

■About verified smart devices

For information on smart devices that have been verified to connect via USB-MIDI with the Digital Keyboard, refer to “Operating System Compatibility” at the website below.
https://support.casio.com/global/en/emi/manual/CT-FS1/

■Making a USB MIDI connection between the Digital Keyboard and a smart device

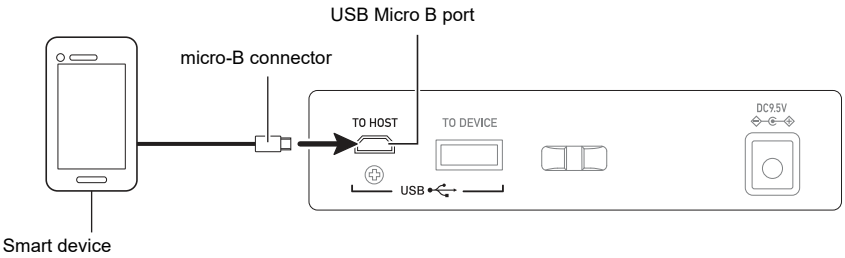
IMPORTANT!

- **Connect using a USB cable with a maximum length of two meters.**
- **Do not connect a USB cable and audio cable to the smart device at the same time.**
- **Do not use the USB Type A port when connecting with a USB cable and using CASIO's apps for smart devices.**

1. Turn on the Digital Keyboard and the smart device.

2. Connect the smart device to the USB Micro B port of the Digital Keyboard using a commercially available USB cable.

- For details on cables that can be used for connection, see "Operating System Compatibility" at the website below.
  https://web.casio.com/app/en/music_space/support/connect.html



3. Launch the MIDI-compatible app on your smart device.

- After you connect the Digital Keyboard to your smart device, you will use the app on the smart device to perform various operations. For details on the various operations, refer to the app manual or help contents.
- When using CASIO's dedicated app, if a successful connection is made, the message "Connecting" will appear on the smart device screen, followed by the message "Connected".

MIDI settings of the Digital Keyboard

For details on the MIDI settings of the Digital Keyboard, see "MIDI-Related Settings".

NOTE

- For detailed MIDI data transmission and reception specifications for the Digital Keyboard, refer to "MIDI Implementation" in the "Other Manuals" section of the following website.
  https://support.casio.com/global/en/emi/manual/CT-FS1/

Using a Cable to Connect with an Audio Device

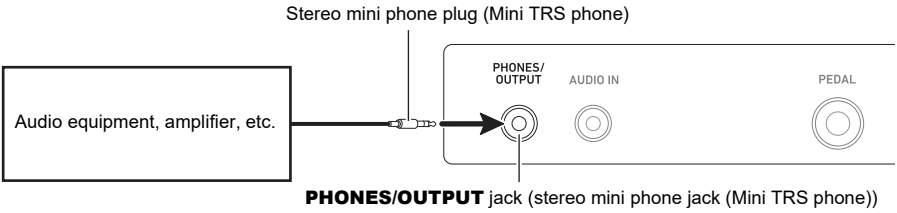
The Digital Keyboard can be connected to a commercially available playback device or amplifier for playing back at louder volumes, or to a recording device to record your performance. You can also enjoy playing along with the background sound from a portable audio player or other device through the Digital Keyboard.

Listening to the Digital Keyboard via an external device

For this connection, you can use a commercially available cable.
Use a cable with a stereo mini phone plug (Mini TRS phone) on the side that connects to the Digital Keyboard, and a plug that matches the input jack on the external device.

IMPORTANT!

- **Turn off all external devices when connecting. Also, keep the volume of the Digital Keyboard and the external devices turned down low when turning the power on/off.**
- **After connecting, first turn on the Digital Keyboard, and then turn on the external device.**
- **If the sound from the Digital Keyboard played through the external device is distorted, turn down the volume of the Digital Keyboard.**
- **Be sure to use a cable with a stereo mini phone plug (Mini TRS phone) that can connect to the PHONES/OUTPUT jack of the Digital Keyboard. Other types of plugs do not fit.**

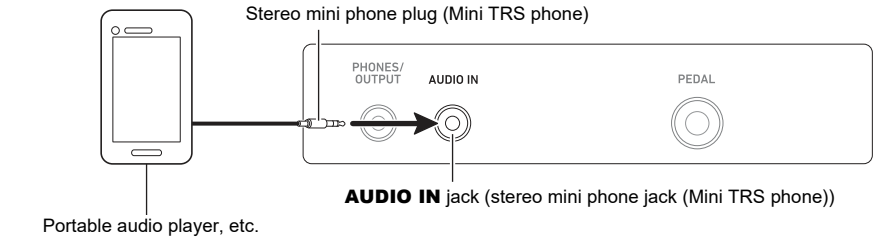


Play sound from external devices through the Digital Keyboard

For this connection, you can use a commercially available cable.
Use a cable with a stereo mini phone plug (Mini TRS phone) on the side that connects to the Digital Keyboard, and a plug that matches the input jack on the external device.
When using the Digital Keyboard to play an input sound from an external device, use the external device to adjust the volume. You cannot adjust the volume of sound from external devices by using the Digital Keyboard.

