

CTK-800

USER'S GUIDE GUÍA DEL USUARIO



GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THE UNIT IN THE U.S.A. (not applicable to other areas).

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING

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

Declaration of Conformity

Model Number: CTK-800

Trade Name: CASIO COMPUTER CO., LTD.

Responsible party: CASIO, INC.

Address: 570 MT. PLEASANT AVENUE, DOVER, NEW JERSEY 07801

Telephone number: 973-361-5400

This device complies with Part 15 of the FCC Rules, Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Important!

Please note the following important information before using this product.

- Before using the optional AD-5 Adaptor to power the unit, be sure to check the AC Adaptor for any damage first. Carefully check the power cord for breakage, cuts, exposed wire and other serious damage. Never let children use an AC adaptor that is seriously damaged.
- Never attempt to recharge batteries.
- Do not use rechargeable batteries.
- Never mix old batteries with new ones.
- Use recommended batteries or equivalent types.
- Always make sure that positive (+) and negative (-) poles are facing correctly as indicated near the battery compartment.
- Replace batteries as soon as possible after any sign they are getting weak.
- Do not short-circuit the battery terminals.
- The product is not intended for children under 3 years.
- Use only CASIO AD-5 adaptor.
- The AC adaptor is not a toy.
- Be sure to disconnect the AC adaptor before cleaning the product.



This mark applies in EU countries only.



CASIO Europe GmbH
Bornbarch 10, 22848 Norderstedt, Germany

Safety Precautions

Congratulations on your selection of the CASIO electronic musical instrument.

- Before using the instrument, be sure to carefully read through the instructions contained in this manual.
- Please keep all information for future reference.

Symbols

Various symbols are used in this user's guide and on the product itself to ensure that the product is used safely and correctly, and to prevent injury to the user and other persons as well as damage to property. Those symbols along with their meanings are shown below.

DANGER

This symbol indicates information that, if ignored or applied incorrectly, creates the danger of death or serious personal injury.

WARNING

This indication stipulates matters that have the risk of causing death or serious injury if the product is operated incorrectly while ignoring this indication.

CAUTION

This indication stipulates matters that have the risk of causing injury as well as matters for which there is the likelihood of occurrence of physical damage only if the product is operated incorrectly while ignoring this indication.

Symbol Examples



This triangle symbol (\triangle) means that the user should be careful. (The example at left indicates electrical shock caution.)




This circle with a line through it (\odot) means that the indicated action must not be performed. Indications within or nearby this symbol are specifically prohibited. (The example at left indicates that disassembly is prohibited.)



The black dot (\bullet) means that the indicated action must be performed. Indications within this symbol are actions that are specifically instructed to be performed. (The example at left indicates that the power plug must be unplugged from the electrical socket.)

DANGER

Alkaline Batteries

Perform the following steps immediately if fluid leaking from alkaline batteries ever gets into your eyes. 

1. Do not rub your eyes! Rinse them with water.
 2. Contact your physician immediately.
- Leaving alkaline battery fluid in your eyes can lead to loss of sight.





WARNING




Smoke, Strange Odor, Overheating

Continued use of the product while it is emitting smoke, a strange odor, or heat creates the risk of fire and electric shock. Take the following steps immediately.

1. Turn off power.
2. If you are using the AC adaptor for power, unplug it from the wall outlet.
3. Contact your original retailer or an authorized CASIO Service Provider.


AC Adaptor

- Misuse of the AC adaptor creates the risk of fire and electric shock. Always make sure you observe the following precautions.
 - Be sure to use only the AC adaptor that is specified for this product.
 - Use only a power source whose voltage is within the rating marked on the AC adaptor. 
 - Do not overload electrical outlets and extension cords. 
- Misuse of the AC adaptor's electric cord can damage or break it, creating the risk of fire and electric shock. Always make sure you observe the following precautions.
 - Never place heavy objects on the cord or subject it to heat. 
 - Never try to modify the cord or subject it to excessive bending.
 - Never twist or stretch the cord.
 - Should the electric cord or plug become damaged, contact your original retailer or authorized CASIO Service Provider. 


- Never touch the AC adaptor while your hands are wet. Doing so creates the risk of electric shock. 
- Use the AC adaptor where it will not be splashed with water. Water creates the risk of fire and electric shock. 
- Do not place a vase or any other container filled with liquid on top of the AC adaptor. Water creates the risk of fire and electric shock. 

Batteries


Misuse of batteries can cause them to leak, resulting in damage to nearby objects, or to explode, creating the risk of fire and personal injury. Always make sure you observe the following precautions.

- Never try to take batteries apart or allow them to become shorted. 
- Never expose batteries to heat or dispose of them by incineration.
- Never mix old batteries with new ones.
- Never mix batteries of different types.
- Do not charge the batteries.
- Make sure the positive (+) and negative (-) ends of the batteries are facing correctly.

Do not incinerate the product.


Never throw the product into fire. Doing so can cause it to explode, creating the risk of fire and personal injury. 

Water and Foreign Matter

Water, other liquids, and foreign matter (such as pieces of metal) getting into the product create the risk of fire and electric shock. Take the following steps immediately. 

1. Turn off power.
2. If you are using the AC adaptor for power, unplug it from the wall outlet.
3. Contact your original retailer or an authorized CASIO Service Provider.

Disassembly and Modification

Never try to take this product apart or modify it in any way. Doing so creates the risk of electric shock, burn injury, or other personal injury. Leave all internal inspection, adjustment, and maintenance up to your original retailer or authorized CASIO Service Provider. 

Dropping and Impact

Continued use of this product after it has been damaged by dropping or subjecting it to strong impact creates the risk of fire and electric shock. Take the following steps immediately.



1. Turn off power.
2. If you are using the AC adaptor for power, unplug it from the wall outlet.
3. Contact your original retailer or an authorized CASIO Service Provider.

Plastic Bags

Never place the plastic bag the product comes in over your head or in your mouth. Doing so creates the risk of suffocation. Particular care concerning this precaution is required where small children are present.



Keep off of the product and stand.*

Climbing onto the product or stand can cause it to tip over or become damaged. Particular care concerning this precaution is required where small children are present.



Location

Avoid locating the product on an unstable stand, on an uneven surface, or any other unstable location. An unstable location can cause the product to fall over, creating the risk of personal injury.



CAUTION

AC Adaptor

- Misuse of the AC adaptor creates the risk of fire and electric shock. Always make sure you observe the following precautions.
 - Do not locate the electric cord near a stove or other sources of heat.
 - Never pull on the cord when unplugging from the electrical outlet. Always grasp the AC adaptor when unplugging.
- Misuse of the AC adaptor creates the risk of fire and electric shock. Always make sure you observe the following precautions.
 - Insert the AC adaptor into the wall outlet as far as it will go.
 - Unplug the AC adaptor from the wall outlet during lightening storms or before leaving on a trip or other long-term absence.
 - At least once a year, unplug the AC adaptor from the wall outlet and wipe away any dust that is built up in the area around the prongs of the plug.



Relocating the Product

Before relocating the product, always unplug the AC adaptor from the wall outlet and disconnect all other cables and connecting cords. Leaving cords connected creates the risk of damage to the cords, fire, and electric shock.



Cleaning

Before cleaning the product, always unplug the AC adaptor from the wall outlet first. Leaving the AC adaptor plugged in creates the risk of damage to the AC adaptor, fire, and electric shock.



Batteries

Misuse of batteries can cause them to leak resulting in damage to nearby objects, or to explode, creating the risk of fire and personal injury. Always make sure you observe the following precautions.

- Use only batteries that are specified for use with this product.
- Remove batteries from the product if you do not plan to use it for a long time.

Connectors

Connect only the specified devices and equipment to the product's connectors. Connection of a non-specified device or equipment creates the risk of fire and electric shock.



Location

Avoid the following locations for this product. Such locations create the risk of fire and electric shock.



- Areas subject to high humidity or large amounts of dust.
- In food preparation areas or other areas subject to oil smoke.
- Near air conditioning equipment, on a heated carpet, in areas exposed to direct sunlight, inside of a vehicle parked in the sun, or any other area that subjects the product to high temperatures.

Display Screen

- Never push on the display screen's LCD panel or subject it to strong impact. Doing so can cause the LCD panel's glass to crack, creating the risk of personal injury.
- Should the LCD panel ever crack or break, never touch the liquid inside of the panel. LCD panel liquid can cause skin irritation.
- Should LCD panel liquid ever get inside your mouth, immediately wash out your mouth with water and contact your physician.
- Should LCD panel liquid ever get into your eyes or onto your skin, rinse with clear water for at least 15 minutes, and then contact a physician.



Sound Volume

Do not listen to music at very loud volumes for long periods. Particular care concerning this precaution is required when using headphones. High volume settings can damage your hearing.



Heavy Objects

Never place heavy object on top of the product.

Doing so can make the product top heavy, causing the product to tip over or the object to fall from it, creating the risk of personal injury.



Correct Stand* Assembly

An incorrectly assembled stand can tip over, causing the product to fall and creating the risk of personal injury.



Make sure you assemble the stand correctly, following the assembly instructions that come with it. Make sure you mount the product on the stand correctly.

* Stand is available as an option.

IMPORTANT!

When using batteries, be sure to replace them or shift to one of the alternate power sources whenever you notice any of the following symptoms.

- Dim power supply indicator
- Instrument does not turn on.
- Dim, difficult to read display
- Abnormally low speaker/headphone volume
- Distortion of sound output
- Occasional interruption of sound when playing at high volumes
- Sudden power failure when playing at high volumes
- Dimming of the display when playing at high volume
- Continued sound output even after you release a key
- A totally different tone may sound
- Abnormal rhythm pattern and demo tune play
- Abnormally low microphone volume
- Distortion of microphone input
- Dim power supply indicator when a microphone is used
- Sudden power failure when using the microphone

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Main Features

❑ 500 tones

A wide selection of tones includes stereo piano and synthesized sounds, drum sets, and much more. Other features include digital effects that control the acoustical characteristic of tones.

❑ PIANO BANK button

The touch of a button takes you directly to piano tones and piano lessons.

❑ Advanced 3-Step Lesson System

The 3-Step Lesson System lets you practice at your own pace. The keyboard automatically grades your performances, so you can trace your progress as you improve.

- 3-Step Lesson System: Now you can learn the parts that make up the keyboard's built-in tunes and SMF data you download over the Internet step-by-step. Guidance that appears on the monitor screen helps lead you down the path to music proficiency.
- Evaluation System: The keyboard can be configured to rate your performances during Step 1, Step 2 and Step 3 lessons by assigning points. You can even have the keyboard report your points vocally, both part way through and at the end of a lesson.

❑ Sing-along

Simply connect a commercially available microphone to the microphone jack* and you can sing along with the keyboard's built-in tunes and SMF data playback.

* If a microphone was included with your keyboard, use that microphone.

❑ 100 built-in tunes, including piano pieces

Built-in tunes are divided into two groups: a Song Bank of 50 tunes with Auto Accompaniment, and a Piano Bank of 50 piano tunes.

❑ 120 rhythms

A selection of rhythms cover rock, pops, jazz and just about any other musical style imaginable.

❑ Auto Accompaniment

Simply play a chord and the corresponding rhythm, bass, and chord parts play along automatically. One Touch Presets instantly recalls the most suitable tone and tempo settings to match the rhythm you are using.

❑ Song Memory function

With lesson recording you can record as you play along with built-in tunes for later playback.

Performance recording lets you record your performances, including Auto Accompaniment, in real time.

❑ Storing and Playing Back Tune Data You Transferred from Your Computer

You can connect your keyboard to a computer, use special CASIO conversion software to convert SMF data you purchase or create to CASIO format, and then transfer it to the keyboard.



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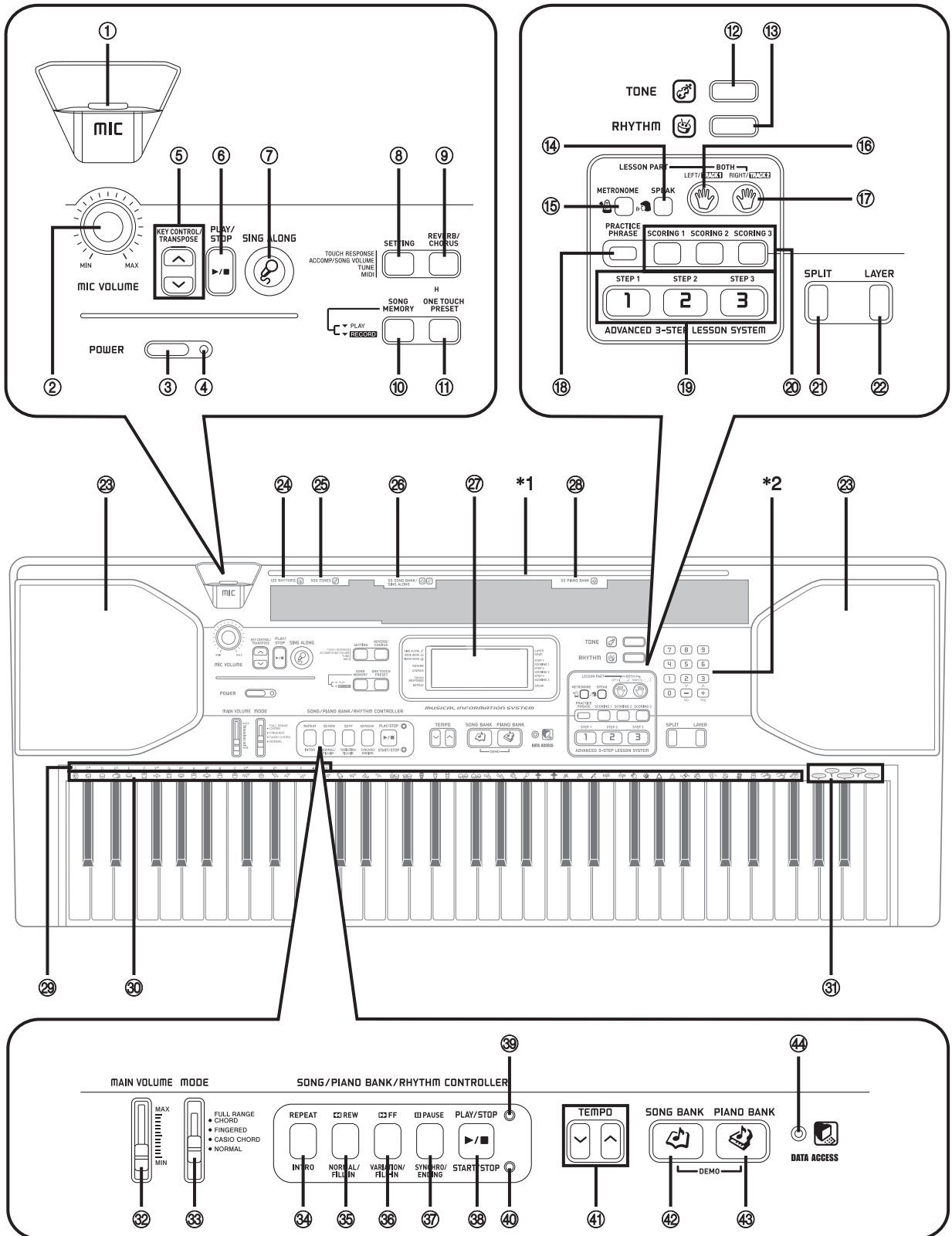
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MIDI messages that can be sent and received using the USB port

General Guide



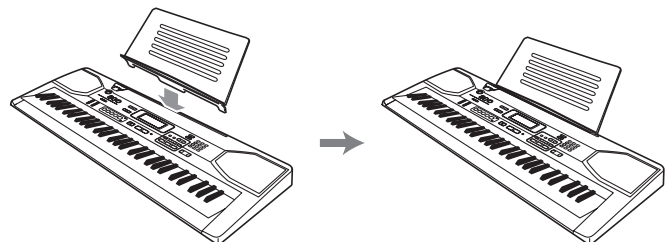
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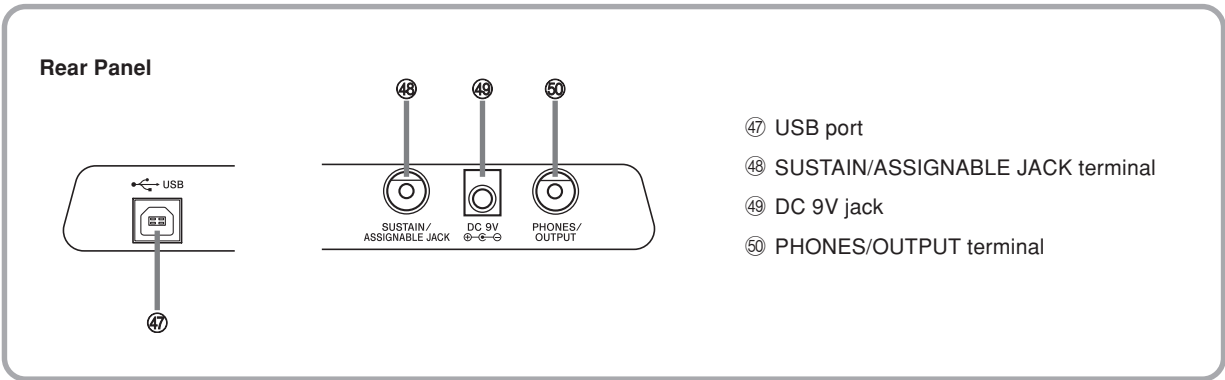
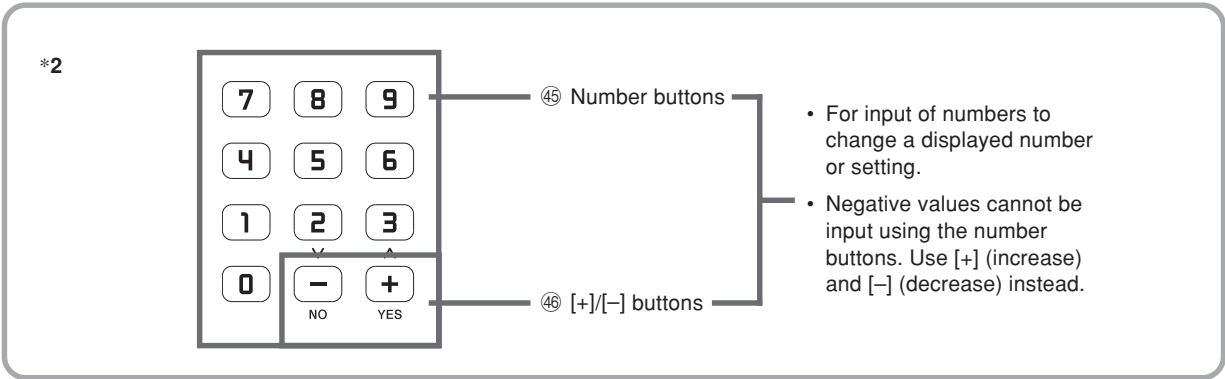
- This keyboard has two PLAY/STOP buttons. In this manual, the PLAY/STOP button that is located near the SING ALONG button is indicated as <PLAY/STOP>.