IMPORTANT!

- **Turn off the power to the Digital Keyboard when making connections. Also, keep the volume of the Digital Keyboard and the external devices turned down low when turning the power on/off.**
- **After connecting, first turn on the external device, and then turn on the Digital Keyboard.**
- **If the sound from the external device played through the Digital Keyboard is distorted, turn down the volume of the external device.**
- **If the external device is too loud, the Digital Keyboard power may automatically shut off to protect it against damage. If this occurs, turn down the volume of the external device.**
- **Be sure to use a stereo mini phone plug (Mini TRS phone) for the plug that connects to the AUDIO IN jack on the Digital Keyboard. Other types of plugs do not fit.**



NOTE

- The built-in effect (reverb) is not applied to the input sound from the **AUDIO IN** jack.

■Center localization cancellation of input audio (AUDIO IN center cancel)

The sound of vocals input to the Digital Keyboard from an external device can be cut (deleted or lowered in volume). For details, see “Switching AUDIO IN Center Cancel On/Off”.

Using a Pedal (sold separately)

Using a Pedal

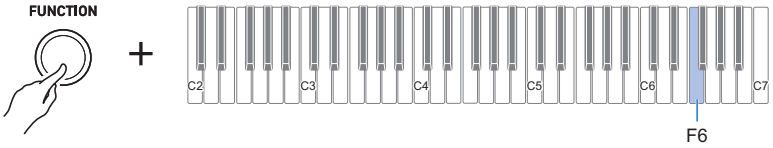
By connecting a pedal (SP-3 or SP-20, sold separately) to the Digital Keyboard, you can make the sound change when the pedal is pressed. For how to connect, see “Connecting a pedal (sold separately)”.

Switching between pedal functions

By default, this pedal works as a damper pedal, but you can make it function differently.

1. Press and hold the FUNCTION button, and press the F6 key.

- Do not release the **FUNCTION** button until step 2.



- Each press of the F6 key changes the setting in the order shown in the table below. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting	Details
Plays once	Damper (default setting)	Press the pedal while you play to make the notes sustain even after the keys are released. On an instrument such as an organ where the tones sustain for as long as the key is pressed, notes will continue to sound while the pedal is pressed.
Plays twice	Sostenuto	Only the note of the key that is being held down at the time the pedal is pressed will sustain until the pedal is released, even if the key is released.
Plays three times	Soft	The notes played while the pedal is pressed are slightly reduced in volume.
Plays four times	Metronome	Pressing the pedal starts/stops the metronome.

2. To exit the settings, release the FUNCTION button.

Turn off the pedal effect for each part

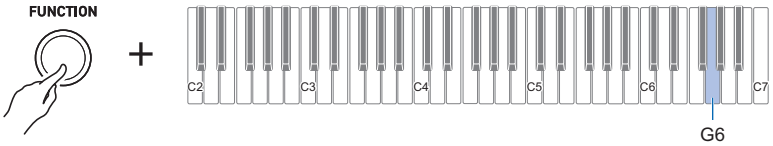
For the main and layered parts*, you can turn off the effect that's applied to the notes played when the pedal is pressed. This is useful when you want to apply a pedal effect to only one part.

* For the main part and the layered part, see "Layering Two Tones".

■Turning off the effect of the pedal on the main part

1. Press and hold the FUNCTION button, and press the G6 key.

- Do not release the **FUNCTION** button until step 2.



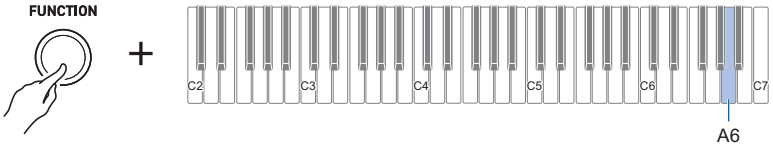
- Each time you press the G6 key, the setting toggles between on and off. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting	Details
High note plays	On (default setting)	The pedal effect is applied.
Low note plays	Off	The pedal effect is not applied.

2. To exit the settings, release the FUNCTION button.

■Turning off the pedal effect for the layered part

Press the A6 key instead of the G6 key in step 1 of "Turning off the effect of the pedal on the main part".



After that, the operation is the same as that for the main part.

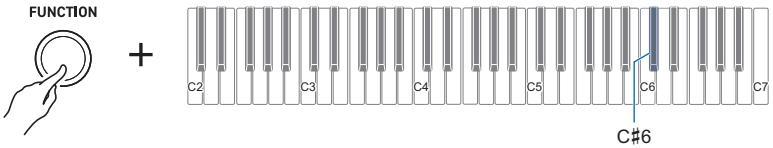
Changing Various Operational Settings

Turning the Auto Power Off function on/off

By default, the Digital Keyboard automatically turns off the power after about 20 minutes of inactivity, to prevent unnecessary power consumption. The Auto Power Off function can also be canceled, to prevent the power from turning off between songs when you are playing live at a concert, for example.

1. Press and hold the **FUNCTION** button, and press the C♯6 key.

- Do not release the **FUNCTION** button until step 2.



- Each time you press the C♯6 key, the setting toggles between on and off. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting	Details
High note plays	On (default setting)	The Auto Power Off function is enabled.
Low note plays	Off	The Auto Power Off function is canceled, and the power will not turn off automatically.

2. To exit the settings, release the **FUNCTION** button.

Important Notice:
If Auto Power Off is set to off, the Digital Keyboard will not turn off automatically and will continue using power.

NOTE

- Even if Auto Power Off is set to on, the power might not turn off automatically even while the Digital Keyboard is not operated in certain situations, such as while using the metronome.

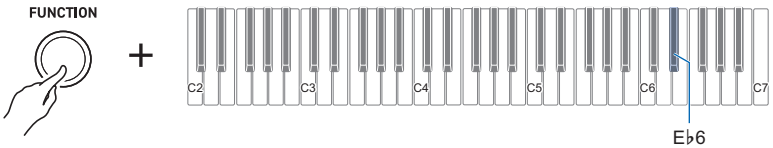
Setting the Battery Type

After inserting batteries into the Digital Keyboard for the first time or after replacing them, follow the steps below to set the battery type.

1. Turn on the Digital Keyboard.

2. Press and hold the FUNCTION button, and press the E♭6 key.

- Do not release the **FUNCTION** button until step 3.



- A notification tone sounds each time the E♭6 key is pressed to confirm the setting.

Notification tone	Setting
Plays once	Alkaline batteries (default setting)
Plays twice	Rechargeable batteries (eneloop)

3. To exit the settings, release the FUNCTION button.

MIDI-Related Settings

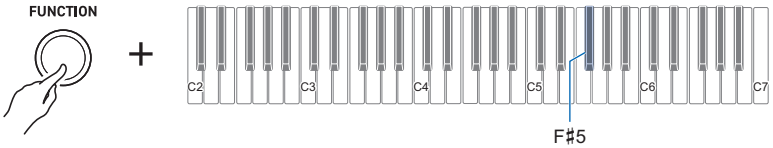
For more information about MIDI, see “Send/receive MIDI data”.

Turning Local Control on/off

When Local Control is turned off, performance information (MIDI data) is output from the Digital Keyboard, but the Digital Keyboard itself does not produce sound. This setting is for sending MIDI data to external devices only.

1. Press and hold the FUNCTION button, and press the F♯5 key.

- Do not release the **FUNCTION** button until step 2.



- Each time you press the F♯5 key, the setting toggles between on and off. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting
High note plays	On (default setting)
Low note plays	Off

2. To exit the settings, release the FUNCTION button.

Changing the MIDI out channel

Sets the MIDI channel to be used when sending keyboard performance information from the Digital Keyboard to an external device as MIDI data. Different MIDI out channels can be set for the main part and the layered part*.

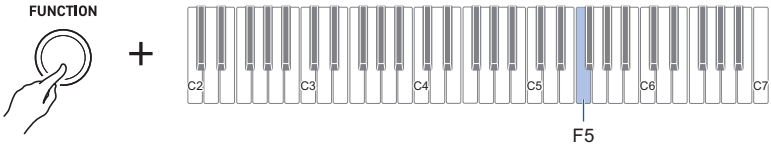
Set the MIDI out channel from 1 to 16 (default value: 1). The MIDI out channel can also be set to 0 (off) on this Digital Keyboard, so that MIDI data is not sent from a specific part.

* For the main part and the layered part, see "Layering Two Tones".

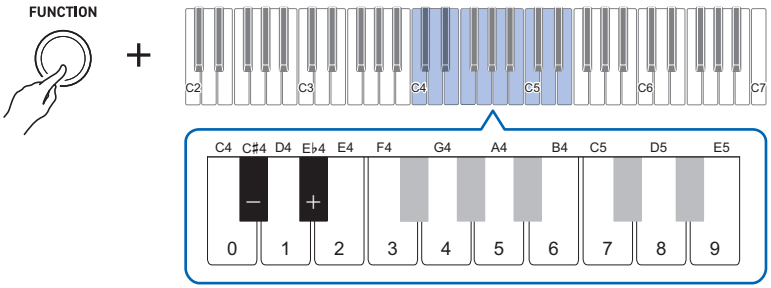
■Setting the MIDI out channel for the main part

1. Press and hold the FUNCTION button, and press the F5 key.

- Do not release the **FUNCTION** button until step 3.