- ① MIC jack
- ② MIC VOLUME knob
- ③ POWER button
- ④ Power indicator
- ⑤ KEY CONTROL/TRANPOSE buttons
- ⑥ <PLAY/STOP> button
- ⑦ SING ALONG button
- ⑧ SETTING button
- ⑨ REVERB/CHORUS button
- ⑩ SONG MEMORY button
- ⑪ ONE TOUCH PRESET button
- ⑫ TONE button
- ⑬ RHYTHM button
- **ADVANCED 3-STEP LESSON SYSTEM**
 - ⑭ SPEAK button
 - ⑮ METRONOME button
 - ⑯ LEFT/TRACK 1 button
 - ⑰ RIGHT/TRACK 2 button
 - ⑱ PRACTICE PHRASE button
 - ⑲ STEP 1 to 3 button
 - ⑳ SCORING 1 to 3 button
- ⑳ SPLIT button
- ㉑ LAYER button
- ㉒ Speaker
- ㉓ RHYTHM list
- ㉔ TONE list
- ㉕ SONG BANK/SING ALONG list
- ㉖ Display
- ㉗ PIANO BANK list
- ㉘ CHORD root names
- ㉙ Percussion instrument list
- ㉚ Voice 1 to 5
- ㉛ MAIN VOLUME slider
- ㉜ MODE switch
- **SONG/PIANO BANK/RHYTHM CONTROLLER**
 - ㉝ REPEAT button, INTRO button
 - ㉞ REW button, NORMAL/FILL-IN button
 - ㉟ FF button, VARIATION/FILL-IN button
 - ㊱ PAUSE button, SYNCHRO/ENDING button
 - ㊲ PLAY/STOP button, START/STOP button
 - ㊳ Song/Piano Bank controller indicator
 - ㊴ Rhythm controller indicator
- ㊵ TEMPO buttons
- ㊶ SONG BANK button
- ㊷ PIANO BANK button
- ㊸ DATA ACCESS lamp

***1 Attaching the Score Stand**

Insert the score stand into the slot at the top of the keyboard as shown in the illustration.





Controller Indicators

Song/Piano Bank controller indicator

Pressing the SONG BANK, PIANO BANK, or SING ALONG button, or pressing the SONG BANK and PIANO BANK buttons at the same time to start demo tune play causes the Song/Piano Bank controller indicator to light. This indicates that buttons ③④ through ③⑧ are currently functioning as playback control buttons.

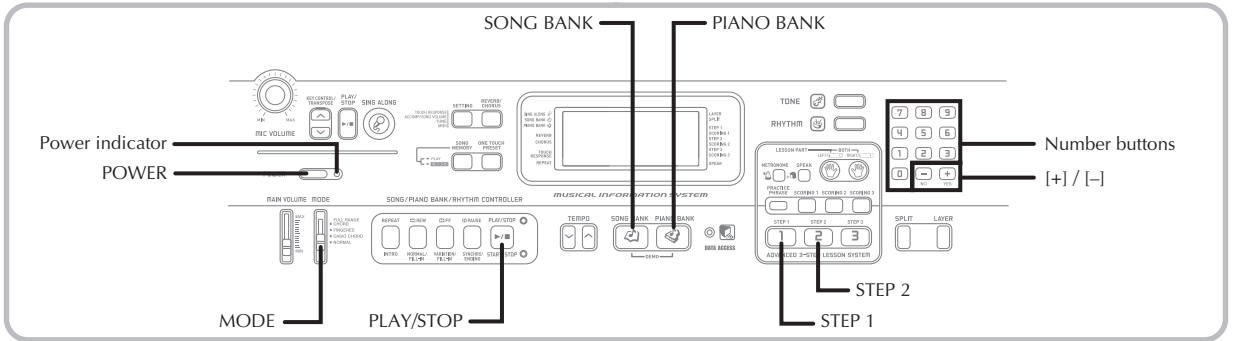
Rhythm controller indicator

Pressing the RHYTHM button to enter the Rhythm Mode causes the Rhythm controller indicator to light. This indicates that buttons ③④ through ③⑧ are currently functioning as rhythm control buttons.

NOTE

- Display examples shown in this User's Guide are intended for illustrative purposes only. The actual text and values that appear on the display may differ from the examples shown in this User's Guide.
- Viewing a liquid crystal display screen from an angle can change the appearance of display contrast. The display contrast of this keyboard is set to allow easy viewing for a person seated on a chair in front of the keyboard. Note that display contrast is fixed, and cannot be adjusted.

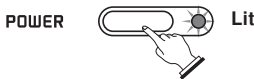
Quick Reference



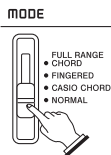
This section provides a quick overview of keyboard operation using steps one and two of the 3-step lesson feature. With the 3-step lesson feature, the on-screen keyboard guide keys light to show the next note of the tune.

To play the keyboard

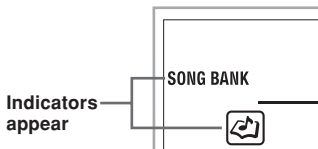
- 1 Press the POWER button to turn on power.
 - This causes the power indicator to light.



- 2 Set the MODE switch to NORMAL.



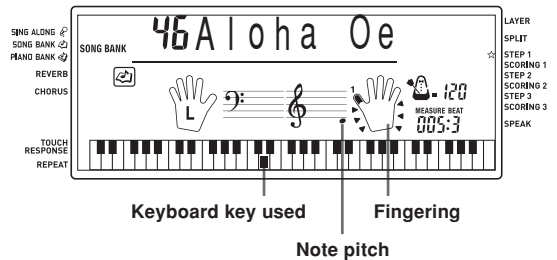
- 3 Press the SONG BANK button.



- 4 Find the tune you want to play in the SONG BANK/SING ALONG List, and then use the number buttons to input its two-digit number.
 - See page A-9 for the SONG BANK/SING ALONG List.
 - Example:* To select "46 ALOHA OE", input 4 and then 6.



- 5 Press the STEP 1 button or STEP 2 button.
 - The keyboard sounds a count beat and waits for you to play something on the keyboard. The keys that you need to press first flash on the display.
- 6 Play the melody along with the selected tune's accompaniment.
 - Play in accordance with the keyboard keys, fingerings and notes that appear on the display.



If you selected lesson Step 1

- Play the notes on the keyboard.
- Accompaniment (left-hand part) plays in time with the notes.
- With Step 1, the correct melody note is played no matter which keyboard key you press.

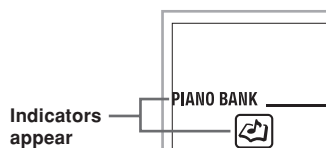
If you selected lesson Step 2

- Play the correct notes on the keyboard.
- While an on-screen keyboard guide key is lit, press the corresponding key on the actual keyboard. In the case of a Piano Bank tune, the keyboard guide indication turns off when you press a keyboard key, and the on-screen keyboard guide key lights for the next note to be played.
- Accompaniment (left-hand part) plays in time with the notes, as long as you press the correct keyboard keys.

- 7 To stop play at any time, press the PLAY/STOP button.

To play an Etude or Concert Piece tune

- 1 When you get to step 3 of the above procedure, press the PIANO BANK button in place of the SONG BANK button.



- 2 Find the tune you want to play in the PIANO BANK List, and then use the number buttons to input its two-digit number.
 - See page A-9 for the PIANO BANK List.
- 3 Next, continue from step 5 of the above procedure.

Power Supply

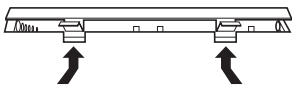
This keyboard can be powered by current from a standard household wall outlet (using the specified AC adaptor) or by batteries. Always make sure you turn the keyboard off whenever you are not using it.

Using batteries

Always make sure you turn off the keyboard before loading or replacing batteries.

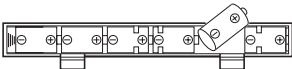
To load batteries

- 1 Remove the battery compartment cover.

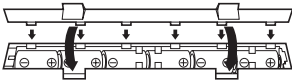


- 2 Load 6 D-size batteries into the battery compartment.

- Make sure that the positive (+) and negative (-) ends are facing correctly.



- 3 Insert the tabs on the battery compartment cover into the holes provided and close the cover.



NOTE

- The keyboard may not function correctly if you load or replace batteries with power turned on. If this happens, turning the keyboard off and then back on again should return functions back to normal.

Important Battery Information

- The following shows the approximate battery life.

Manganese batteries 9 hours

The above value is standard battery life at normal temperature, with the keyboard volume at medium setting. Temperature extremes or playing at very loud volume settings can shorten battery life.

⚠ WARNING

Misuse of batteries can cause them to leak, resulting in damage to nearby objects, or to explode, creating the risk of fire and personal injury. Always make sure you observe the following precautions.

- Never try to take batteries apart or allow them to become shorted. ⓧ
- Never expose batteries to heat or dispose of them by incineration.
- Never mix old batteries with new ones.
- Never mix batteries of different types.
- Do not charge the batteries.
- Make sure the positive (+) and negative (-) ends of the batteries are facing correctly.

⚠ CAUTION

Misuse of batteries can cause them to leak resulting in damage to nearby objects, or to explode, creating the risk of fire and personal injury. Always make sure you observe the following precautions.

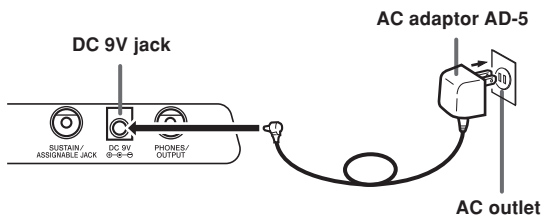
- Use only batteries that are specified for use with this product. ⓧ
- Remove batteries from the product if you do not plan to use it for a long time.

Using the AC Adaptor

Make sure that you use only the AC adaptor specified for this keyboard.

Specified AC Adaptor: AD-5

[Rear Panel]



Note the following important precautions to avoid damage to the power cord.

- **During Use**
 - Never pull on the cord with excessive force.
 - Never repeatedly pull on the cord.
 - Never twist the cord at the base of the plug or connector.
 - The power cord should not be stretched tight while it is in use.
- **During Movement**
 - Before moving the keyboard, be sure to unplug the AC adaptor from the power outlet.
- **During Storage**
 - Loop and bundle the power cord, but never wind it around the AC adaptor.

IMPORTANT!

- Make sure that the keyboard is turned off before connecting or disconnecting the AC adaptor.
- Using the AC adaptor for a long time can cause it to become warm to the touch. This is normal and does not indicate malfunction.

Auto Power Off

When you are using battery power, keyboard power turns off automatically whenever you leave it on without performing any operation for about 6 minutes. When this happens, press the POWER button to turn power back on.

NOTE

- Auto Power Off is disabled (it does not function) when you are using the AC adaptor to power the keyboard.

To disable Auto Power Off

Hold down the TONE button while turning on the keyboard to disable Auto Power Off.

NOTE

- When this function is turned off, the keyboard does not turn off automatically no matter how long it is left with no operation being performed.
- Auto Power Off is enabled again when you manually turn off power and then turn it back on again.

Memory Contents

Song Memory Contents

Data stored using the song memory function is retained.

Electrical Power

The song memory data is retained as long as the keyboard is being supplied with electrical power. Unplugging the AC adaptor when batteries are not loaded or when loaded batteries are dead cuts off the keyboard's electrical power supply. This clears all data stored in memory.

Power Requirements

Note the following precautions whenever you want to ensure that current song memory contents are not lost.

- Make sure the keyboard is being supplied power through the AC adaptor before replacing its batteries.
- Before unplugging the AC adaptor, make sure that fresh batteries are loaded in the keyboard.

Make sure that keyboard power is turned off before replacing batteries or unplugging the AC adaptor.

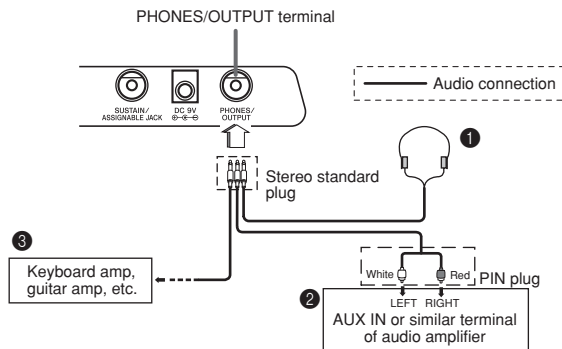
Connections

Phones/Output Terminal

PREPARATION

- Before connecting headphones or other external equipment, be sure to first turn down the volume settings of the keyboard and the connected equipment. You can then adjust volume to the desired level after connections are complete.

[Rear Panel]



Connecting Headphones (Figure 1)

Connecting headphones cuts off output from the keyboard's built-in speakers, so you can play even late at night without disturbing anyone.

Audio Equipment (Figure 2)

Connect the keyboard to an audio equipment using a commercially available connecting cord with a standard plug on one end and two PIN plugs on the other end. Note that the standard plug you connect to the keyboard must be a stereo plug, otherwise you will be able to output only one of stereo channels. In this configuration, you normally set the input selector of the audio equipment to the terminal (usually marked AUX IN or something similar) where the cord from the keyboard is connected. See the user documentation that comes with your audio equipment for full details.

Musical Instrument Amplifier (Figure 3)

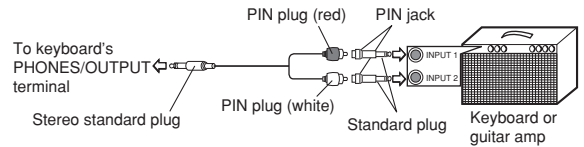
Use a commercially available connecting cord to connect the keyboard to a musical instrument amplifier.

NOTE

- Be sure to use a connecting cord that has a stereo standard plug on the end you connect to the keyboard, and a connector that provides dual channel (left and right) input to the amplifier to which you are connecting. The wrong type of connector at either end can cause one of the stereo channels to be lost.

When connected to a musical instrument amplifier, set the volume of the keyboard to a relatively low level and make output volume adjustments using the amplifier's controls.

Connection Example



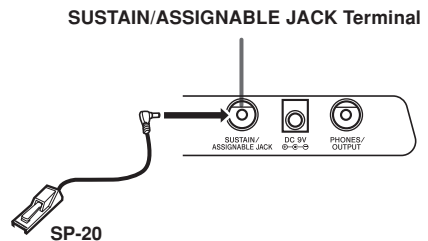
Connecting to a Computer or Other Equipment

You can also connect the keyboard to a computer or sequencer. See "Connecting to a Computer" on page E-47 for details.

Sustain/Assignable jack Terminal

You can connect an optional sustain pedal (SP-3 or SP-20) to the SUSTAIN/ASSIGNABLE JACK terminal to enable the capabilities described below.

For details on how to select the pedal function you want, see "SUSTAIN/ASSIGNABLE JACK (Default: SUS)" on page E-50.



Sustain Pedal

- With piano tones, depressing the pedal causes notes to linger, much like a piano's damper pedal.
- With organ tones, depressing the pedal causes notes to continue to sound until the pedal is released.

Sostenuto Pedal

- As with the sustain pedal function described above, depressing the sostenuto pedal causes notes to be sustained.
- This difference between a sostenuto pedal and sustain pedal is the timing. With a sostenuto pedal, you press the keys and then depress the pedal before you release the keys.
- Only the notes that are sounding when the pedal is depressed are sustained.

Soft Pedal

Depressing the pedal softens the sound of the notes being played.

Rhythm Start/Stop Pedal

In this case, the pedal performs the same functions as the START/STOP button.



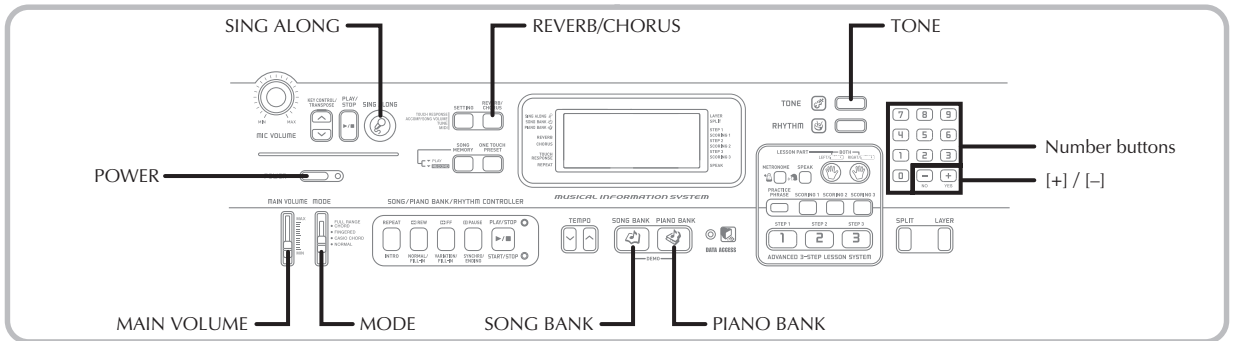
Microphone Jack

You can connect a commercially available microphone to the microphone jack and sing along with notes played on the keyboard. For details, see “Using a Microphone for Sing Along” on page E-29.

Accessories and Options

Use only the accessories and options specified for this keyboard. Use of non-authorized items creates the danger of fire, electrical shock, and personal injury.

Basic Operations



This section provides information on performing basic keyboard operations.

To play the keyboard

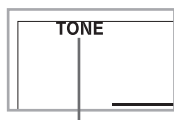
- 1 Press the POWER button to turn the keyboard on.
- 2 Set the MODE switch to NORMAL.
- 3 Use the MAIN VOLUME slider to set the volume to a relatively low level.
- 4 Play something on the keyboard.
 - The keyboard's initial power on default setting is Song Bank Mode. The tone that is initially assigned to the keyboard is 000 STEREO GRAND PIANO.

Selecting a Tone

This keyboard comes with 500 built-in tones. Use the following procedure to select the tone you want.

To select a tone

- 1 Find the tone you want to use in the TONE List and note its tone number.
 - Not all of the available tones are shown on the tone list printed on the keyboard console. For a complete list, see the "Tone List" on page A-1.
- 2 Press the TONE button.



Indicator appears

- 3 Use the number buttons to input the three-digit tone number of the tone you want to select.

Example: To select "106 ACOUSTIC BASS", input 1, 0 and then 6.



NOTE

- Always input all three digits for the tone number, including leading zeros (if any). If you input one or two digits and stop, the display will automatically clear your input after a few seconds.
- You can also increment the displayed tone number by pressing [+] and decrement it by pressing [-].
- When one of the drum sets is selected (tone numbers 490 through 499), each keyboard key is assigned a different percussion sound. See page A-6 for details.

Polyphony

The term polyphony refers to the maximum number of notes you can play at the same time. The keyboard has 32-note polyphony, which includes the notes you play as well as the rhythms and auto-accompaniment patterns that are played by the keyboard. This means that when a rhythm or auto-accompaniment pattern is being played by the keyboard, the number of notes (polyphony) available for keyboard play is reduced. Also note that some of the tones offer only 16-note polyphony.

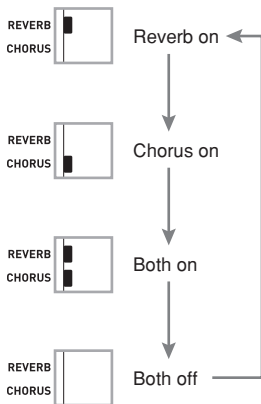
- When rhythm or auto accompaniment is playing, the number of sounds simultaneously played is reduced.