2. Use the C4 to E5 keys to change the MIDI out channel setting.



To do this:	Operate as follows:
Lower the setting by 1	Press the C♯4 (–) key.*1
Raise the setting by 1	Press the E♭4 (+) key.*1
Directly input the value	Use the C4 (0) to E5 (9) keys to enter a two-digit value. For channel 3, press "0-3"; for channel 12, press "1-2". The setting changes when the second digit is entered. *2
Restore the default value	Press the C♯4 (–) key and the E♭4 (+) key at the same time.

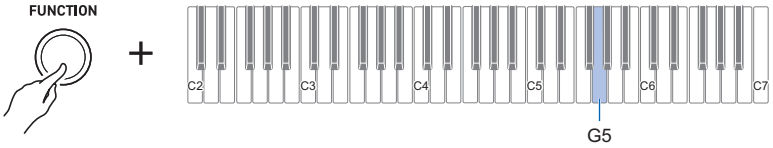
*1 Press and hold to change the value continuously.

*2 Even if you have only entered one digit, releasing the **FUNCTION** button will confirm the value already entered (e.g., if you press "5" and release the **FUNCTION** button, the channel will be set to 5).

3. To exit the settings, release the FUNCTION button.

■Setting the MIDI out channel for the layered part

Press the G5 key instead of the F5 key in step 1 of “Setting the MIDI out channel for the main part”.



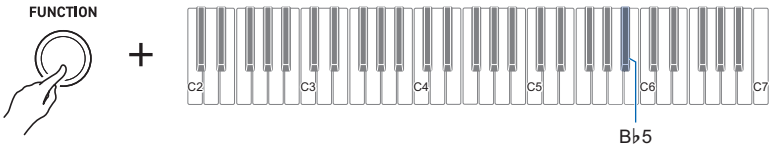
After that, the operation is the same as that for the main part.

Switching AUDIO IN Center Cancel On/Off

AUDIO IN center cancel is turned off by default on the Digital Keyboard. When on, this cuts out (eliminates or reduces) vocals in sound input from the **AUDIO IN** jack or Bluetooth audio. This function cancels output sound in the center position, so it may also cut sound other than vocals in some cases. The degree of effect depends on the input sound.

1. Press and hold the FUNCTION button, and press the B♭5 key.

- Do not release the **FUNCTION** button until step 2.



- Each time you press the B♭5 key, the setting toggles between on and off. A notification tone signals which setting you have switched to after you press a key.

Notification tone	Setting
High note plays	On
Low note plays	Off (default setting)

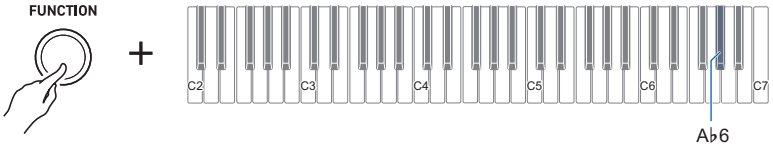
2. To exit the settings, release the FUNCTION button.

Turning the Notification Sound On/Off

When this setting is off, the notification sounds that play when a **FUNCTION** button is held down and a setting is made on the keyboard are muted.

1. Press and hold the FUNCTION button, and press the A♭6 key.

- Do not release the **FUNCTION** button until step 2.



- Each time you press the A♭6 key, the setting toggles between on and off. A notification tone signals which setting you have switched to after you press a key.

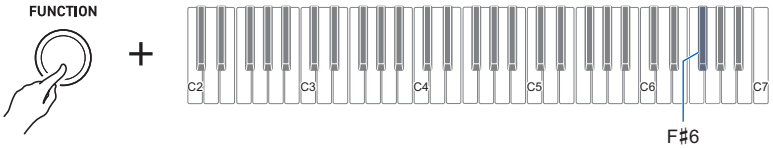
Notification tone	Setting
High note plays	On (default setting)
Low note plays	Off

2. To exit the settings, release the FUNCTION button.

Restoring All Settings of the Digital Keyboard to the Factory Defaults (Initialization)

1. Press and hold the FUNCTION button, and press the F♯6 key.

- Do not release the **FUNCTION** button until step 3.



- When you hear the notification tone, keep holding down the **FUNCTION** button and release the F♯6 key. The Digital Keyboard enters initialization standby.
- Release the **FUNCTION** button at this time if you wish to cancel the initialization.

2. To start the initialization, press the F♯6 key again.

- A notification tone sounds, and initialization begins. The Digital Keyboard turns off and then back on again.

3. Release the FUNCTION button.

Troubleshooting

Points to check to determine if there is a malfunction

IMPORTANT!

- **If any of the following occurs, turn the Digital Keyboard off and back on again (the various settings will be initialized). In many cases, this should resolve the problem.**
  - No sound is produced when the keys are pressed.
  - The metronome is not making any sound.
  - A sound keeps playing and won't stop.
  - The volume and/or sound quality has changed.
  - The pitch does not match (or sounds unnatural) with other instruments.
  - The sound seems to suddenly reverberate differently.

  If the problem persists even after turning the power off and back on again, read each item in "Causes and required actions to resolve the issues" and try the required actions.

Causes and required actions to resolve the issues

The Digital Keyboard does not turn on.

Causes:	a. The AC adaptor is not connected properly. b. The batteries are not installed correctly. c. The batteries are depleted.
Required actions:	a. Check the connection of the AC adaptor. b. Check that the batteries are installed in the correct orientation. c. Replace the batteries with new ones or use the AC adaptor.

Playing the Digital Keyboard loudly causes the power to shut down abruptly.

Causes:	a. The batteries are depleted. b. The volume of the external device is too loud when it is being used to play sound through the Digital Keyboard.
Required actions:	a. Replace the batteries with new ones or use the AC adaptor. b. Turn down the volume of the external device.

After 20 minutes of not playing, the Digital Keyboard suddenly turns off.

Causes:	The power is automatically turned off due to the Auto Power Off function.
Required actions:	• To turn the Digital Keyboard on again, press the ⏻ **(Power)** button. • To prevent the power from turning off automatically, cancel the Auto Power Off function. For details, see "Turning the Auto Power Off function on/off".

No sound is produced when the keys are pressed.

Causes:	a. The **VOLUME** knob has been turned down. b. A plug is inserted into the **PHONES/OUTPUT** jack on the back of the Digital Keyboard. c. The Local Control setting is off.
Required actions:	a. Use the **VOLUME** knob to adjust the volume. b. Unplug the **PHONES/OUTPUT** plug from the jack. c. Turn on the Local Control setting. For details, see "Turning Local Control on/off".

The metronome is not making any sound.

Causes:	The metronome volume is set to 0 or to a very low value.
Required actions:	Increase the volume of the metronome. For more information, see "Changing the Metronome Volume".

A sound keeps playing and won't stop.

Causes:	The batteries are depleted.
Required actions:	Replace the batteries with new ones or use the AC adaptor.

Some of the notes that play get cut off.

Causes:	This occurs when the number of keys pressed exceeds the maximum polyphony* of the Digital Keyboard while you are playing. This is part of the specifications of this Digital Keyboard, and is not a malfunction.
Required actions:	Try not to have too many notes sounding at the same time while you play the keyboard (or while receiving notes via MIDI). For example, when you play the keyboard, more notes sound simultaneously when the sustain function is turned on (see "Turning sustain on/off") or when an optional pedal is connected and used as a damper pedal (see "Using a Pedal").

* The maximum is 64 notes. Note that this depends on the tone and the functions you use.

The volume and/or sound quality has changed.

Causes:	a. You might have accidentally moved the **VOLUME** knob. b. The batteries are depleted.
Required actions:	a. Use the **VOLUME** knob to adjust the volume. b. Replace the batteries with new ones or use the AC adaptor.

The pitch of the sound does not match (or sounds unnatural) with other instruments.

Causes:	The transpose and tuning settings have been changed.
Required actions:	Check and adjust the transpose and tuning settings. For details, please refer to the sections under "Adjusting the pitch (transposing, tuning, etc.)".

The sound seems to suddenly reverberate differently.

Causes:	The reverb setting has been changed.
Required actions:	Check and adjust the reverb setting. For details, see "Playing with Reverb".

Cannot send or receive MIDI when connected to a computer.

Causes:	a. There may be a problem with how you are connecting (for instance, you may have connected to the USB Type A port on this Digital Keyboard, or you are using a cable intended for charging only). b. The MIDI device to be connected is not correctly selected in the settings of the music software on your computer. c. The music software on your computer does not recognize the Digital Keyboard.
Required actions:	a. Connect the USB port of your computer to the USB Micro B port of the Digital Keyboard with a USB cable that supports data transfer. For details, see “Connecting the Digital Keyboard to a computer via USB”. b. In the settings of your computer’s music software, select “CASIO USB-MIDI” as the MIDI device. For details, see “Connecting the Digital Keyboard to a computer via USB”. c. Quit the music software on your computer, and turn off the Digital Keyboard. After that, turn on the Digital Keyboard and then launch the music software on your computer.

NOTE

- The following issues are not malfunctions, but are caused by limitations of the system.
  - The volume and sound quality of certain keys sound slightly different from other keys in the keyboard range.
  - With some tones, some notes in an octave seem to be repeated when playing at the far ends of the keyboard.