Using Tone Effects

Reverb: Makes your notes resonate

Chorus: Adds more breadth to your notes

- 1 Press the REVERB/CHORUS button to cycle through the effect settings as shown below.
 - You can find out the current effect setting by looking at the REVERB and CHORUS indicators.



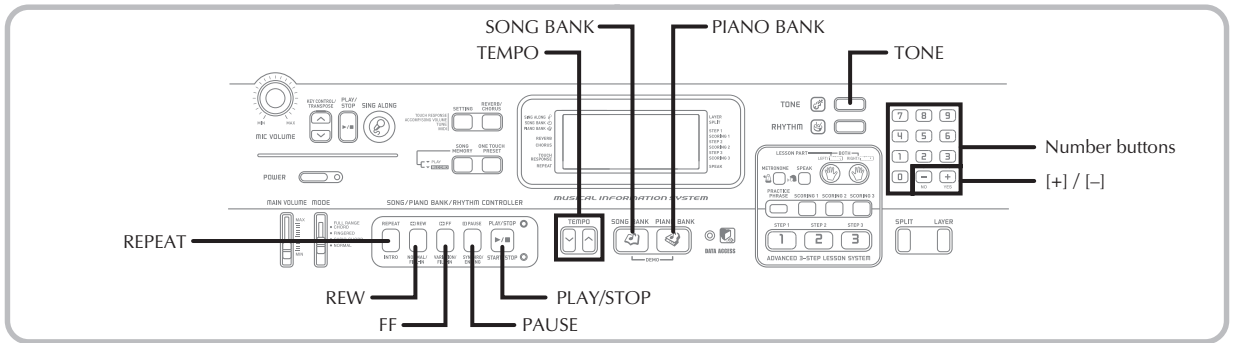
- 2 After turning on the effect you want, use the number buttons or the [+]/[-] buttons to select the effect type you want.

- Note that you need to select an effect type with the number buttons or the [+]/[-] buttons within a few seconds after turning on an effect. If you don't, the display will exit the setting screen.

Effect List

Reverb	0: Room 1
	1: Room 2
	2: Hall 1
	3: Hall 2
Chorus	0: Chorus 1
	1: Chorus 2
	2: Chorus 3
	3: Chorus 4

Playing a Built-in Tune



Your keyboard comes with a total of built-in 100 tunes. You can play back built-in tunes for your own listening pleasure, or you can use them for practice and even sing-along. Built-in tunes are divided between the two groups described below.

- **Song Bank/Sing Along Group:** 50 tunes
The tunes in this group are Auto Accompaniment tunes. If you connect a microphone to the keyboard and enter the Sing Along Mode*, you can sing along with the built-in tune.
* The Sing Along Mode reduces the volume of the melody part of the built-in tunes and changes the tone selection to one that makes it easier for a vocalist to follow.
- **Piano Bank Group:** 50 tunes
The piano tunes in this group are subdivided between 20 etudes and 30 concert pieces.

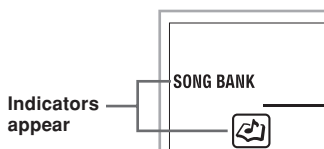
In addition to the built-in tunes, you can also play back the tunes you download over the Internet (page E-48).

To play back a Song Bank tune

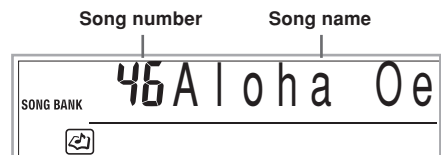
PREPARATION

- Adjust the main volume (page E-17).

- 1 Find the tune you want to play in the SONG BANK/SING ALONG List, and note its number.
 - See page A-9 for the SONG BANK/SING ALONG List.
- 2 Press the SONG BANK button to enter the Song Bank Mode.



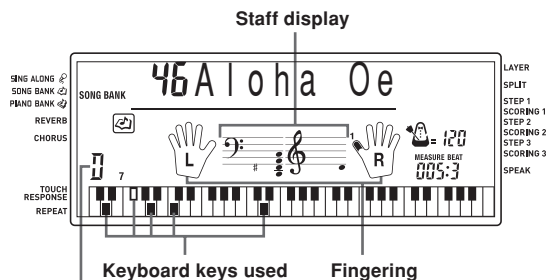
- 3 Use the number buttons to input the tune's two-digit number.
Example: To select "46 ALOHA OE", input 4 and then 6.



NOTE

- Tune Number 00 is the initial default Song Bank tune setting whenever you turn on keyboard power.
- You can also increment the displayed tune number by pressing [+], and decrement is by pressing [-].

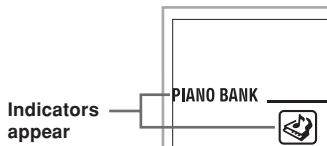
- 4 Press the PLAY/STOP button to start play of the tune.



- 5 Press the PLAY/STOP button to stop playback of the Song Bank tune.
 - The tune you select continues to play until you stop it.

To play back a Piano Bank tune

- 1 Find the tune you want to play in the PIANO BANK List, and note its number.
 - See page A-9 for the PIANO BANK List.
- 2 Press the PIANO BANK button to specify the Piano Bank group.



NOTE

- Pressing the PIANO BANK button changes the tone to stereo piano (Tone Number 000).

- 3 Use the number buttons to input the two-digit tune number you looked up in step 1.

Example: To select tune number 44 (Ode To Joy), input 4 and then 4.



NOTE

- Tune Number 00 is the initial default Piano Bank tune setting whenever you turn on keyboard power.
- You can also change the displayed tune number using the [+] and [-] buttons.

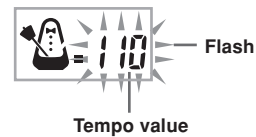
- 4 Press the PLAY/STOP button to start playback.
- 5 To stop playback, press the PLAY/STOP button.
 - The tune you select continues to play until you stop it.

Adjusting the Tempo

Each tune has a preset default tempo (beats per minute) that is set automatically whenever you select a tune. While the tune is playing, you can change the tempo setting to a value in the range of 30 to 255.

To set the tempo

- 1 Use the TEMPO buttons to set the tempo.
 - ∧ : Increases the tempo value.
 - ∨ : Decreases the tempo value.



NOTE

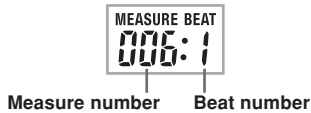
- While the tempo value is flashing, you can also use the number buttons or [+] and [-] to input a three-digit value. Note that you must input leading zeros, so 90 is input as 090.
- Pressing both the ∧ and ∨ TEMPO buttons at the same time automatically returns the currently selected rhythm to its default tempo.
- Piano Bank tunes have tempo changes part way through in order to produce specific musical effects. Note that the tempo setting automatically returns to the default whenever a tempo change occurs within one of these tunes.

To pause playback

- 1 Press the PAUSE button while a tune is playing to pause it.
- 2 Pressing the PAUSE button again resumes play from the point where it was paused.

To fast reverse

- 1 While a tune is playing or paused, hold down the REW button to skip in a reverse direction at high speed.
 - The fast reverse operation skips back one measure at a time.
 - The measure and beat numbers on the display change while the fast reverse operation is being performed.



- 2 Releasing the REW button starts song playback from the measure whose number is shown on the display.

NOTE

- Fast reverse does not work while tune play is stopped.
- Certain playback conditions can cause it to take some time before fast reverse starts after you press the REW button.

To fast forward

- 1 While a tune is playing or paused, hold down the FF button to skip forward at high speed.
 - The fast forward operation skips forward one measure at a time.
 - The measure and beat numbers on the display change while the fast forward operation is being performed.



- 2 Releasing the FF button starts song playback from the measure whose number is shown on the display.

NOTE

- Fast forward does not work while tune play is stopped.

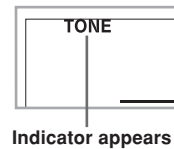
Looping a Musical Phrase

You can select one or more measures and “loop” them, which means that they play again and again until you stop playback.

- 1 While the tune is playing, press the REPEAT button while the measure you want to start from is playing.
 - This causes the repeat indicator to flash on the display, and displays the measure number of the start measure.
- 2 When playback is within the measure you want to specify as the end of the loop, press the REPEAT button again.
 - This displays the measure number of the end measure, and starts repeat play of the loop.
 - To cancel repeat play of a loop, press the REPEAT button again so the repeat indicator is not displayed.

To change the melody tone

- 1 Press the TONE button.



- 2 Find the tone you want in the TONE List, and then use the number buttons to input its three-digit number.

Example: To select “124 VIOLIN”, input 1, then 2, then 4.

 - You can select any one of the keyboard’s built-in tones.



NOTE

- You can also use the [+] and [-] buttons to change the melody tones.
- For two-hand tunes (Piano Bank tunes), the same tone is applied for both the left and right hand parts.
- Specifying the tune number for the same tune that is currently selected returns the melody tone to the default setting for that tune.

To play all tunes in succession

- 1 Press the SONG BANK button and PIANO BANK button at the same time.
 - Playback starts from Song Bank tune number 00, followed in sequence by Piano Bank tunes.
- 2 To stop tune play, press the PLAY/STOP button.

NOTE

- While a tune is playing, you can use the number buttons or [+] and [-] to change to another tune.
- You can play along with the tunes on the keyboard.

Using the PIANO BANK Button

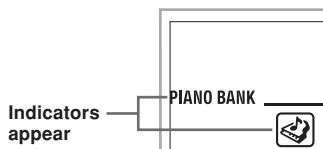
Pressing the PIANO BANK button provides instant access to piano tones and piano tune selection.

Initial Piano Bank Setting

Tone: 000 STEREO GRAND PIANO

To use the piano bank

- 1 Press the PIANO BANK button.



- 2 Now try playing something on the keyboard.
 - The notes you play sound with a piano tone.
- 3 If you want to playback the built-in tune, press the PLAY/STOP button.
 - This causes the currently selected tune to play in an endless loop.
 - To stop playback, press the PLAY/STOP button again.

Advanced 3-Step Lesson

With the 3-Step Lesson System, you can practice built-in tunes and SMF data you download over the Internet, and even plot your progress according to the evaluation points the keyboard awards you.

* See "Expanding the Selections in the Song Bank Tunes" on page E-48 for information about the SMF data you download over the Internet.

Lesson Progress



3-Step Lesson

The 3-step lesson feature takes you through the three distinct steps described below to help you learn to play tunes on the keyboard.

Step 1 – Master the timing.

Step 2 – Master the notes.

Step 3 – Play at normal speed.

Lesson Parts

3-Step Lesson lets you practice the right-hand part, left-hand part, or the parts for both hands.

Display Contents During 3-step Lesson Play

Whenever you select an Auto Accompaniment tune for 3-step lesson play, the on-screen keyboard guide and staff notation shows the note you should play and its length. The on-screen keyboard guide also shows the notes you play on the keyboard. The following describes the information that appears on the display.

Note Pitch

The key you should press lights on the on-screen keyboard guide, while the actual pitch of the note appears in the display's staff notation area. The fingers you should use to play the notes are also shown on the display.

Note Length

The key stays lit on the on-screen keyboard guide for as long as the note should be sustained. The staff notation and fingerings also remain on the display for the length of the note.

Next Note

An on-screen keyboard guide key flashes to indicate the next note to be played, while a number appears on the display near the finger you should use to play the next note.

Series of Same Pitch Notes

The on-screen keyboard guide key turns off momentarily between the notes, and lights again for each successive note. The staff notation and fingerings also turn off and back on again.

Example: When play requires pressing keys with fingers 3, 2, and then 1

1st Note 2nd Note 3rd Note

Next note → 2
Current note →

Flash Lit Flash Lit Lit Flash

On-screen keyboard guide

NOTE

- Note length is not indicated when you are using Piano Bank tunes with 3-step lesson Steps 1 and 2. As soon as you press a key that is lit on the on-screen keyboard guide, it goes out and the next key you need to press starts to flash.
- Note length is indicated by the on-screen keyboard guide when you use Piano Bank tunes with Step 3. In this case, the next key to be pressed does not flash when you press a lit key and the next finger number does not appear on the display. Only the current finger number is shown.

3-step Lesson Tempo Setting

Use the procedure under "Adjusting the Tempo" on page E-20 to adjust the tempo for 3-step lesson play.

Evaluation Mode

The keyboard's Evaluation Mode awards points to your performances during Step 1, Step 2, and Step 3 of the 3-Step Lesson. A perfect score is 100. Also, the Evaluation Mode provides comments about your play, both on the monitor screen and by means of a simulated human voice.

Evaluation Mode Display

Level Indicator (9 Levels): This indicator shows the evaluation of your current performance at a glance. The more segments that appear, the higher your points.

Example: 50 points



Timing Indicator: In the Evaluation Mode, the configuration of the star changes with each note to let you know how your timing is. The more stars, the better your timing.



Using Tone and Voice Guide

When the keyboard senses that your timing is off, it will let you know by changing the notes you play to a tone that is different from the one you currently have selected. In the Evaluation Mode, a simulated human voice will also tell you your evaluation level. The sound effect keeps you informed of when your evaluation level is about to change.

Expressions

"Good"
 "That's close"
 "Nice try!"
 "Keep trying!"
 "Take your time" : This expression is used if you do not play the correct note for a long time.

↑ <High>
 Evaluation Ranges
 ↓ <Low>

Evaluation Results

After you finish playing, the keyboard calculates an evaluation of your total performance, from beginning to end, and displays your total score on the monitor screen. The greater the score, the higher your evaluation is.

Evaluation Rank Display Messages and Sound Effects

Display Message	Sound Effect
"Bravo!"	Applause and cheering
"Great"	Applause only
"Not bad!"	None
"Again!"	None

↑ <High>
 Evaluation Ranges
 ↓ <Low>

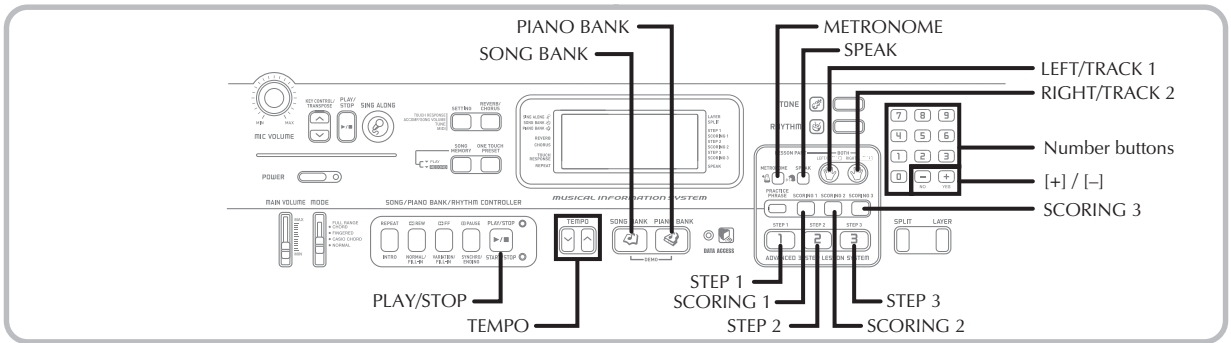
"****" : indicates that the Evaluation Mode was exited before an evaluation result could be obtained.

NOTE

- If your play is flawless, the message "Perfect!" appears before the evaluation result.
- If you press the PLAY/STOP button and interrupt the Evaluation Mode part way through, the monitor screen shows the evaluation points you have accumulated up to that point. In this case, the keyboard does not display a message and play a sound effect.

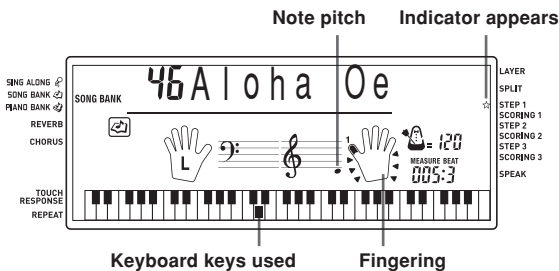
Using the Lesson Functions and Evaluation Mode

Perform the following steps to master your favorite tunes.

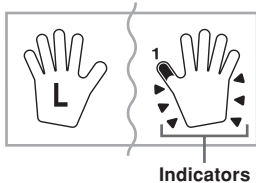


Step 1 – Master the timing.

- 1 Select the tune you want to use.
- 2 Press the RIGHT/TRACK 2 button or the LEFT/TRACK 1 button to specify the part you want to practice.
 - If you want to practice both hands, press both buttons at the same time.
 - Indicators appear around the hand on the display whose part is selected for practice.
- 3 Press the STEP 1 button to start Step 1 play.



- The hand you should use is indicated by arrows around it.

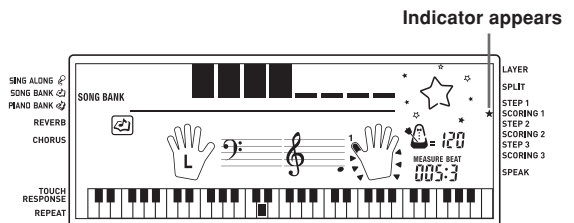


- After a count sounds, the keyboard stands by and waits for you to play the first note of the tune.
- Voice fingering guide will use a simulated human voice to call out fingering numbers during one-hand part practice. See "Voice Fingering Guide" on page E-27 for details.

- 4 Press any keyboard keys to play the notes.
 - The key for the next note to be played flashes on the on-screen keyboard guide and the keyboard waits for you to play it. When you press any key to play the note, the on-screen key remains lit as the note plays.
 - Accompaniment (left-hand part) waits until you press any key to play a note.
 - If you accidentally press more than one key in succession, accompaniment is played for the corresponding number of notes.
 - Pressing more than one key at the same time counts as a single note. Pressing a key while another key is held down is counted as two notes.
- 5 To stop play at any time, press the PLAY/STOP button.

Evaluation 1: Find out how the keyboard evaluates your Step 1 play.

- 1 Press the SCORING 1 button.
 - This causes the SCORING 1 indicator to appear on the display.



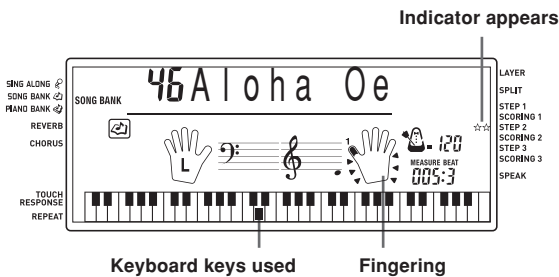
- A count beat sounds and then evaluation mode starts.
- 2 Play in accordance with the guidance on the monitor screen and as told by the voice.
 - To stop evaluation, press the PLAY/STOP button. This displays only the points accumulated up to that point.

- 3 After you finished playing, your evaluation result appears on the display.
 - For information about evaluation ranks and sound effects, see “Evaluation Results” on page E-24.
 - The keyboard will tell you where you scored the lowest during your performance, so you can find out where you need the most work. See “Using the Phrase Practice Mode” on page E-27 for more information.
 - Pressing the SONG BANK button or PIANO BANK button returns to the tune selection screen.



Step 2 – Master the notes.

- 1 Select the tune you want to use.
- 2 Press the RIGHT/TRACK 2 button or the LEFT/TRACK 1 button to specify the part you want to practice.
 - If you want to practice both hands, press both buttons at the same time.
 - Indicators appear around the hand on the display whose part is selected for practice.
- 3 Press the STEP 2 button to start Step 2 play.