Other Information

Product Specifications

Model	CT-FS1BK/CT-FS1WE
Keyboard	61 keys
Touch Response function	3 types, off
Maximum polyphony (number of simultaneous notes)	Max. 64 notes
Tone function	
Preset tones	61 tones, main tone buttons
Other	Layer, sustain
Effect functions	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	Center cancel (vocal cut) for input signals from AUDIO IN jack or Bluetooth audio
Metronome function	
Beat	Beat bell tone off, 1–16 beats
Tempo	20–255
Demo function	5 demo songs
Feel Sync function	
Supported songs	Songs played back using the Feel Sync app, built-in demo songs (5 songs)
Part volume balance adjustment	11 steps (–5 to 0 to +5)
Effective keyboard range settings	Left half/right half/entire keyboard
Other functions	
Transpose	±1 octave (–12 to 0 to +12 semitones)
Octave Shift	Main part/layered part, ±3 octaves
Tuning	A4 = 415.5 to 465.9 Hz (default value: 440.0 Hz)
Scales	17 preset scales
MIDI function	16-channel multi-timbre reception, GM Level 1 compliant
Dedicated apps	Feel Sync app, CASIO MUSIC SPACE app
Supported devices	iOS/Android
Ports and jacks	
PHONES/OUTPUT jack	Stereo mini phone jack (Mini TRS phone)
AUDIO IN jack	Stereo mini phone jack (Mini TRS phone) (Input impedance: 10 kΩ, input sensitivity: 200 mV)
USB port	Type A, Micro B
PEDAL jack	Standard jack (damper, sostenuto, soft, metronome)
Power terminal	DC 9.5 V

Power	2-way power
Batteries	Uses 6 AA alkaline batteries or 6 AA eneloop batteries
Continuous operating time	Approximately 3 hours (alkaline batteries), approximately 3 hours (eneloop batteries)* Continuous operation time may be shortened depending on the type of batteries used, the method of performance and the environment where the Digital Keyboard is used.
AC adaptor	AD-E95100LE/LG/LJ/LU/LW (JEITA standard, with unified polarity plug)
Auto Power Off function	Approximately 20 minutes later (can be canceled)
Speakers	13 cm × 6 cm (oval) × 2 (output: 2.5 W + 2.5 W)
Power consumption	9.5 V ⎓ 7.5 W
Dimensions	93.0 (W) × 25.8 (D) × 8.3 (H) cm (36 5/8 × 10 3/16 × 3 1/4 inch)
Weight	Approximately 4.5 kg (9.9 lbs) (Excluding batteries)

* eneloop is a registered trademark of Panasonic Group.

• In the interests of continued improvement, the specifications and design of this product are subject to change without notice.

Accessories Sold Separately

For more information on accessories sold separately, see “Latest Support Information”.

Latest Support Information

https://support.casio.com/global/en/emi/manual/CT-FS1/

Contents of this Manual

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Precautions for Use

■Setup environment

- Set this Digital Keyboard up on a stable and level surface.
- Do not set this Digital Keyboard up in locations subject to extreme temperature and humidity changes.

■Care of this Digital Keyboard

- Wipe with a soft, dry cloth. Do not use tissues, as they scratch the surface easily.
- If you are concerned about dirt or stains, soak a soft cloth in diluted neutral detergent and wring it out tightly, gently wipe off the dirt or stains, and lightly wipe the instrument's surface with a soft, dry cloth.
- Do not use cleaners containing benzine, organic solvents, cleaning agents containing alcohol, chlorine disinfectants, alcohol-type sanitizing sheets, etc., as they may cause discoloration, deterioration, paint peeling, cracking and so on.

■Sterilizing and disinfecting

- Wipe with a non-alcoholic sanitizing sheet two or three times, then finish with a light wipe using a soft, dry cloth.
- Note that not wiping the area dry will leave marks.
- If more than one person will be using the product, we recommend that each person disinfects their hands before and after use.

■Accessories and Optional Products

Use the supplied accessories and optional products specified for this Digital Keyboard.
Using products other than those specified may cause fire, electric shock, or injury.

■Weld lines

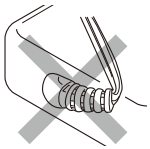
There are some areas that look like streaks on the exterior, but these are weld lines created by the resin molding process, and are not cracks or scratches. They do not affect use in any way.

■AC adaptor

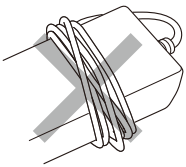
- The AC adaptor which is specified for this Digital Keyboard (JEITA standard, with uniform polarity plug) should be used only for this Digital Keyboard. Never connect it to other equipment. Doing so may cause a malfunction.
- The AC adaptor cannot be repaired.
  In the event of damage or malfunction, contact the number for repair inquiries.
- AC adaptor operating environment:
  – Temperature: 0 to 40°C
  – Humidity: 10% to 90% RH
- Output polarity:
- Use of other AC adaptors may cause smoke or a malfunction.

■Precautions to prevent wire breakage

(1) Do not pull hard on the cord.
(2) Do not repeatedly pull on the cord.
(3) Do not bend the base of the cord.