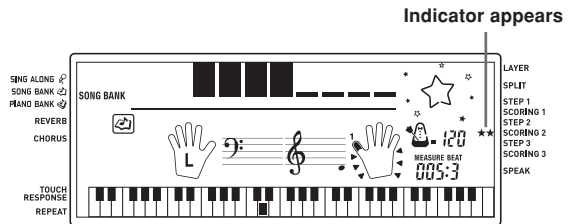
- After a count sounds, the keyboard stands by and waits for you to play the first note of the tune.
- Voice fingering guide will use a simulated human voice to call out fingering numbers during one-hand part practice. See “Voice Fingering Guide” on page E-27 for details.

- 4 Play the notes as indicated by the on-screen keyboard guide.
 - The key for the next note to be played flashes on the on-screen keyboard guide and the keyboard waits for you to play it. When you press any key to play the note, the on-screen key remains lit as the note plays.
 - If multiple keys light on the on-screen keyboard guide when you are using a two-hand tune, it means that you must press all of the keys that are lit.

- 5 To stop play at any time, press the PLAY/STOP button.

Evaluation 2: Find out how the keyboard evaluates your Step 2 play.

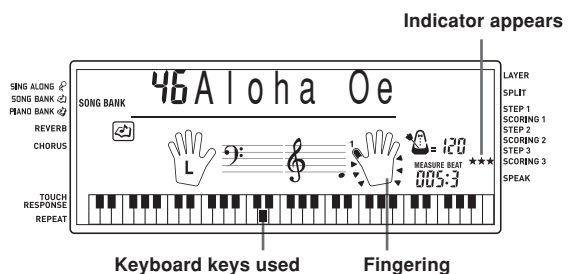
- 1 Press the SCORING 2 button.
 - This causes the SCORING 2 indicator to appear on the display.



- A count beat sounds and then evaluation mode starts.
- * The remainder of this procedure is identical to that for Evaluation 1.

Step 3 – Play at normal speed.

- 1 Select the tune you want to play.
- 2 Press the RIGHT/TRACK 2 button or the LEFT/TRACK 1 button to specify the part you want to practice.
 - If you want to practice both hands, press both buttons at the same time.
 - Indicators appear around the hand on the display whose part is selected for practice.
- 3 Press the STEP 3 button to start Step 3 play.



- Accompaniment (left hand part) starts to play at normal speed.

- 4 Play the notes as indicated by the on-screen keyboard guide.
- 5 To stop play at any time, press the PLAY/STOP button.

Evaluation 3: Find out how the keyboard evaluates your Step 3 play.

- 1 Press the SCORING 3 button.
 - This causes the SCORING 3 indicator to appear on the display.
 - After the keyboard sounds a count, it enters the Evaluation Mode.
 - * The remainder of this procedure is identical to that for Evaluation 1.

Using the Phrase Practice Mode

Perform the following procedure to find out where you scored the lowest in your performance, so you can find your weak points and focus your practice on those phrases.

- 1 After displaying your evaluation results, press the PRACTICE PHRASE button.



- This displays the Phrase Practice Mode screen, which shows the phrase (start measure number and end measure number) where your evaluation mode was the lowest. This is the "practice phrase".

NOTE

- If there are multiple phrases that qualify as the lowest score, the phrase closest to the beginning of the tune is used for phrase practice.
- If there is no section that qualifies for phrase practice, "***-***" is displayed in place of the start and end measures.
- Phrase practice measures are cleared if you change to another tune or another mode.

To play back the practice phrase

- 1 While the Phrase Practice Mode screen is on the display, press the PLAY/STOP button.
 - This plays back the phrase starting from the start measure number.
 - Playback continually loops from the beginning of the practice phrase to its end.
 - To stop practice phrase playback, press the PLAY/STOP button again.

NOTE

- With some tunes, it may take a few seconds for playback to start after you press the PLAY/STOP button in the above procedure.

To practice the practice phrase

- 1 While the Phrase Practice Mode screen is on the display, press the STEP 1, STEP 2, or STEP 3 button.
 - This starts 3-Step Lesson playback of the practice phrase in accordance with the STEP button you pressed.
- 2 Play along on the keyboard.
 - Playback continually loops from the beginning of the practice phrase to its end.
 - To stop playback, press the PLAY/STOP button.

Voice Fingering Guide

Voice fingering guide uses a simulated human voice to call out fingering numbers during Step 1 and Step 2 one-hand part practice. If you need to press a key with your thumb, for example, voice fingering guide says, "One!" In the case of a chord to be played with your thumb, middle and little finger, voice fingering guide says, "One, three, five!" Voice Fingering Guide calls out fingerings only when you do not press the proper key when you should.

Voice Fingering Guide

- One : Thumb
- Two : Forefinger
- Three : Middle finger
- Four : Ring finger
- Five : Little finger

To turn voice fingering guide on or off

Press the SPEAK button to toggle voice fingering guide on (voice fingering guide indicator displayed) and off (indicator not displayed).



NOTE

- Note that Voice Fingering is disabled in the Evaluation Mode.
- Exiting the Evaluation Mode automatically restores the Voice Fingering setting that was in effect when you entered the Evaluation Mode.

Using the Metronome

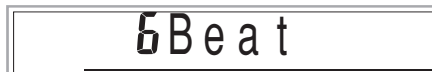
The metronome feature of this keyboard produces a bell sound for the first beat of each measure, followed by click sounds for each successive beat of the measure. It is the perfect tool for practicing tunes without accompaniment (rhythm).

To start the metronome

- 1 Press the METRONOME button to start sounding the metronome.
 - This causes "Beat" to appear on the display. Perform step 2 within five seconds after "Beat" appears.



- 2 Use the number buttons or [+] and [-] to change the number of beats per measure.
 - You can specify 0, or a value from 2 to 6 as the number of beats per measure.



NOTE

- The bell (indicating the first beat of a measure) does not sound while 0 beat per measure is specified. All beats are indicated by a click sound. This setting lets you practice with a steady beat, without worrying about how many beats there are in each measure.

- 3 Use the TEMPO buttons to set the tempo.
 - Press ^ to increase the tempo (make it faster) or v to decrease it (make it slower).



NOTE

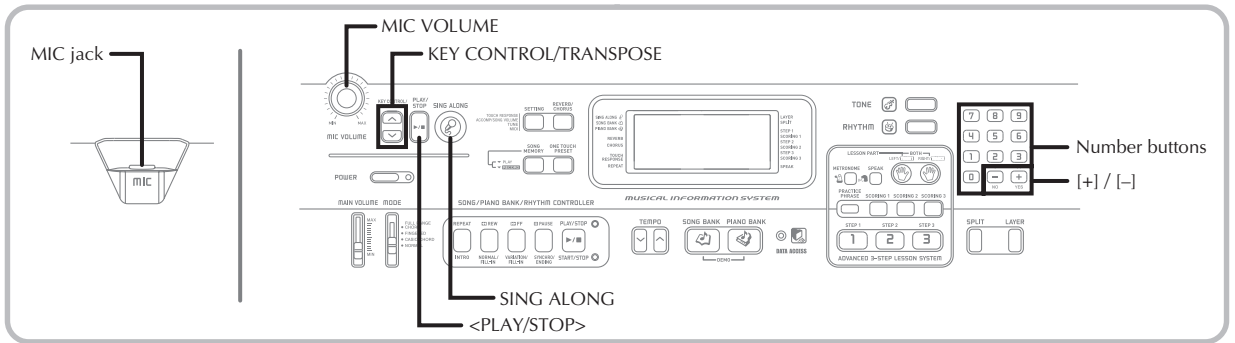
- While the tempo value is flashing, you can also use the number buttons or [+] and [-] to input a three-digit value. Note that you must input leading zeros, so 90 is input as 090.
- Pressing both the ^ and v TEMPO buttons at the same time automatically returns the currently selected rhythm or tune to its default tempo.

- 4 To turn off the metronome, press the METRONOME button.

NOTE

- The metronome is disabled whenever you are using Step 1 or Step 2 of the 3-step lesson.
- Starting play of a two-hand tune or Step 3 of the 3-step lesson while the metronome is operating or activating the metronome while either of the two above operations is already in progress causes the metronome to sound in time with the Auto Accompaniment played by the keyboard. At this time, the tempo of the metronome beat changes to that of the default tempo for the Auto Accompaniment being played.

Using a Microphone for Sing Along



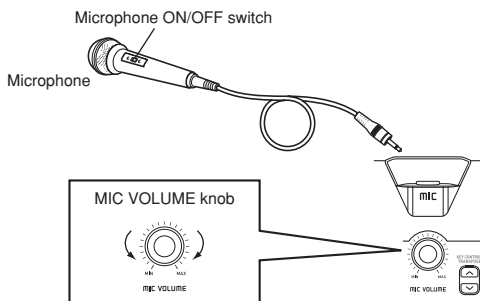
Connecting a commercially available microphone* to the MIC IN jack makes it possible to sing along with the keyboard's built-in tunes or with SMF playback. When connecting a microphone, be sure to first adjust the MIC VOLUME to a relatively low setting, and then adjust to the level you want after connecting.

* If a microphone was included with your keyboard, use that microphone. If your keyboard did not come with a microphone, use a commercially available microphone that satisfies the stipulated specifications.

Using the microphone jack

When connecting a microphone, be sure to first adjust the MIC VOLUME to a relatively low setting, and then adjust to the level you want after connecting.

- 1 Set the MIC VOLUME knob setting so it is on the "MIN" side.
- 2 Turn on the microphone's ON/OFF switch.
- 3 Use the MIC VOLUME knob to adjust microphone volume to the level you want.



IMPORTANT!

- Be sure to use the microphone's ON/OFF switch to turn off the microphone and to disconnect the microphone from the keyboard whenever you are not using it.

Recommended Microphone Type

- Dynamic microphone (standard plug)

Howling (Feedback Noise)

Any of the following conditions can cause howling (feedback noise).

- Covering the head of the microphone with your hand
- Positioning the microphone too near to a speaker

Should howling occur, try grasping the microphone further away from the head, and move away from any nearby speaker.

Static Noise

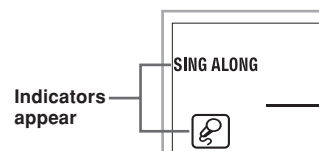
Fluorescent lighting can cause static noise in the microphone signal. When this happens, move away from the lighting you suspect may be causing the static.

To use a microphone for sing along

PREPARATION

- Adjust the main volume (page E-17), accompaniment/song volume (page E-46), and microphone volume (page E-29).

- 1 Find the tune you want in the SONG BANK/SING ALONG List, and note its number.
 - See page A-9 for the SONG BANK/SING ALONG List.
- 2 Press the SING ALONG button to enter the Sing Along Mode.



- 3 Use the number buttons to input the two-digit song number.

Example: To select "ALOHA OE", which is song number 46, input 4 and then 6.

NOTE

- The initial power on default tune setting is "00".
 - You can also specify the song number using the [+] and [-] buttons.
-

- 4 Press the <PLAY/STOP> button to start tune play.
- Now use the microphone to sing along with the playback.
 - The Sing Along Mode is similar to the Song Bank Mode. The only difference is that the melody part in the Sing Along Mode is played back at a lower volume. Also a different tone setting is used in the Sing Along mode to make sing along easier.

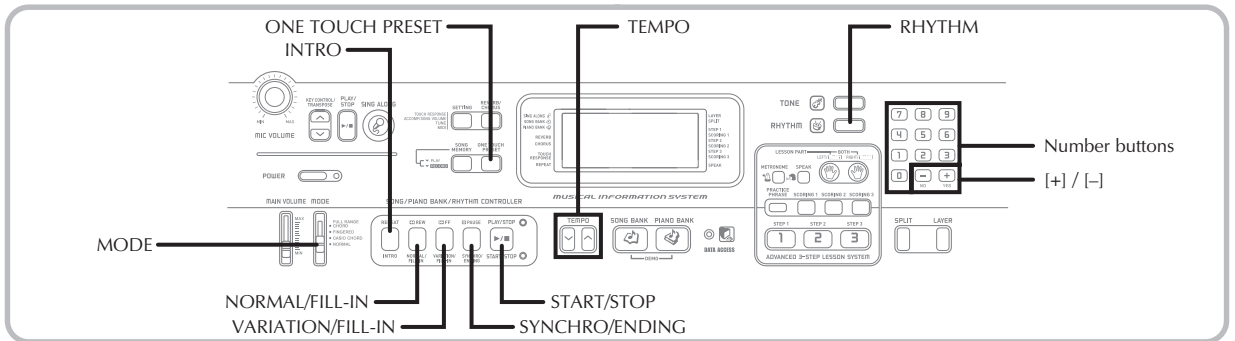
- 5 Use the KEY CONTROL/TRANSPPOSE buttons (▲/▼) to change the overall key of the playback, if you want.
- ▲ : Raises the key by one semitone
▼ : Lowers the key by one semitone

- 6 Press the <PLAY/STOP> button to stop tune play.
- The same song plays in an endless loop until you stop it.

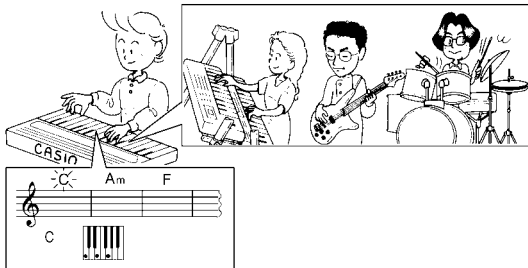
NOTE

- To return a tune to its default key, press both of the KEY CONTROL/TRANSPPOSE buttons (▲ and ▼) at the same time.
-

Auto Accompaniment



This keyboard automatically plays bass and chord parts in accordance with the chords you finger. The bass and chord parts are played using sounds and tones that are automatically selected to select the rhythm you are using. All of this means that you get full, realistic accompaniments for the melody notes you play with your right hand, creating the mood of an one-person ensemble.



Selecting a Rhythm

This keyboard provides you with 120 exciting rhythms that you can select using the following procedure.

To select a rhythm

- 1 Find the rhythm you want to use in the RHYTHM List and note its rhythm number.
 - Not all of the available rhythms are shown on the rhythm list printed on the keyboard console. For a complete list, see the "Rhythm List" on page A-8.

- 2 Press the RHYTHM button.



Indicator appears

- 3 Use the number buttons to input the three digit rhythm number for the rhythm you want to select.

Example: To select "075 RHUMBA", input 0, 7 and then 5.



NOTE

- You can also increment the displayed rhythm number by pressing [+], and decrement it by pressing [-].
- Some rhythms consist of chord accompaniments only, without any drums or other percussion instruments. Such rhythms do not sound unless CASIO CHORD, FINGERED, or FULL RANGE CHORD is selected as the accompaniment mode.

Playing a Rhythm

Use the following procedure to start and stop rhythm play.

To play a rhythm

- 1 Set the MODE switch to NORMAL.
- 2 Press the START/STOP button to start play of the currently selected rhythm.
- 3 To stop rhythm play, press the START/STOP button again.

NOTE

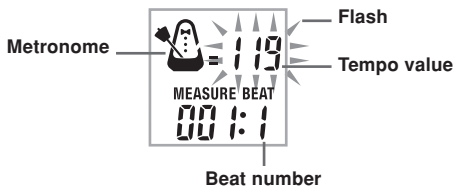
- All of the keyboard keys are melody keys while the MODE switch is set to NORMAL.

Adjusting the Tempo

The tempo (beats per minute) can be set to a value in the range of 30 to 255. The tempo value you set is use for Song Bank, 3-step lesson, and Auto Accompaniment chord play, as well as playback from memory and metronome operation.

To set the tempo

- 1 Use the TEMPO buttons to set the tempo.
 - ∧ : Increase the tempo value.
 - ∨ : Decreases the tempo value.



NOTE

- While the tempo value is flashing, you can also use the number buttons or [+] and [-] to input a three-digit value. Note that you must input leading zeros, so 90 is input as 090.
- Pressing both the ∧ and ∨ TEMPO buttons at the same time automatically returns the currently selected rhythm to its default tempo.

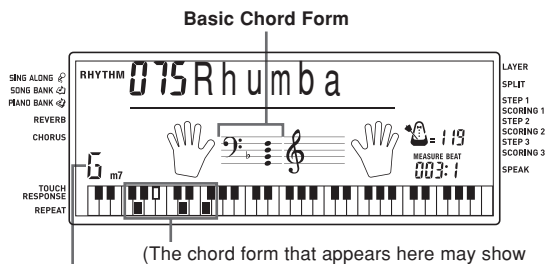
Using Auto Accompaniment

The following procedure describes how to use the keyboard's Auto Accompaniment feature. Before starting, you should first select the rhythm you want to use and set the tempo of the rhythm to the value you want.

To use Auto Accompaniment

- 1 Set the MODE switch to CASIO CHORD, FINGERED, or FULL RANGE CHORD.
- 2 Press the START/STOP button to start play of the currently selected rhythm.
- 3 Play a chord.
 - The actual procedure you should use to play a chord depends on the current MODE switch position. Refer to the following pages for details on chord play.

CASIO CHORD	Page E-33
FINGERED	Page E-33
FULL RANGE CHORD	Page E-34



Chord name (The chord form that appears here may show notes that differ from those actually pressed on the keyboard. With some chords, inverted chord forms may be displayed.)

- 4 To stop Auto Accompaniment play, press the START/STOP button again.

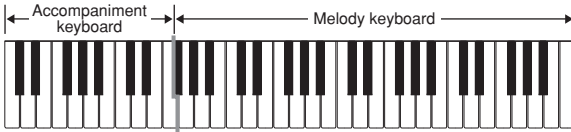
NOTE

- If you press the SYNCHRO/ENDING button and then the INTRO button in place of the START/STOP button in step 2, accompaniment will start with an intro pattern when you perform the operation in step 3. For details about these buttons, see pages E-35 and E-36.
- If you press the SYNCHRO/ENDING button in place of the START/STOP button in step 4, an ending pattern will play before accompaniment play is ended. For details about this button, see page E-36.
- You can adjust the accompaniment part volume level independently of the main volume. For details, see "Adjusting Accompaniment and Song Bank Volume" on page E-46.

CASIO CHORD

This method of chord play makes it possible for anyone to easily play chords, regardless of previous musical knowledge and experience. The following describes the CASIO CHORD "Accompaniment keyboard" and "Melody keyboard", and tells you how to play CASIO CHORDs.

CASIO CHORD Accompaniment Keyboard and Melody Keyboard



NOTE

- The accompaniment keyboard can be used for playing chords only. No sound will be produced if you try playing single melody notes on the accompaniment keyboard.
- The split point (page E-44) is the point that separates the Auto Accompaniment area and the melody area of the keyboard. You can change the location of the split point, which also changes the sizes of the keyboard areas.

Chord Types

CASIO CHORD accompaniment lets you play four types of chords with minimal fingering.

Chord Types	Example
Major chords Major chord names are marked above the keys of the accompaniment keyboard. Note that the chord produced when you press an accompaniment keyboard does not change octave, regardless of which key you use to play it.	C Major (C)
Minor chords (m) To play a minor chord, keep the major chord key depressed and press any other accompaniment keyboard key located to the right of the major chord key.	C minor (Cm)
Seventh chords (7) To play a seventh chord, keep the major chord key depressed and press any other two accompaniment keyboard keys located to the right of the major chord key.	C seventh (C7)
Minor seventh chords (m7) To play a minor seventh chord, keep the major chord key depressed and press any other three accompaniment keyboard keys located to the right of the major chord key.	C minor seventh (Cm7)

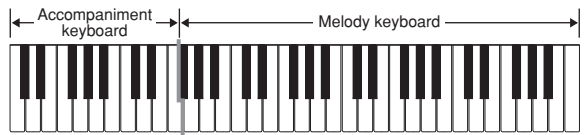
NOTE

- It makes no difference whether you press black or white keys to the right of a major chord key when playing minor and seventh chords.

FINGERED

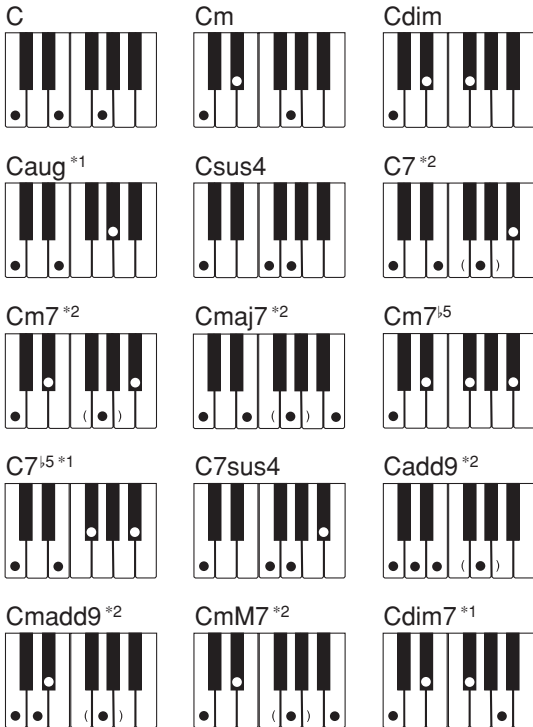
FINGERED provides you with a total of 15 different chord types. The following describes the FINGERED "Accompaniment keyboard" and "Melody keyboard", and tells you how to play a C-root chord using FINGERED.

FINGERED Accompaniment Keyboard and Melody Keyboard



NOTE

- The accompaniment keyboard can be used for playing chords only. No sound will be produced if you try playing single melody notes on the accompaniment keyboard.
- The split point (page E-44) is the point that separates the Auto Accompaniment area and the melody area of the keyboard. You can change the location of the split point, which also changes the sizes of the keyboard areas.



See the FINGERED Chord Chart on page A-7 for details on playing chords with other roots.

- *1: Inverted fingerings cannot be used. The lowest note is the root.
- *2: The same chord can be played without pressing the 5th G.

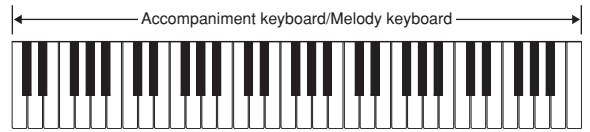
NOTE

- Except for the chords specified in note*1 above, inverted fingerings (i.e. playing E-G-C or G-C-E instead of C-E-G) will produce the same chords as the standard fingering.
- Except for the exception specified in note*2 above, all of the keys that make up a chord must be pressed. Failure to press even a single key will not play the desired FINGERED chord.

FULL RANGE CHORD

This accompaniment method provides a total of 38 different chord types: the 15 chord types available with FINGERED plus 23 additional types. The keyboard interprets any input of three or more keys that matches a FULL RANGE CHORD pattern to be a chord. Any other input (that is not a FULL RANGE CHORD pattern) is interpreted as melody play. Because of this, there is no need for a separate accompaniment keyboard, so the entire keyboard, from end to end, can be used for both melody and chords.

FULL RANGE CHORD Accompaniment Keyboard and Melody Keyboard

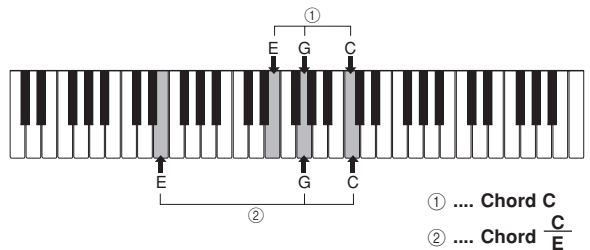


< Chords Recognized by This Keyboard >

Chord Types	Number of Types
Corresponding FINGERED Chord	15 (page E-33)
Other Chords	<p>23</p> <p>The following are examples of chords that use C as the bass note.</p> <p>C₆ • Cm₆ • C₆₉</p> <p>$\frac{C^\#}{C} \cdot \frac{D}{C} \cdot \frac{E}{C} \cdot \frac{F}{C} \cdot \frac{G}{C} \cdot \frac{A^\flat}{C} \cdot \frac{B^\flat}{C}$</p> <p>$\frac{B}{C} \cdot \frac{C^\#m}{C} \cdot \frac{Dm}{C} \cdot \frac{Fm}{C} \cdot \frac{Gm}{C} \cdot \frac{Am}{C} \cdot \frac{B^bm}{C}$</p> <p>$\frac{Dm7^\flat5}{C} \cdot \frac{A^\flat7}{C} \cdot \frac{F7}{C} \cdot \frac{Fm7}{C} \cdot \frac{Gm7}{C} \cdot \frac{A^\flat add9}{C}$</p>

Example: To play the chord C major.

Any of the fingerings shown in the illustration below will produce C major.



NOTE

- As with the FINGERED mode (page E-33), you can play the notes that form a chord in any combination (①).
- When the composite notes of a chord are separated by 6 or more notes, the lowest sound becomes the bass (②).

< Music Example >

Tone: 023, Rhythm: 005, Tempo: 070



Using an Intro Pattern

This keyboard lets you insert a short intro into a rhythm pattern to make startup smoother and more natural.

The following procedure describes how to use the Intro feature. Before starting, you should first select the rhythm you want to use, and set the tempo.

To insert an intro

- 1 Press the INTRO button to start the selected rhythm with an intro pattern.
 - With the above setup, the intro pattern is played and the auto accompaniment with intro pattern starts as soon as you play chords on the accompaniment keyboard.

NOTE

- The standard rhythm pattern starts to play after the intro pattern is complete.
- Pressing the VARIATION/FILL-IN button while an intro pattern is playing causes the variation pattern to sound after the intro pattern is complete.
- Pressing the SYNCHRO/ENDING button while an intro pattern is playing causes the ending pattern to sound after the intro pattern is complete.

Using a Fill-in Pattern

Fill-in patterns let you momentarily change the rhythm pattern to add some interesting variation to your performances.

The following procedure describes how to use the Fill-in feature.

To insert a fill-in

- 1 Press the START/STOP button to start rhythm play.
- 2 Press the NORMAL/FILL-IN button to insert a fill-in pattern for the rhythm you are using.

NOTE

- The fill-in pattern does not play if you press the NORMAL/FILL-IN button while an intro pattern is playing.

Using a Rhythm Variation

In addition to the standard rhythm pattern, you can also switch to a secondary "variation" rhythm pattern for a bit of variety.

To insert the variation rhythm pattern

- 1 Press the START/STOP button to start rhythm play.
- 2 Press the VARIATION/FILL-IN button to switch to the variation pattern for the rhythm you are using.

NOTE

- To switch back to the standard rhythm pattern, press the NORMAL/FILL-IN button.

Using a Fill-in Pattern with a Variation Rhythm

You can also insert a fill-in pattern while a variation rhythm pattern is playing.

To insert a fill-in into a rhythm variation

- 1 While a variation rhythm pattern is playing, press the VARIATION/FILL-IN button to insert a fill-in pattern for the variation rhythm you are using.

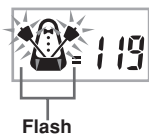
Synchro Starting Accompaniment with Rhythm Play

You can set up the keyboard to start rhythm play at the same time you play the accompaniment on the keyboard.

The following procedure describes how to use synchro start. Before starting, you should first select the rhythm you want to use, set the tempo, and use the MODE switch to select the chord play method you want to use (NORMAL, CASIO CHORD, FINGERED, FULL RANGE CHORD).

To use synchro start

- 1 Press the SYNCHRO/ENDING button to put the keyboard into synchro start standby.



- 2 Playing a chord and the rhythm pattern starts to play automatically.

NOTE

- If the MODE switch is set to NORMAL, only the rhythm plays (without a chord) when you play on the accompaniment keyboard.
- If you press the INTRO button before playing anything on the keyboard, the rhythm starts automatically with an intro pattern when you play something on the accompaniment keyboard.
- Pressing the VARIATION/FILL-IN button before playing anything on the keyboard causes play to start with the variation pattern when something is played on the keyboard.
- To cancel synchro start standby, press the SYNCHRO/ENDING button one more time.

Finishing with an Ending Pattern

You can end your performances with an ending pattern that brings the rhythm pattern you are using to a natural-sounding conclusion.

The following procedure describes how to insert an ending pattern. Note that the actual ending pattern played depends on the rhythm pattern you are using.

To finish with an ending pattern

- 1 While the rhythm is playing, press the SYNCHRO/ENDING button.
 - This causes the ending pattern to play, which brings rhythm accompaniment to an end.

NOTE

- The timing when the ending pattern starts depends on when you press the SYNCHRO/ENDING button. If you press the button before the second beat of the current measure, the ending pattern starts playing immediately. Pressing the button at any point in the measure after the second beat results in the ending pattern playing from the beginning of the following measure.

Using One-touch Preset

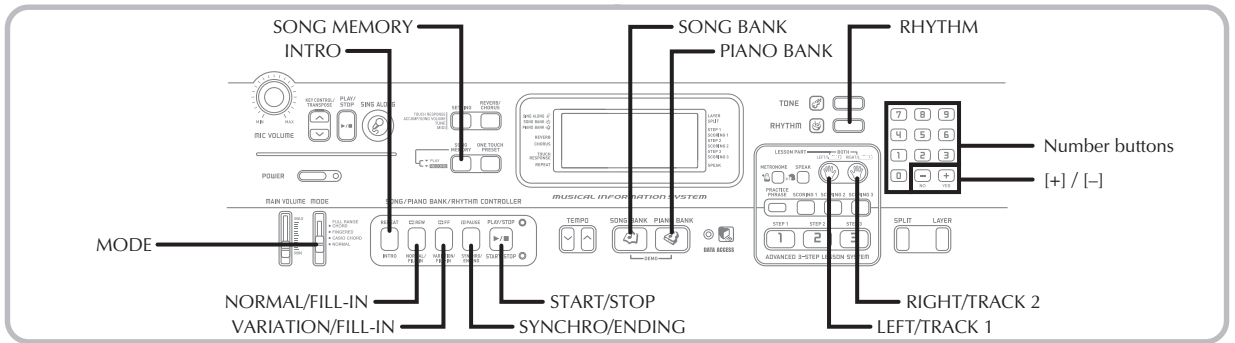
One-touch preset automatically makes the settings listed below in accordance with the rhythm pattern you are using.

- Keyboard tone
- Layer, Split, or Layer Split on/off
- Layered tone (when layer is turned on), split tone (when split is turned on), or layered split tone (when layer and split are turned on)
- Tempo
- Reverb and chorus settings

To use one-touch preset

- 1 Select the rhythm you want to use.
- 2 Use the MODE switch to select the accompaniment mode you want to use.
- 3 Press the ONE TOUCH PRESET button.
 - This automatically configures the one-touch preset settings in accordance with the rhythm you selected, and enters synchro start standby.
- 4 Play a chord. This will cause the rhythm pattern to start to play automatically.
 - Accompaniment is played using the one touch preset settings.

Song Memory Function



You can use Song Memory to record your lesson play (lesson recording) and to record your keyboard play along with the Auto Accompaniment you are using (performance recording).

Parts and Tracks

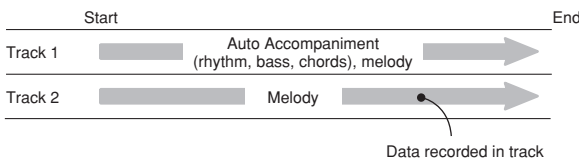
How data is recorded to Song Memory and the type of data that is recorded depends on whether you are performing a performance recording operation or a lesson recording operation.

Lesson Recording

With lesson recording, you use the LEFT/TRACK 1 button and the RIGHT/TRACK 2 button to select recording of only the left-hand part, only the right-hand part, or both the left-hand and right-hand parts.

Performance Recording

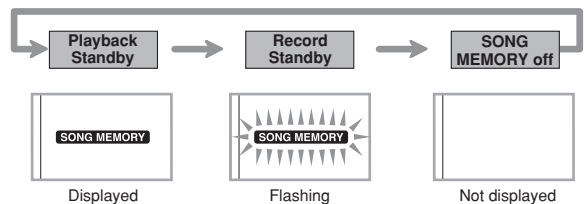
With performance recording, Song Memory operates like a tape recorder or sequencer. In this case, you can use the LEFT/TRACK 1 button and the RIGHT/TRACK 2 button to select the Song Memory track you want to record to. Performance recording records the data shown in the illustration below, using two memory tracks.



- Since each track is independent of the other, you can edit a recording by re-recording only one of the tracks.

Using the SONG MEMORY Button

When performing a performance recording or lesson recording, you will need to use the SONG MEMORY button to select recording or playback. Each press of the SONG MEMORY button cycles through the song memory options in the sequence shown below.



Song Memory Capacity

Song Memory can hold a total of approximately 12,000 notes, which can be divided between a lesson recording and a performance recording. Note that you can use up all 12,000 notes for either the lesson recording or the performance recording. If you do, you will not be able to record anything for the other type of recording.

- When the number of remaining notes becomes less than about 100 while you are recording, the SONG MEMORY indicator and the track/part indicator (L, R) will start to flash at high speed.
- Recording will stop automatically if Song Memory becomes full.

If you are using Auto Accompaniment or a rhythm, they will also stop playing at this time.

IMPORTANT!

- Never turn off the keyboard while it is recording or standing by for recording to Song Memory. Doing so will cause all of the song data currently stored in the Song Bank user area to be deleted.

Recorded Data Storage

- Anything previously stored in song memory is replaced whenever you make a new recording.
- Song Memory contents are retained even when power is turned off, as long as the keyboard is being supplied battery or AC adaptor power. If you remove the batteries or should the batteries go dead while the keyboard is not being supplied power by the AC adaptor, song memory contents will be deleted. Be sure to supply power to the keyboard with the AC adaptor when replacing batteries.
- Turning off the keyboard while a record operation is in progress causes the contents of the track you are currently recording to be lost.

Recording Play Along with a Built-in Tune

You can use the lesson recording procedure to record notes you play along with one of the keyboard's built-in tunes. When you start a lesson recording, the keyboard plays the song minus the part(s) you selected as the recording part(s), and indicates the notes you need to play by lighting the keys of the keyboard.

Selecting Parts

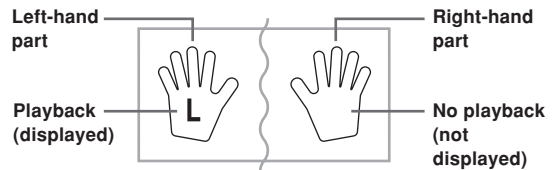
Press the part/track button that corresponds to the part(s) you want to select as the recording part(s).

To select this part:	Press this button:
Left-hand	LEFT/TRACK 1
Right-hand	RIGHT/TRACK 2
Both hands	LEFT/TRACK 1 + RIGHT/TRACK 2

The part that is currently selected is indicated by the part/track indicators (L and R) that appear on the display as described below.

Part/Track Indicators in Playback Standby

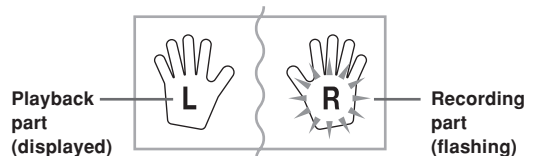
Each press of a part/track button toggles playback of that part on (part/track indicator displayed) and off (indicator not displayed).



Example: The above indicates that left-hand part will be played back, while the right-hand part will not.

Part/Track Indicators in Recording Standby

Press the part/track button of the part you want to play on the keyboard (recording part). This causes its part/track indicator to flash. The part/track indicator of the other part will remain displayed (without flashing) to indicate that it will play back during recording (playback part).



Example: The above indicates the left-hand part is the playback part, and the right-hand part is the recording part.



To record as you play along with a built-in tune

- 1 Press the SONG BANK button or PIANO BANK button to select the mode that includes the tune you want to play along with.
- 2 Use the SONG MEMORY button to select record standby.
 - This causes the SONG MEMORY indicator to flash on the display.
- 3 Select the tune you want to play along with.
 - See “To play back a Song Bank tune” on page E-19 for information about selecting Song Bank tunes, and “To play back a Piano Bank tune” on page E-20 for information about selecting Piano Bank tunes.
- 4 Use the LEFT/TRACK 1 button or RIGHT/TRACK 2 button to select the part(s) (left-hand, right-hand) you want to mute in the built-in tune playback and play along on the keyboard.
 - If you want to mute and play both parts, press both buttons at the same time.
- 5 Configure the following settings as required.
 - Tone (page E-17)
 - Tempo (page E-20)
- 6 Press the controller block START/STOP button.
 - This starts recording.
- 7 Play the notes for the part(s) you selected in step 4 on the keyboard.
- 8 Recording stops automatically when playback of the built-in tune is finished.
 - To interrupt recording part way through, press the controller block START/STOP button. This will play back everything you recorded up to that point.
 - If you want to hear what you recorded immediately, press the controller block START/STOP button again.

Lesson Recording Data

In addition to the notes you play on the keyboard and the accompaniment of the built-in song you selected, the following data is also stored by a lesson recording operation.

- Tone setting
- Tempo setting
- Tune name
- Recording part selection
- Pedal operations
- Layer and split settings, and their tone settings
- Effect setting

Playing Back a Lesson Recording

- 1 Press the SONG BANK button or the PIANO BANK button to select the bank of the built-in tune that you originally used to record the lesson recording.
- 2 Use the SONG MEMORY button to select playback standby.
- 3 Press the controller block START/STOP button.
 - This starts playback of Song Memory lesson recording contents.
 - You can adjust the tempo at this point, if you want.
- 4 To stop playback, press the controller block START/STOP button again.

Recording a Performance

Use this procedure when you want to record what you play on the keyboard in real time. Performance recording records both the notes you play and any accompaniment patterns that you use.

Selecting a Track

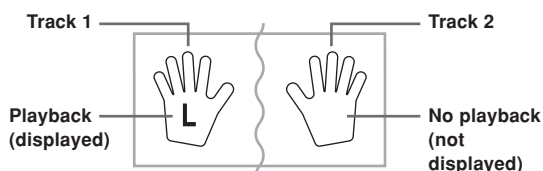
Press the part/track button that corresponds to the track you want to select.

To select this track:	Press this button:
Track 1	LEFT/TRACK 1
Track 2	RIGHT/TRACK 2

The track that is currently selected is indicated by the part/track indicator (L or R) that appears on the display as described below.

Part/Track Indicators in Playback Standby

Each press of a part/track button toggles playback of that track on (part/track indicator displayed) and off (indicator not displayed).