(4) Do not wrap the cord around the AC adaptor.



(5) Always disconnect the AC adaptor from the power outlet when moving the Digital Keyboard.

■Where the AC adaptor should be used

- Use the AC adaptor in the following locations.
  – Places free from dripping water
    As it is designed for indoor use only, do not place the AC adaptor in a place where it may get wet, or place a vase filled with water on top of the adaptor.
  – Places free from humidity
  – Spacious and well-ventilated places
    Do not cover with newspaper, tablecloths, curtains, and so forth.
  – Places where an electrical outlet is located nearby
    In the event of a malfunction, the Digital Keyboard should be immediately disconnected from the power outlet.

Various Lists

Demo Song List

Song number	Song title
1	Air on the G String (Feel Sync Arrangement)
2	Jupiter [The Planets] (Feel Sync Arrangement)
3	Adagio cantabile [“Pathétique” 2nd Mov.] (Feel Sync Arrangement)
4	Hungarian Dance No.5 (Feel Sync Arrangement)
5	The Entertainer (Feel Sync Arrangement)

Tone List

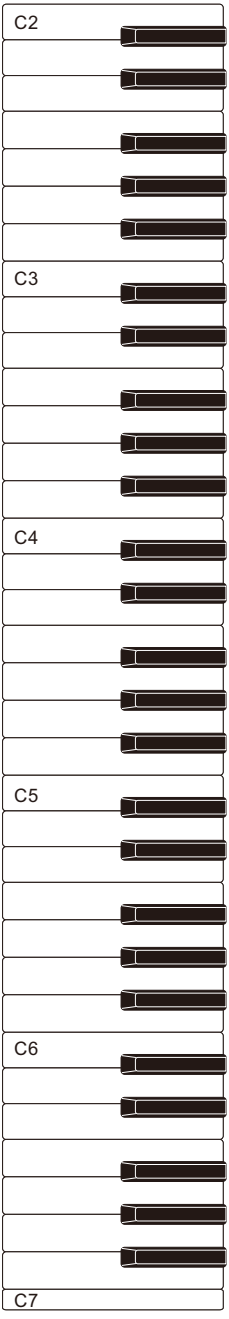
Number	Selection key name	Tone category	Tone name*1	Program change	Bank select MSB	Bank select LSB*2
1	C2	Piano	**STAGE PIANO**	0	2	0/64
2	C♯2		GRAND PIANO	1	2	0/64
3	D2		BRIGHT PIANO	2	2	0/64
4	E♭2		ROCK PIANO	3	2	0/64
5	E2		BALLAD PIANO	4	2	0/64
6	F2		POP PIANO	5	2	0/64
7	F♯2		TACK PIANO	6	2	0/64
8	G2		HONKY-TONK	7	2	0/64
9	A♭2		OCTAVE PIANO	8	2	0/64
10	A2		STRINGS PIANO	9	2	0/64
11	B♭2	Electric piano	**DIGITAL E.PIANO**	10	2	0/64
12	B2		GALAXIA E.PIANO	11	2	0/64
13	C3		LUCENT E.PIANO	12	2	0/64
14	C♯3		DYNO E.PIANO	13	2	0/64
15	D3		AMP 60'S E.PIANO	14	2	0/64
16	E♭3		STAGE E.PIANO	15	2	0/64
17	E3		DIGI BARK E.PIANO	16	2	0/64
18	F3		E.PIANO PAD	17	2	0/64
19	F♯3		MODERN E.G.PIANO	18	2	0/64
20	G3		VIBRAPHONE	19	2	0/64
21	A♭3		CLAVINET	20	2	0/64
22	A3		HARPSICHORD	21	2	0/64