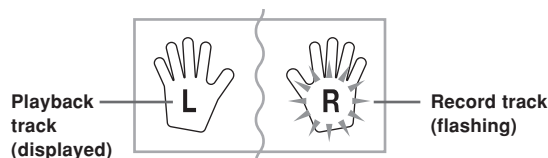


Example: The above indicates that Track 1 will be played back, while Track 2 will not.

Part/Track Indicators in Recording Standby

The part/track indicator will be displayed if its track already contains data.

Press the part/track button of the track to which you want to record (record track). This causes its part/track indicator to flash. The part/track indicator of the other track will remain displayed (without flashing) to indicate that it will playback during recording (playback track).



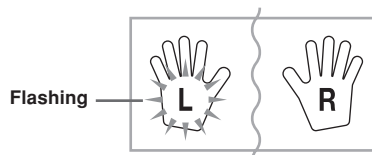
Example: The above indicates Track 1 is the playback track, and Track 2 is the record track.

To record your keyboard performances

IMPORTANT!

- Recording to a track that already contains data causes the existing data to be replaced by your new performance.

- Press the RHYTHM button to enter the rhythm mode.
- Use the SONG MEMORY button to select record standby.
 - This causes the SONG MEMORY indicator to flash on the display.
- Press the LEFT/TRACK 1 button to select Track 1.
 - This causes the L indicator to flash, indicating that Track 1 is the recording track.



- Configure the following settings as required.
 - Tone (page E-17)
 - Rhythm (page E-31)
 - MODE switch setting (page E-32)
 - Use a slower tempo if you feel you might have trouble playing properly at a faster tempo (page E-20).
- Press the controller block START/STOP button.
 - This starts recording.
- Play the notes you want on the keyboard.
 - Besides notes, any chords you play on the keyboard are recorded, along with their Auto Accompaniment patterns. Melody notes you play are also recorded.
 - Any pedal operations you perform while playing are also recorded.
- To stop recording, press the controller block START/STOP button again.
 - If you make a mistake, you need to go back and re-record from step 2.
 - If you want to immediately hear what you recorded, press the controller block START/STOP button again.

Track 1 Data

In addition to notes played on the keyboard and chord accompaniments, the following data is also stored in Track 1 during performance recording.

- Tone number
- Rhythm number
- INTRO button, SYNCHRO/ENDING button, NORMAL/FILL-IN button, VARIATION/FILL-IN button operations
- Pedal operations
- Layer and split settings, and their tone settings
- Split point
- Tempo setting
- Effect setting

Track 1 Recording Variations

■ To record without rhythm

Skip step 5 of the above procedure.

- Recording without rhythm starts as soon as you press a keyboard key.

■ To start recording with synchro start

In place of step 5 of the above procedure, press the SYNCHRO/ENDING button.

- Now Auto Accompaniment and recording will start when you play a chord within the accompaniment keyboard range.

■ To insert an intro, ending, or fill-in into a recording

During recording, press the INTRO button, SYNCHRO/ENDING button, NORMAL/FILL-IN button, or VARIATION/FILL-IN button as required.

■ To start recording with an intro using synchro start

In place of step 5 of the above procedure, press the SYNCHRO/ENDING button and then the INTRO button.

- Now Auto Accompaniment and recording will start with an intro pattern when you play a chord within the accompaniment keyboard range.

■ To start Auto Accompaniment part way into a recording

In place of step 5 of the above procedure, press the SYNCHRO/ENDING button, and play something within the melody range of the keyboard.

- This records the melody without any accompaniment. Auto Accompaniment will start when you play a chord within the accompaniment keyboard range.

Playing Back a Performance Recording

Perform the following procedure when you want to play back a tune you recorded with performance recording.

- 1 Press the RHYTHM button to enter the rhythm mode.
- 2 Use the SONG MEMORY button to select playback standby.
- 3 Press the controller block START/STOP button.
 - This starts playback of Song Memory performance recording contents. During playback, you can press the LEFT/TRACK 1 or RIGHT/TRACK 2 button to mute either track and listen to the contents of the other track only.
 - You can adjust the tempo at this point, if you want.
- 4 To stop playback, press the controller block START/STOP button again.

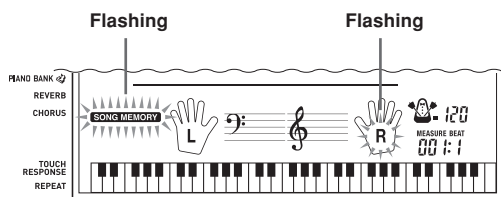
NOTE

- During performance recording playback, the entire range of the keyboard operates as a melody keyboard, regardless of the MODE switch setting. You can play along with performance recording playback, if you want. You could use layer and split (page E-43 through E-45) at this time to assign multiple tones to the keyboard.
- Note that pause, skip forward, and skip back operations cannot be performed during performance recording playback.

Overdubbing a Performance Recording

You can use the following procedure to record a melody in Track 2 so it combines with a recording you previously made in Track 1.

- 1 Press the RHYTHM button to enter the rhythm mode.
- 2 Use the SONG MEMORY button to select record standby.
- 3 Press the RIGHT/TRACK 2 button to select Track 2 as the recording track.



- 4 Select the tone you want to use.
- 5 Press the controller block START/STOP button.
 - This starts playback of Track 1 and recording in Track 2.
- 6 Play the melody notes you want as you listen to the playback from Track 1.
- 7 To stop recording, press the controller block START/STOP button again.
 - If you make a mistake, you need to go back and re-record from step 2.
 - If you want to immediately hear what you recorded, press the controller block START/STOP button again.

NOTE

- Track 2 is a melody-only track, which means that chord accompaniment cannot be recorded there. Because of this, the entire range of the keyboard becomes a melody keyboard when recording the Track 2, regardless of the current MODE switch setting.
- If you want to record without playback from a recorded track, enter playback standby, deselect the playback track, and then enter record standby. Note, however, that you cannot turn off rhythm and Auto Accompaniment.

Track 2 Data

In addition to notes played on the keyboard, the following data is also recorded to Track 2.

- Tone number
- Pedal operations

Deleting a Specific Part/Track

You can use the following procedure to delete a specific part/track from a lesson recording or performance recording.

Getting Ready

■ When deleting a lesson recording part

- Press the SONG BANK button or PIANO BANK button.

■ When deleting a performance recording track

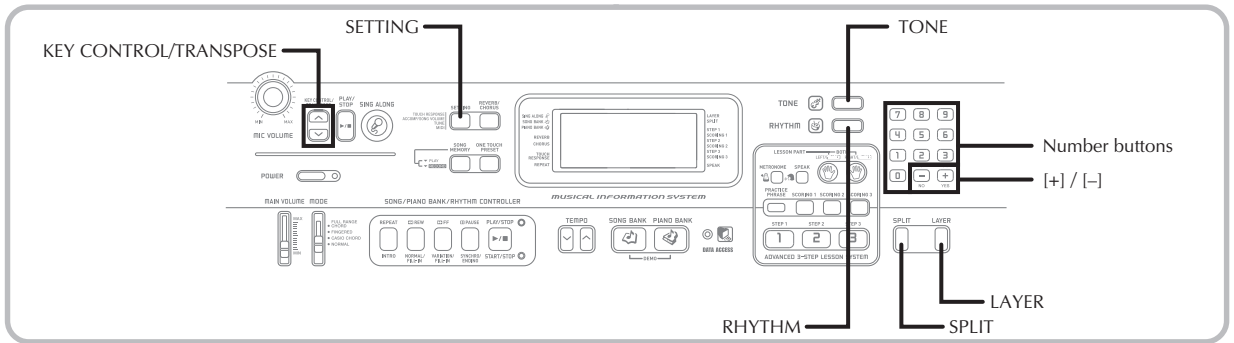
- Press the RHYTHM button.

- 1 Press the SONG MEMORY button to enter record standby.
- 2 Select the part/track you want to delete by pressing the LEFT/TRACK 1 button or RIGHT/TRACK 2 button.
- 3 Hold down the SONG MEMORY button.
 - This causes a confirmation message to appear on the display.
 - To cancel the delete operation, press the [-] (NO) button.
- 4 Press the [+] (YES) button to delete the part/track.
 - This causes the keyboard to return to Song Memory playback standby.

NOTE

- Pressing the SONG MEMORY button while the part/track delete screen is on the display returns to record standby.

Keyboard Settings



This section describes how to use layer (to play two tones with a single key) and split (to assign different tones to either end of the keyboard), and how to make touch response, transpose, and tuning settings.

NOTE

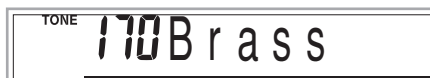
- Note that the split function is not available while playing a built-in tune or while using the lesson functions.

Using Layer

Layer lets you assign two different tones (a main tone and a layered tone) to the keyboard, both of which play whenever you press a key. For example, you could layer the FRENCH HORN tone on the BRASS tone to produce a rich and brassy sound.

To layer tones

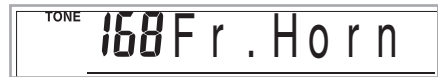
- 1 First select the main tone.
Example: To select “170 BRASS” as the main tone, press the TONE button and then use the number buttons or [+] and [-] buttons to input 1, 7 and then 0.



- 2 Press the LAYER button.

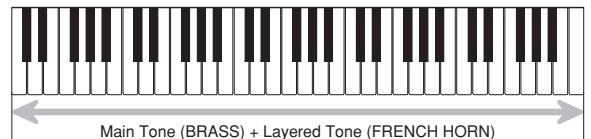


- 3 Select the layered tone.
Example: To select “168 FRENCH HORN” as the layered tone, use the number buttons or [+] and [-] buttons to input 1, 6 and then 8.



- 4 Now try playing something on the keyboard.
 - Both tones are played at the same time.
- 5 Press the LAYER button again to unlayer the tones and return the keyboard to normal.

LAYER



Using Split

With split you can assign two different tones (a main tone and a split tone) to either end of the keyboard, which lets you play one tone with your left hand and another tone with your right hand. For example, you could select STRINGS as the main (high range) tone and PIZZICATO STRINGS as the split (low range) tone, putting an entire string ensemble at your fingertips.

Split also lets you specify the split point, which is the location on the keyboard where the changeover between the two tones occurs.

To split the keyboard

- 1 First select the main tone.

Example: To select "139 STRINGS" as the main tone, press the TONE button and then use the number buttons or [+] and [-] buttons to input 1, 3 and then 9.



- 2 Press the SPLIT button.



Indicator appears

- 3 Select the split tone.

Example: To select "127 PIZZICATO STRINGS" as the split tone, use the number buttons or [+] and [-] buttons to input 1, 2 and then 7.



- 4 Specify the split point. While holding down the SPLIT button, press the keyboard where you want the leftmost key of the high end range to be.

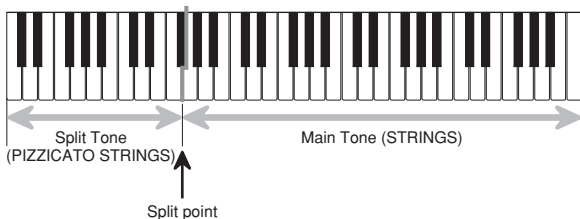
Example: To specify G3 as the split point, press the G3 key.



- 5 Now try playing something on the keyboard.
 - Every key from F#3 and below is assigned the PIZZICATO STRINGS tone, while every key from G3 and above is assigned the STRINGS tone.

- 6 Press the SPLIT button again to unsplit the keyboard and return it to normal.

SPLIT



Using Layer and Split Together

You can use layer and split together to create a layered split keyboard. It makes no difference whether you layer tones first and then split the keyboard, or split the keyboard and then layer tones. When you use layer and split in combination, the high range of the keyboard is assigned two tones (main tone + layered tone), and the low range two tones (split tone + layered split tone).

To split the keyboard and then layer tones

- 1 Press the TONE button and then input the tone number of the main tone.



- 2 Press the SPLIT button and then input the number of the split tone.



Indicator appears

- After specifying the split tone, press the SPLIT button to unsplit the keyboard.

- 3 Press the LAYER button and then input the number of the layered tone.

- Note that you can reverse steps 2 and 3, specifying the layered tone first and then the split tone.



Indicator appears

- 4 Press the SPLIT button or the LAYER button so both of the SPLIT and LAYER indicators are displayed.

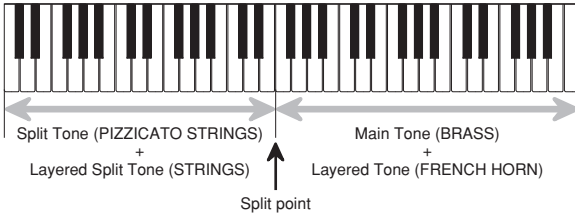
- 5 Input the number of the layered split tone.



- 6 Specify the split point.
 - While holding down the SPLIT button, press the keyboard where you want the leftmost key of the low end range to be.

- Play something on the keyboard.
 - Press the LAYER button to unlayer the keyboard, and the SPLIT button to unsplit it.

LAYER SPLIT



Transposing the Keyboard

Transpose lets you raise and lower the overall key of the keyboard in semitone units. If you want to play an accompaniment for a vocalist who sings in a key that's different from the keyboard, for example, simply use transpose to change the key of the keyboard.

To transpose the keyboard

- Press the RHYTHM button to enter the Rhythm Mode.
 - Note that you cannot transpose the keyboard while in the Song Bank Mode or Piano Bank Mode.
- Use the KEY CONTROL/TRANPOSE buttons (\wedge / \vee) to change the key of the keyboard.
 - \wedge : Raises the key by one semitone
 - \vee : Lowers the key by one semitone
 - Example: To transpose the keyboard five semitones upwards.



NOTE

- The keyboard can be transposed within a range of -12 (one octave downwards) to +12 (one octave upwards).
- The default transpose setting is "00" when keyboard power is turned on.
- If you leave the transpose screen on the display for about five seconds without doing anything, the screen is automatically cleared.
- The transpose setting also affects playback from memory and Auto Accompaniment.
- To return the keyboard to its default key, perform the above procedure and press both of the KEY CONTROL/TRANPOSE buttons (\wedge and \vee) at the same time in step 2. You could also use the [+] and [-] buttons to change the transpose setting to "00".

- The effect of a transpose operation depends on the pitch of each note and on the tone you are currently using. If a transpose operation causes a note to be outside of the allowable range for a tone, the same note in the nearest octave within the range will be substituted.

Using Touch Response

When touch response is turned on, the relative volume of sound output by the keyboard is varied in accordance with the amount of pressure applied, just like an acoustic piano.

Touch response provides a choice of three settings, described below.

- OFF:** This setting turns off touch response. Keyboard pressure does not have any affect on the output notes.
- 1:** This setting provides touch response that is suited for normal play.
- 2:** This setting increases touch response, so stronger keyboard pressure has a greater effect than the "1" setting.

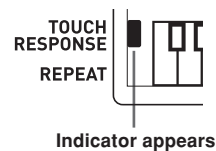
- Press the SETTING button until the TOUCH RESPONSE SELECT screen appears.



- Use the [+] and [-] or [0] and [1] buttons to change the setting.
 - Example: To select touch response 2.



- Touch response is on when touch response indicator is on.



- Touch response is off when touch response indicator is off.



NOTE

- Song memory playback and accompaniment do not affect the touch response setting.

About SETTING button

Each press of the SETTING button cycles through the setting screens. If you accidentally pass the screen you want to use, keep pressing the SETTING button until the screen appears again.

Adjusting Accompaniment and Song Bank Volume

You can adjust the volume of the accompaniment and Song Bank tunes independently of the notes you play on the keyboard. You can specify a volume level in the range of 000 (minimum) to 127 (maximum).

To adjust the accompaniment volume

- 1 Press the SETTING button until the accompaniment volume adjustment screen appears.



Current accompaniment volume setting

- 2 Use the number buttons or the [+] / [-] buttons to change the current volume setting.
Example: 110



NOTE

- The current accompaniment volume value that appears in Step 1 automatically clears from the display if you do not input anything within about five seconds.
- Pressing [+] and [-] buttons at the same time automatically sets an accompaniment volume of 115.

To adjust built-in tune volume

Enter the Song Bank mode or Piano Bank mode, and then perform the procedure under "To adjust the accompaniment volume".

- In this case, a song volume screen will appear in place of the accompaniment volume screen.

Tuning the Keyboard

Use the following procedure to fine tune the keyboard to match the tuning of another musical instrument.

To tune the keyboard

- 1 Press the SETTING button until the tuning screen appears.



- 2 Use the [+] , [-] , and the number buttons to adjust the tuning value.

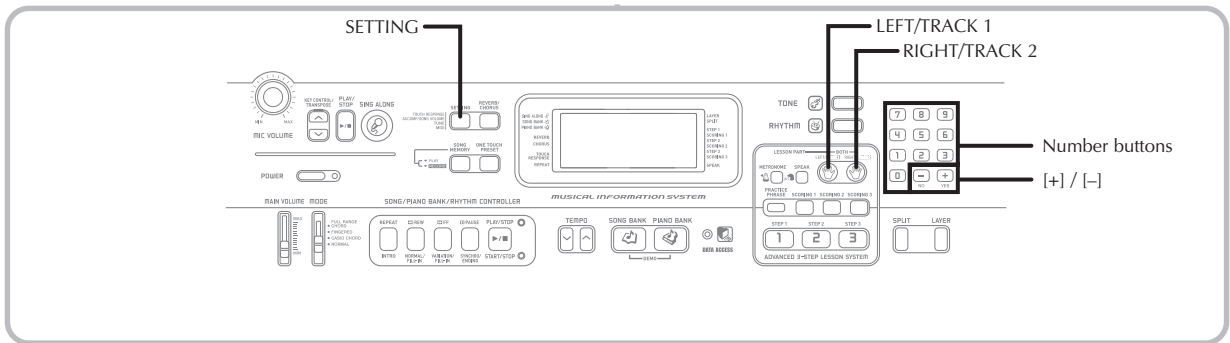
Example: To lower tuning by 20



NOTE

- The keyboard can be tuned within a range of -50 cents to +50 cents.
* 100 cents is equivalent to one semitone.
- The default tuning setting is "00" when keyboard power is turned on.
- If you leave the tuning screen on the display for about five seconds without doing anything, the screen is automatically cleared.
- The tuning setting also affects playback from song memory and Auto Accompaniment.
- To return the keyboard to its default tuning, perform the above procedure and press the [+] and [-] buttons at the same time in step 2.

Connection to a Computer



Connecting to a Computer

The keyboard's USB port makes it quick and simple to connect to a computer. After installing the USB MIDI driver onto your computer from the CD-ROM that comes with the keyboard, you will be able to use commercially available MIDI software on your computer to exchange data between the keyboard and your computer.

To install the USB MIDI driver

- 1 On the computer to which you plan to connect, install the USB MIDI driver that comes on the CD-ROM that comes bundled with the keyboard.
 - For information about installing the USB MIDI driver, see the "CASIO USB MIDI Driver User's Guide" (manual_e.pdf) on the "USB Manual and Driver CD-ROM".

NOTE

- Before starting actual installation of USB MIDI driver, be sure to read the contents of the "readme.txt" file in the "English" folder on the CD-ROM.
- Use Adobe Reader or Acrobat Reader to access the USB MIDI driver user's guide.*
- * You need to have Adobe Reader or Acrobat Reader installed on your computer in order to view the contents of the "CASIO USB MIDI Driver User's Guide" (manual_e.pdf). If your computer does not have either Adobe Reader or Acrobat Reader installed, use the procedure below to install it.

Installing Adobe Reader (Acrobat Reader**)

- Place the "USB Manual and Driver CD-ROM" into your computer's CD-ROM drive.
- On the CD-ROM, navigate to the folder named "Adobe", open the folder named "English", and then double-click "ar601enu.exe" ("ar505enu.exe"). Follow the instructions that appear on your computer screen to install Adobe Reader.

** Adobe Reader cannot be installed on a computer running Windows 98. If your computer is running under Windows 98, double-click "ar505enu.exe" to install Acrobat Reader.

Minimum Computer system Requirements

Supported Operating Systems

Operation is supported under Windows® XP, Windows® 2000, Windows® Me, Windows® 98SE, and Windows® 98.

● Universal

- IBM AT or compatible computer
- USB port that provides normal operation under Windows
- CD-ROM drive (for installation)
- At least 2MB of free hard disk space (not including space required for Adobe Reader)

● Windows XP

- 300MHz or higher Pentium processor
- At least 128MB of memory

● Windows 2000

- 166MHz or higher Pentium processor
- At least 64MB of memory

● Windows Me, Windows 98SE, Windows 98

- 166MHz or higher Pentium processor
- At least 32MB of memory

Driver Signing

● Windows XP

- 1 Log on to Windows XP using a Computer administrator account. See the documentation that comes with Windows XP for information about Computer administrator accounts.
- 2 On the Windows [Start] menu, click [Control Panel].
 - If you cannot see the [System] icon on the Control Panel, click [Switch to Classic View].
- 3 Click the [System] icon. On the dialog box that appears, click the [Hardware] tab, and then click the [Driver Signing] button.
- 4 On the dialog box that appears, select [Ignore], and then click [OK].

● Windows 2000

- 1 Log on using an Administrators group account. See the documentation that comes with Windows 2000 for information about the Administrators group.
- 2 On the Windows [Start] menu, point to [Settings] and then click [Control Panel].
- 3 Click the [System] icon. On the dialog box that appears, click the [Hardware] tab, and then click the [Driver Signing] button.
- 4 On the dialog box that appears, select [Ignore], and then click [OK].

NOTE

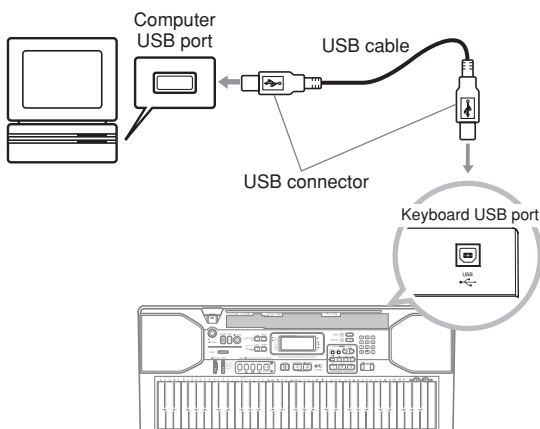
- Company and product names used herein are trademarks of their respective owners.

Using the USB port

Note that you need to purchase a commercially available USB cable to connect the keyboard to a computer using the USB port. Once you establish a USB connection between the keyboard and a computer, you can exchange data between them.

To connect to a computer using the USB port

- 1 Use a commercially available USB cable to connect the keyboard to the computer.



DATA ACCESS Lamp

- The DATA ACCESS lamp lights whenever the keyboard is exchanging data with a connected computer over a USB cable connection. Never disconnect the USB cable while the DATA ACCESS lamp is lit.

Expanding the Selections in the Song Bank Tunes

You can transfer song data from your computer to the keyboard. You can store up to 5 tunes (about 70 kilobytes) as Song Bank tunes 50 through 54. For SMF data you purchase or create, you need to use an SMF Converter to convert it to CASIO format before transferring it to the keyboard.

To install the SMF Converter

- 1 On the computer to which you plan to connect, install the SMF Converter that comes on the CD-ROM that comes bundled with the keyboard.
 - On the CD-ROM, double-click "SMFConv-e.exe", and then follow the instructions that appear on your computer screen to install SMF Converter.

* Before installing SMF Converter, be sure to read the contents of the "smfreadme.txt" file in each language folder on the CD-ROM.

For information about using SMF Converter, double-click "index.html" in the [help] folder, which was created when you installed SMF Converter. You can also access user documentation from the Windows [Start] menu by clicking [Programs] - [CASIO] - [SMF Converter] - [manual].

* A browser that supports frames (like Internet Explorer 4 or Netscape Navigator 4.04 or higher) is required to view the SMF Converter manual.

Minimum Computer System Requirements

* Operating System:

Windows 98SE

Windows Me

Windows XP

* Storage

At least 10MB free HDD space

* USB interface

- You can also obtain a copy of the SMF Converter by downloading it at the Web page shown below. After downloading, install the software on your computer.

CASIO MUSIC SITE

<http://music.casio.com/>

- In addition to the software itself, the CASIO MUSIC SITE will also provide you with information about its installation and use. You can also find out about the latest news about your keyboard and other CASIO musical instruments, and much more.

NOTE

- This keyboard supports SMF 0 and 1 format data.
- Voice Fingering Guide, on-screen fingering indicators, voice announcement of evaluation points, and the Practice Phrase function are not supported for SMF data you purchase or create.

General MIDI Tone

The General MIDI standard defines the tone numbering sequence, the drum sound numbering sequence, the number of MIDI channels that can be used, and other general factors that determine the sound source configuration. Because of this, musical data produced on a General MIDI sound source can be played back using similar tones and identical nuances as the original, even when played on another manufacturers sound source.

This keyboard conforms with General MIDI standards, so it can be connected to a computer and used to play back General MIDI data that has been purchased, downloaded from the Internet, or obtained from any other source.

Changing the Settings

This section tells you how to make the settings required when connecting to a computer.

KEYBOARD CHANNEL (Default: 1)

The keyboard channel is the channel used to send messages from this keyboard to a computer. You can specify one channel from 1 to 16 as the keyboard channel.

- 1 Press the SETTING button until the KEYBOARD CHANNEL screen appears.

01Keybd Ch

- 2 Use the [+], [-], and the number buttons to change the channel number.
Example: To specify channel 4

04Keybd Ch

NAVIGATE CHANNEL (Default: 4)

When messages are received from a computer for play on this keyboard, the navigate channel is the channel whose note data appears on the display. You can select one channel from 01 to 16 as the navigate channel. Since this setting lets you use the data on any channel of commercially available SMF data to light on the on-screen keyboard guide, you can analyze how different parts of an arrangement are played.

- 1 Press the SETTING button until the NAVIGATE CHANNEL screen appears.

04Navi. Ch

- 2 Use the [+], [-], and the number buttons [0] through [9] to change the channel number.

Example: To specify channel 2

02Navi. Ch

To turn off specific sounds before playing back tune data that is being received

<<Navigate channel on/off>>

- 1 While playing tune data, press the RIGHT/TRACK 2 button.
 - This cuts the sound of the navigate channel, but on-screen keyboard guide keys continue to light in accordance with the channel's data as it is received. Press RIGHT/TRACK 2 button again to turn the channel back on.

<<Next lower channel from navigate channel on/off>>

- 1 While playing tune data, press the LEFT/TRACK 1 button.
 - This cuts the sound of the channel whose number is one less than the navigate channel, but on-screen keyboard guide keys continue to light in accordance with the channel's data as it is received. Press LEFT/TRACK 1 button again to turn the channel back on.

Example: If the navigate channel is channel 4, the above operation turns off channel 3.

LOCAL CONTROL (Default: On)

oFF: Anything played on the keyboard is output as a message from the USB port, without being sounded by the internal sound source.

- Note that no sound is produced by the keyboard if LOCAL CONTROL is turned off and no external device is connected.

- 1 Press the SETTING button until the LOCAL CONTROL screen appears.

Example: When LOCAL CONTROL is on

A screenshot of the LOCAL CONTROL screen. The text 'on Local' is displayed in a monospaced font. The 'o' in 'on' is lowercase, and the 'L' in 'Local' is uppercase. The text is centered within a rectangular frame.

- 2 Use the [+] and [-] or [0] and [1] buttons to turn the setting on and off.

Example: To turn LOCAL CONTROL off

A screenshot of the LOCAL CONTROL screen. The text 'off Local' is displayed in a monospaced font. The 'o' in 'off' is lowercase, and the 'L' in 'Local' is uppercase. The text is centered within a rectangular frame.

ACCOMP OUT (Default: Off)

on: Auto Accompaniment is played by the keyboard and the corresponding message is output from the USB port.

oFF: Auto Accompaniment messages are not output from the USB port.

- 1 Press the SETTING button until the ACCOMP OUT screen appears.

Example: When ACCOMP OUT is off

A screenshot of the ACCOMP OUT screen. The text 'off AcompOut' is displayed in a monospaced font. The 'o' in 'off' is lowercase, and the 'A' in 'AcompOut' is uppercase. The text is centered within a rectangular frame.

- 2 Use the [+] and [-] or [0] and [1] buttons to turn the setting on and off.

Example: To turn ACCOMP OUT on

A screenshot of the ACCOMP OUT screen. The text 'on AcompOut' is displayed in a monospaced font. The 'o' in 'on' is lowercase, and the 'A' in 'AcompOut' is uppercase. The text is centered within a rectangular frame.

SUSTAIN/ASSIGNABLE JACK (Default: SUS)

SUS(sustain): Specifies a sustain*¹ effect when the pedal is depressed.

SoS (sostenuto): Specifies a sostenuto*² effect when the pedal is depressed.

SFt (soft): Specifies reduction of the sound's volume when the pedal is depressed.

rHy (rhythm): Specifies START/STOP button operation when the pedal is depressed.

- 1 Press the SETTING button until the SUSTAIN/ ASSIGNABLE JACK screen appears.

Example: When sustain is currently set

A screenshot of the SUSTAIN/ASSIGNABLE JACK screen. The text 'SUS Jack' is displayed in a monospaced font. The 'S' in 'SUS' is uppercase, and the 'J' in 'Jack' is uppercase. The text is centered within a rectangular frame.

- 2 Use the [+] and [-] or [0], [1], [2], and [3] buttons to change the setting.

Example: To select rhythm

A screenshot of the SUSTAIN/ASSIGNABLE JACK screen. The text 'rHY Jack' is displayed in a monospaced font. The 'r' in 'rHY' is lowercase, and the 'J' in 'Jack' is uppercase. The text is centered within a rectangular frame.

*1 Sustain

With piano tones and other sounds that decay, the pedal acts as a damper pedal, with sounds being sustained longer when the pedal is depressed. With organ tones and other continuous sounds, notes played on the keyboard continue to sound until the pedal is released. In either case, the sustain effect is also applied to any notes that are played while the pedal is depressed.

*2 Sostenuto

This effect performs the same way as sustain, except that it is applied only to notes that are sounding already when the pedal is depressed. It does not affect notes that are played after the pedal is depressed.

Troubleshooting

Problem	Possible Cause	Action	See page
No keyboard sound	<ol style="list-style-type: none"> 1. Power supply problem. 2. Power is not turned on. 3. Volume setting is too low. 4. The MODE switch is in the CASIO CHORD or FINGERED position. 5. LOCAL CONTROL is off. 	<ol style="list-style-type: none"> 1. Correctly attach the AC adaptor, make sure that batteries poles (+/-) are facing correctly, and check to make sure that batteries are not dead. 2. Press the POWER button to turn on power. 3. Use the MAIN VOLUME slider to increase volume. 4. Normal play is not possible on the accompaniment keyboard while the MODE switch is set to CASIO CHORD or FINGERED. Change the MODE switch setting to NORMAL. 5. Turn on LOCAL CONTROL. 	<p>Pages E-13, 14</p> <p>Page E-17</p> <p>Page E-17</p> <p>Page E-32</p> <p>Page E-50</p>
Any of the following symptoms while using battery power.	Low battery power	Replace the batteries with a set of new ones or use the AC adaptor.	Pages E-13, 14
<ul style="list-style-type: none"> • Dim power supply indicator • Instrument does not turn on • Dim, difficult to read display • Abnormally low speaker/headphone volume • Distortion of sound output • Occasional interruption of sound when playing at high volumes • Sudden power failure when playing at high volumes • Dimming of the display when playing at high volume • Continued sound output even after you release a key • A totally different tone may sound • Abnormal rhythm pattern and demo tune play • Abnormally low microphone volume • Distortion of microphone input • Dim power supply indicator when a microphone is used • Sudden power failure when using the microphone 			
Auto Accompaniment does not sound.	Accompaniment volume is set to 000.	Use the SETTING button to increase the volume.	Page E-46
Sound output does not change when key pressure is varied.	Touch response is turned off.	Press the SETTING button to turn it on.	Page E-45
On-screen keyboard guide keys stay on.	Keyboard is waiting for play of the correct note during Step 1 or Step 2 play.	<ol style="list-style-type: none"> 1. Press the lit key to continue with Step 1 or Step 2 play. 2. Press the PLAY/STOP button to quit Step 1 or Step 2 play. 	Pages E-25, 26 Pages E-25, 26
When playing with another instrument, keys or tunings do not match.	Transpose or tuning is set to a value other than 00.	Use the SETTING button to display the applicable setting screens and set both transpose and tuning to 00.	Pages E-45, 46
Cannot record Auto Accompaniment or rhythm.	Track other than Track 1 is selected as the recording track.	Use the track select buttons to select Track 1. (Track 2 is melody track.)	Page E-40

Problem	Possible Cause	Action	See page
Cannot record chord accompaniment data on a computer.	ACCOMP OUT is turned off.	Turn on ACCOMP OUT.	Page E-50
Static noise when a microphone is connected.	1. Use of a microphone that is a different from the type that is recommended.	1. Use a recommended type microphone.	Page E-29
	2. Use of the microphone in the vicinity of fluorescent lighting.	2. Move the microphone away from source of the static.	Page E-29
No microphone sound	1. Microphone volume setting is too low.	1. Increase the microphone volume setting.	Page E-29
	2. Microphone on/off switch is set to OFF.	2. Change the microphone on/off switch setting to ON.	Page E-29
A tone's quality and volume sounds slightly different depending where it is played on the keyboard.	<p>This is an unavoidable result of the digital sampling process,* and does not indicate malfunction.</p> <p>* Multiple digital samples are taken for the low range, middle range, and high range of the original musical instrument. Because of this, there may be a very slight difference in tonal quality and volume between sample ranges.</p>		

Specifications

Model:	CTK-800
Keyboard:	61 standard-size keys, 5 octaves (with touch response on/off)
Tones:	500 (362 panel tones + 128 General MIDI tones + 10 drum sets); with layer and split
Polyphony:	32 notes maximum (16 for certain tones)
Auto Accompaniment Rhythm Patterns: Tempo: Chords: Rhythm Controller: Accomp Volume: One Touch Presets:	120 Variable (226 steps, ♩ = 30 to 255) 3 fingering methods (CASIO CHORD, FINGERED, FULL RANGE CHORD) START/STOP, INTRO, NORMAL/NORMAL FILL-IN, VARIATION/ VARIATION FILL-IN, SYNCHRO/ENDING 0 to 127 (128 steps) Recalls settings for tone, tempo, layer, and split.
<Advanced 3-Step Lesson System> 3-step Lesson: Playback: Evaluation Mode: Voice Fingering Guide:	3 lessons (Step 1, 2, 3) Repeat play of a single tune Scoring 1, Scoring 2, Scoring 3, Phrase Practice On/Off
Song Bank, Piano Bank Number of Tunes: Controllers:	Song Bank/Sing Along: 50, Piano Bank: 50, download songs: Up to 5 PLAY/STOP, PAUSE, FF, REW, LEFT/RIGHT
Musical Information Function:	Tone, Auto Accompaniment, Song Bank, Piano Bank, Sing Along numbers and names; staff notation, tempo, metronome, measure and beat number, step lesson display, chord name, fingering, pedal operation, Keyboard, Song Bank icon, Piano Bank icon, Sing Along icon, Voice Fingering Guide, Evaluation Mode, song memory indicator
Sing Along Mode Number of Tunes: Controllers:	Song Bank/Sing Along: 50, download songs: Up to 5 (Approximately 70 kilobytes) PLAY/STOP, KEY CONTROL (25 steps, -12 semitones to +12 semitones)
Metronome: Beat Specification:	On/Off 0, 2 to 6
Song Memory Number of Songs: Recorded Data: Recording Method: Memory Capacity:	Two (1 Lesson Recording, 1 Performance Recording) Lesson Recording: Right-hand part, left-hand part, both-hand parts Performance Recording: Track 1 (chord accompaniment), Track 2 (melody) Real-time Approximately 12,000 notes (total for two songs)
Other Functions Transpose: Tuning:	25 steps (-12 semitones to +12 semitones) 101 steps (A4 = approximately 440Hz ±50Cents)
Terminals USB port Sustain/Assignable Jack: Headphone/Output Terminal: Output Impedance: Output Voltage: Microphone In:	Standard jack (sustain, sostenuto, soft, rhythm start/stop) Stereo standard jack 100Ω 4V (RMS) MAX Standard jack (with microphone volume knob) Input impedance: 3KΩ Input sensitivity: 10mV

Power Jack:	9V DC
Power Supply: Batteries: Battery Life: AC Adaptor: Auto Power Off:	2-way 6 D-size batteries Approximately 9 hours continuous operation on manganese batteries AD-5 Turns power off approximately 6 minutes after last key operation. Enabled under batter power only, can be disabled manually.
Speaker Output:	2.5W + 2.5W
Power Consumption:	9V --- 7.7W
Dimensions:	96.0 x 37.5 x 14.0 cm (37 ¹³ / ₁₆ x 14 ³ / ₄ x 5 ¹ / ₂ inch)
Weight:	Approximately 5.4 kg (11.9 lbs)(without batteries)

- Design and specifications are subject to change without notice.



Care of your keyboard

Avoid heat, humidity or direct sunlight.

Do not overexpose the instrument to direct sunlight, or place it near an air conditioner, or in any extremely hot place.

Do not use near a TV or radio.

This instrument can cause video or audio interference with TV and radio reception. If this happens, move the instrument away from the TV or radio.

Do not use lacquer, thinner or similar chemicals for cleaning.