Number	Selection key name	Tone category	Tone name*1	Program change	Bank select MSB	Bank select LSB*2
23	B♭3	Organ	FULL DRAWBAR	22	2	0/64
24	B3		DRAWBAR ORGAN	23	2	0/64
25	C4		PERC. ORGAN	24	2	0/64
26	C♯4		JAZZ ORGAN	25	2	0/64
27	D4		ROCK ORGAN	26	2	0/64
28	E♭4		PIPE ORGAN	27	2	0/64
29	E4	Guitar	NYLON GUITAR	28	2	0/64
30	F4		STEEL GUITAR	29	2	0/64
31	F♯4		CLEAN GUITAR	30	2	0/64
32	G4		OVERDRIVE GUITAR	31	2	0/64
33	A♭4	Synth	**SYNTH PLUCK**	32	2	0/64
34	A4		POP LEAD	33	2	0/64
35	B♭4		DETUNE SAW LEAD	34	2	0/64
36	B4		POLY LEAD	35	2	0/64
37	C5		SUPER SAW LEAD	36	2	0/64
38	C♯5		PULSE LEAD	37	2	0/64
39	D5		8BIT LEAD	38	2	0/64
40	E♭5		SAW PLUCK	39	2	0/64
41	E5	Strings	**STRINGS**	40	2	0/64
42	F5		STEREO STRINGS	41	2	0/64
43	F♯5		WARM STRINGS	42	2	0/64
44	G5		HARP & STRINGS	43	2	0/64
45	A♭5		ANALOG POLY STRINGS	44	2	0/64
46	A5		VINTAGE SYNTH STRINGS	45	2	0/64
47	B♭5		CHOIR SYNTH STRINGS	46	2	0/64
48	B5	Pad	SOFT PAD	47	2	0/64
49	C6		CHOIR PAD	48	2	0/64
50	C♯6		SYNTH VOICE PAD	49	2	0/64
51	D6		FANTASIA PAD	50	2	0/64
52	E♭6		ATMOSPHERE PAD	51	2	0/64
53	E6		WARM PAD	52	2	0/64
54	F6		PIPE PAD	53	2	0/64
55	F♯6	Brass	**SYNTH BRASS**	54	2	0/64
56	G6		80'S ECHO BRASS	55	2	0/64
57	A♭6		POLY SYNTH BRASS	56	2	0/64
58	A6		BRASS SECTION	57	2	0/64
59	B♭6		BIG BAND BRASS	58	2	0/64
60	B6		TRUMPET	59	2	0/64
61	C7		FLUGELHORN	60	2	0/64

*1 Tone names listed in boldface are the main tones that can be selected using the buttons (see "Choosing one of the five main tones").

*2 If 64 is received, the chorus and reverb types will change to match the tone. If 0 is received, there will be no change.

Keyboard Function List



Note name	Assigned function
C2	Precount
C♯2	Octave shift (–)
D2	Key range over which Feel Sync is enabled
E♭2	Octave shift (+)
E2	Reverb
F2	Reverb type
F♯2	Transpose (–)
G2	Layer on/off
A♭2	Transpose (+)
A2	Layer tone selection
B♭2	
B2	Equalizer
C3	Metronome start/stop
C♯3	Part octave shift (main part)
D3	Metronome beat
E♭3	Part octave shift (layered part)
E3	Tempo
F3	Metronome volume
F♯3	Part volume (main part)
G3	Scale Tuning (type)
A♭3	Part volume (layered part)
A3	Scale Tuning (base note)
B♭3	
B3	Tuning
C4	Value input (0)
C♯4	Decrease value by 1 (–)
D4	Value input (1)
E♭4	Increase value by 1 (+)
E4	Value input (2)
F4	Value input (3)
F♯4	
G4	Value input (4)
A♭4	
A4	Value input (5)
B♭4	
B4	Value input (6)
C5	Value input (7)
C♯5	
D5	Value input (8)
E♭5	
E5	Value input (9)
F5	MIDI out channel (main part)
F♯5	Local Control
G5	MIDI out channel (layered part)
A♭5	Surround
A5	Touch Response
B♭5	AUDIO IN center cancel
B5	Touch off velocity
C6	Sustain
C♯6	Auto Power Off function
D6	Sustain time (main part)
E♭6	Battery type
E6	Sustain time (layered part)
F6	Pedal
F♯6	Initialization
G6	Pedal effect (main part)
A♭6	Notification tone
A6	Pedal effect (layered part)
B♭6	Delete Bluetooth audio pairing registration
B6	MY SETUP save/recall
C7	MY SETUP recall on startup on/off

MIDI Implementation Chart

Model: CT-FS1BK/CT-FS1WE **Version : 1.0**

Function		Transmitted	Recognized	Remarks
Basic	Default	1	1 - 16	
Channel	Changed	1 - 16	1 - 16	
Mode	Default	Mode 3	Mode 3	
	Messages	X	X	
	Altered	＊＊＊＊＊＊＊	＊＊＊＊＊＊＊	
Note		0 - 127	0 - 127	
Number	True voice	＊＊＊＊＊＊＊	0 - 127 *1	
Velocity	Note ON	O 9nH v = 1 - 127	O 9nH v = 1 - 127	
	Note OFF	X 8nH v = 64	X 9nH v = 0, 8nH v =**	**: no relation
After	Key's	X	X	
Touch	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	O	O	Channel Volume
	10	X	O	Pan
	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	O	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		O	O	
Change	True #	＊＊＊＊＊＊＊	0 - 127	
Exclusive		O *3	O *3	
System	Song Pos	X	X	
Common	Song Sel	X	X	
	Tune	X	X	
System	Clock	X	X	
Real Time	Commands	X	X	
Aux	All sound off	X	O	
Messages	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 the tone. *2: Depends on the setup of the pedal. *3: For details about RPN and system exclusive messages that can be transmitted and received, see MIDI Implementation (https://support.casio.com/global/en/emi/manual/CT-FS1/). • 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 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No

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