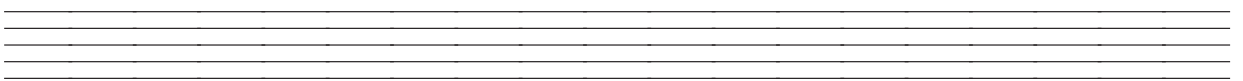
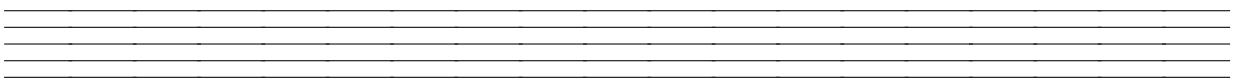
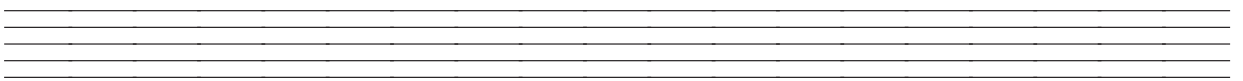
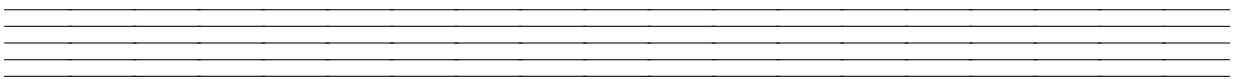
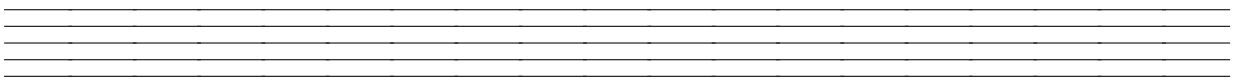
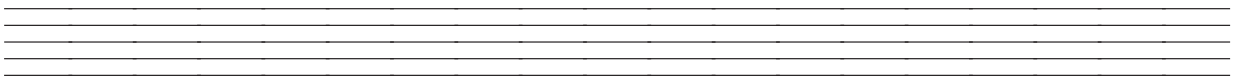
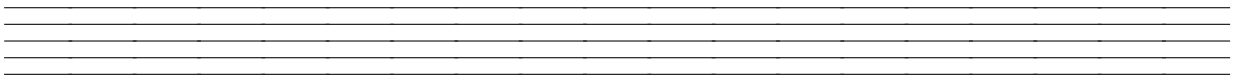
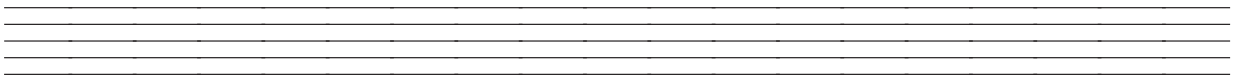
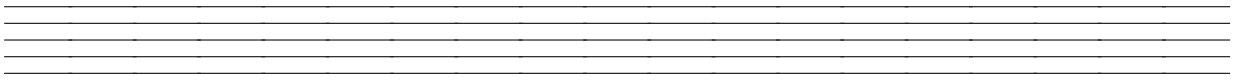
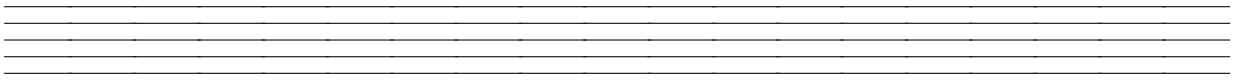
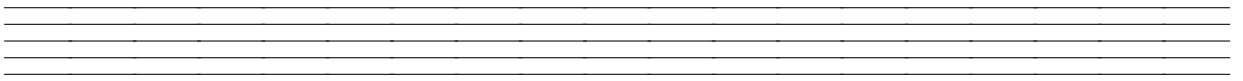
Clean the keyboard with a soft cloth dampened in a weak solution of water and a neutral detergent. Soak the cloth in the solution and squeeze until it is almost dry.

Avoid use in areas subjected to temperature extremes.

Extremely high or low temperature can cause figures on the LCD screen to become dim and difficult to read. This condition should correct itself when the keyboard is brought back to normal temperature.

NOTE

- You may notice lines in the finish of the case of this keyboard. These lines are a result of the molding process used to shape the plastic of the case. They are not cracks or breaks in the plastic, and are no cause for concern.
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Tone List/Lista de sonidos

- ① : No./Nº
- ② : Bank Select MSB/MSB de selección de banco

- ② : Tone Name/Nombre de sonido
- ⑤ : Maximum Polyphony/Polifonía máxima

- ③ : Program Change/Cambio de programa
- ⑥ : Range Type/Tipo de gama

①	②	③	④	⑤	⑥
	PIANO				
0	STEREO GRAND PIANO	0	2	16	A
1	GRAND PIANO	0	1	32	A
2	BRIGHT PIANO	1	2	16	A
3	MELLOW PIANO	0	3	16	A
4	MODERN PIANO	1	3	16	A
5	DANCE PIANO	1	1	32	A
6	STRINGS PIANO	0	8	16	A
7	BRIGHT PIANO PAD	1	5	16	A
8	HONKY-TONK	3	2	16	A
9	1 OCTAVE PIANO	3	9	16	A
10	2 OCTAVE PIANO	3	8	16	A
11	ELEC.GRAND PIANO	2	2	16	A
12	MODERN E.G.PIANO	2	3	16	A
13	ELEC.PIANO	4	2	32	A
14	CHORUS EP 1	4	9	16	A
15	CHORUS EP 2	4	6	16	A
16	MODERN E.PIANO	5	2	16	A
17	SOFT E.PIANO	4	8	16	A
18	E.PIANO PAD 1	5	8	16	A
19	STEREO PIANO	0	4	16	A
20	STEREO PIANO WIDE	0	9	16	A
21	PIANO PAD	0	5	16	A
22	SYNTH-STR. E.PIANO	4	3	16	A
23	E.PIANO PAD 2	4	1	16	A
24	HARPSICHORD	6	2	32	A
25	COUPLED HARPSICHORD	6	8	16	A
26	CLAVI	7	2	32	A
27	HARPSICHORD E.PIANO	5	4	16	A
28	CLEAN E.PIANO	4	4	32	A
29	KOTO E.PIANO	5	3	16	A
30	DETUNE E.PIANO	5	5	16	A
31	OLD E.PIANO	4	5	16	A
32	SOFT CLAVI	7	1	32	A
33	CLAVI & DRAWBAR	7	3	16	A
34	DETUNE CLAVI	7	8	16	A
35	HARPSICHORD PAD	6	1	16	A
36	CRYSTAL E.PIANO	4	7	16	A
	CHROMATIC PERC				
37	CELESTA	8	2	32	A
38	GLOCKENSPIEL	9	2	32	B
39	MUSIC BOX	10	2	16	A
40	VIBRAPHONE	11	2	32	A
41	MARIMBA	12	2	32	A
42	GLOCKENSPIEL PAD	9	3	16	A
43	SYNTH-VIBRAPHONE	11	3	16	A
44	SYNTH-MARIMBA	12	3	16	A
45	TUBULAR BELL	14	2	16	A
46	DULCIMER	15	2	16	A
47	BRIGHT CELESTA	8	1	32	A
48	CHORUS CELESTA	8	8	16	A
49	CHORUS GLOCKENSPIEL	9	8	16	B
50	CHORUS VIBRAPHONE	11	8	16	A

①	②	③	④	⑤	⑥
	ORGAN				
51	DRAWBAR ORGAN 1	16	2	16	A
52	DRAWBAR ORGAN 2	16	1	16	A
53	DRAWBAR ORGAN 3	16	3	16	A
54	PERC.ORGAN 1	17	2	16	A
55	PERC.ORGAN 2	17	3	16	A
56	ELEC.ORGAN 1	16	8	16	A
57	ELEC.ORGAN 2	16	4	16	A
58	JAZZ.ORGAN 1	17	4	16	A
59	ROCK ORGAN 1	18	2	16	A
60	CHURCH ORGAN	19	2	16	A
61	CHAPEL ORGAN	19	8	32	A
62	REED ORGAN	20	2	16	A
63	ACCORDION 1	21	2	16	A
64	OCTAVE ACCORDION	21	8	16	A
65	BANDONEON	23	2	16	A
66	HARMONICA 1	22	2	32	A
67	THEATER	19	6	16	A
68	OCTAVE BANDONEON	23	3	16	A
69	HARMONICA 2	22	8	16	A
70	DRAWBAR ORGAN 4	16	5	16	A
71	JAZZ ORGAN 2	17	6	16	A
72	ROCK ORGAN 2	18	1	16	A
73	DRAWBAR ORGAN 5	16	6	16	A
74	JAZZ ORGAN 3	17	8	16	A
75	PERC.ORGAN 3	17	1	16	A
76	8'ORGAN	17	5	16	A
77	ROCK ORGAN 3	18	3	16	A
78	ROCK ORGAN 4	18	4	16	A
79	FULL DRAWBAR	16	9	32	A
80	PIPE ORGAN 1	19	1	32	A
81	PIPE ORGAN 2	19	3	32	A
82	ORGAN & HARPSICHORD	19	4	16	A
83	PIPE ORGAN PAD	19	5	16	A
84	ACCORDION 2	21	3	32	A
85	BANDONEON SOLO	23	1	16	A
86	BANDONEON & VIOLIN	23	4	16	A
87	ORGAN PAD	17	7	16	A
	GUITAR				
88	NYLON STR.GUITAR	24	2	32	C
89	STEEL STR.GUITAR	25	2	32	C
90	12 STR.GUITAR	25	8	16	C
91	JAZZ GUITAR	26	2	32	C
92	OCT JAZZ GUITAR	26	8	16	C
93	CLEAN GUITAR	27	2	32	C
94	ELEC.GUITAR	27	1	16	C
95	MUTE GUITAR	28	2	32	C
96	OVERDRIVE GT	29	2	32	C
97	DISTORTION GT	30	2	32	C
98	POWER DIST. GT	30	5	16	C
99	HARMONIZED DIST. GT	30	3	16	C
100	RHYTHM DIST. GT	30	4	16	C
101	FEEDBACK GT	31	8	16	C

1	2	3	4	5	6
158	SLOW CHOIR			52	32
159	CHOIR STRINGS			52	3
160	CHOIRS 2			52	4
161	VOICE UH			53	3
162	SYNTH-VOICE 2			54	1
163	CHORUS SYNTH-VOICE			54	9
	BRASS				
164	TRUMPET			56	2
165	TROMBONE			57	2
166	TUBA 1			58	2
167	MUTE TRUMPET			59	2
168	FRENCH HORN			60	2
169	HORN ORCHESTRA			60	16
170	BRASS			61	2
171	BRASS SECTION 1			61	3
172	BRASS SFZ			61	8
173	BRASS & STRINGS			61	4
174	HARD BRASS			61	5
175	BRASS SECTION 2			61	6
176	ANALOG SYNTH-BRASS 1			62	8
177	SYNTH-BRASS 1			62	2
178	SYNTH-BRASS 2			63	2
179	MELLOW TRUMPET			56	8
180	VELO TRUMPET			56	4
181	VELO TROMBONE			57	4
182	MELLOW TROMBONE			57	1
183	TUBA 2			58	3
184	FRENCH HORN SOLO			60	8
185	MELLOW BRASS			61	1
186	ANALOG SYNTH-BRASS 2			62	9
187	SYNTH-BRASS PAD			63	3
	REED				
188	SOPRANO SAX			64	2
189	ALTO SAX 1			65	1
190	ALTO SAX 2			65	2
191	BREATHY A.SAX			65	8
192	HARD A.SAX			65	3
193	RICH A.SAX			65	6
194	TENOR SAX 1			66	1
195	TENOR SAX 2			66	2
196	BREATHY T.SAX			66	8
197	T.SAXYS			66	9
198	BARITONE SAX			67	2
199	OBOE			68	2
200	CLARINET			71	2
201	BREATHY S.SAX			64	8
202	SOFT A.SAX			65	5
203	SOLO A.SAX			65	4
204	SAX SECTION			65	9
205	SAX SECTION SFZ			65	7
206	DETUNE T.SAX			66	3
207	SOFT T.SAX			66	5
208	SOLO T.SAX			66	4
209	SOLO OBOE			68	4
210	VELO CLARINET			71	4
	PIPE				
211	PICCOLO 1			72	2
212	FLUTE 1			73	2
213	FLUTE 2			73	1

1	2	3	4	5	6
102	CHORUS NYLON GT	24	8	16	C
103	CHORUS STEEL GT	25	9	16	C
104	DIST GT & BASS	30	6	16	C
105	STEEL GT HARMONICS	25	3	16	C
	BASS				
106	ACOUSTIC BASS	32	2	32	C
107	RIDE BASS	32	32	16	C
108	FINGERED BASS	33	2	32	C
109	PICKED BASS	34	2	32	C
110	FRETLESS BASS	35	2	32	C
111	SLAP BASS	37	2	32	C
112	DOUBLED STRINGS BASS	37	3	16	C
113	SAW SYNTH-BASS	38	2	32	C
114	SQR SYNTH-BASS	39	2	32	C
115	VOCODER BASS	38	3	32	C
116	SYNTH-BASS	39	1	32	C
117	MELLOW FINGERED BASS	33	3	32	C
118	BASS & KICK	39	3	16	C
119	CLAVI BASS	39	4	16	C
120	RHYTHM PICKED BASS	34	3	32	C
121	RHYTHM FINGERED BASS	33	4	32	C
122	SINE BASS	39	6	32	A
123	ORGAN BASS	39	5	32	A
	STR/ORCHESTRA				
124	VIOLIN	40	2	32	A
125	SLOW VIOLIN	40	8	32	A
126	CELLO	42	2	32	C
127	PIZZICATO STRINGS	45	2	32	A
128	HARP 1	46	2	32	A
129	DOUBLE VIOLIN	40	1	16	A
130	SLOW CELLO	42	8	32	C
131	VIOLIN SECTION	40	4	16	A
132	SLOW VIOLIN SECTION	40	9	16	A
133	PIZZICATO ENSEMBLE	45	1	16	A
134	CELLO SECTION	42	4	16	C
135	OCTAVE PIZZICATO	45	3	16	A
136	DOUBLE VIOLA	41	2	16	A
137	HARP 2	46	1	32	A
138	CHORUS HARP	46	8	16	A
	ENSEMBLE				
139	STRINGS	48	2	32	A
140	SLOW STRINGS 1	49	2	32	A
141	WIDE STRINGS	48	16	16	A
142	OCTAVE STRINGS 1	48	32	16	A
143	CHAMBER	48	3	16	A
144	STRINGS SFZ	48	8	32	A
145	SYNTH-STRINGS 1	50	2	32	A
146	SYNTH-STRINGS 2	51	2	32	A
147	CHOIR AAHS	52	2	32	A
148	CHOIRS 1	52	8	32	A
149	VOICE DOO	53	2	32	A
150	SYNTH-VOICE 1	54	2	32	A
151	SYNTH-VOICE PAD	54	8	16	A
152	ORCHESTRA HIT	55	2	16	A
153	ORCHESTRA STRINGS	48	4	16	A
154	SLOW STRINGS 2	49	3	32	A
155	STRINGS VOICE	49	4	16	A
156	OCTAVE STRINGS 2	48	1	16	A
157	FAST SYNTH STRINGS	50	3	32	A

1	2	3	4	5	6
272	SYNTH-BASS+LEAD				
	SYNTH-PAD	87	3	16	A
273	FANTASY 1	88	2	16	A
274	FANTASY 2	88	3	16	A
275	WARM PAD	89	2	16	A
276	WARM VOX	89	8	16	A
277	SINE PAD	89	3	16	A
278	POLY SYNTH 1	90	2	16	A
279	POLY SAW	90	8	16	A
280	POLY SYNTH PAD 1	90	5	16	A
281	SPACE STRINGS PAD	91	3	16	A
282	BOWED PAD	92	2	16	A
283	GLASS PAD	92	3	16	A
284	ETHNIC PAD	93	2	16	A
285	HALO PAD 1	94	2	16	A
286	HALO PAD 2	94	3	16	A
287	RAIN DROP 1	96	2	16	A
288	SOUND TRACK 1	97	2	16	A
289	RAVE	97	8	16	A
290	CRYSTAL	98	2	32	A
291	SOFT CRYSTAL	98	1	16	A
292	ATMOSPHERE	99	2	16	A
293	BRIGHTNESS 1	100	2	16	A
294	GOBLIN	101	2	16	A
295	ECHO PAD	102	2	16	A
296	STAR THEME 1	103	2	16	A
297	SPACE PAD	103	8	16	A
298	NEW AGE PAD	88	1	16	A
299	SOFT PAD	89	4	16	A
300	HORN PAD	89	5	16	A
301	THICK PAD	89	1	16	A
302	POLY SYNTH 2	90	1	16	A
303	OLD TAPE PAD	89	6	16	A
304	POLY SYNTH PAD 2	90	4	16	A
305	HEAVEN	91	2	16	A
306	UTOPIA	91	1	16	A
307	SQUARE PAD	92	1	16	A
308	SOFT METAL PAD	93	3	16	A
309	HARD METAL PAD	93	4	16	A
310	TINE PAD	93	1	16	A
311	CHORUS PAD	94	1	16	A
312	ORGAN CHOIR PAD	94	4	16	A
313	SWEEP PAD	95	2	16	A
314	SWEEP CHOIR	95	1	16	A
315	CLAVI PAD	96	1	16	A
316	RAIN DROP 2	96	3	16	A
317	SOUND TRACK 2	97	3	16	A
318	SPACE VOICE	97	1	16	A
319	CHORAL BELL	98	16	16	A
320	GLOCKENSPIEL CHIME	98	5	16	A
321	CHRISTMAS BELL	98	3	16	A
322	VIBRAPHONE BELL	98	8	16	A
323	HARP VOX	99	3	16	A
324	NYLON+EP	99	5	16	A
325	CELESTA PAD	99	1	16	A
326	BRIGHT BELL PAD	100	1	16	A
327	BRIGHTNESS 2	100	3	16	A
328	ECHO VOICE	102	1	16	A
329	ECHO DROP	102	3	16	A

1	2	3	4	5	6
214	MELLOW FLUTE	73	8	32	A
215	PIPE SECTION 1	72	4	16	A
216	RECORDER	74	2	32	A
217	PAN FLUTE 1	75	2	32	A
218	BOTTLE BLOW	76	2	16	A
219	SHAKUHACHI	77	2	16	A
220	WHISTLE 1	78	2	32	A
221	OCARINA	79	2	32	A
222	PICCOLO 2	72	3	16	B
223	PIPE SECTION 2	73	4	16	A
224	SOFT FLUTE	73	5	16	A
225	WHISTLE 2	78	3	32	A
226	PAN FLUTE 2	75	3	16	A
	SYNTH-LEAD				
227	SQUARE LEAD 1	80	2	16	A
228	SQUARE PULSE LEAD	80	5	16	A
229	SEQUENCE LEAD	83	5	16	A
230	SAWTOOTH LEAD 1	81	2	16	A
231	MELLOW SAW LEAD	81	8	16	A
232	SEQUENCE SAW 1	81	32	16	A
233	SINE LEAD	80	8	32	A
234	VELO SINE LEAD	80	9	32	A
235	SS LEAD	81	3	16	A
236	CALLOPE 1	82	2	16	A
237	VENT LEAD	82	5	16	A
238	CHIFF LEAD 1	83	2	16	A
239	DROP LEAD	83	4	16	A
240	E PL EAD	83	1	16	A
241	VOICE LEAD 1	85	2	16	A
242	BASS+LEAD	87	2	16	A
243	SQUARE LEAD 2	80	3	16	A
244	SLOW SQUARE LEAD	80	4	16	A
245	SLOW SQUARE PULSE	80	6	16	A
246	SEQUENCE SQUARE	80	7	16	A
247	SEQUENCE PULSE 1	80	16	16	A
248	SQUARE LEAD 3	80	1	32	A
249	SQUARE LEAD 4	80	32	16	A
250	SAWTOOTH LEAD 2	81	1	32	A
251	SLOW SAW LEAD	81	4	16	A
252	PULSE SAW LEAD	81	5	16	A
253	SLOW SAW PULSE	81	6	16	A
254	FIFTH SEQUENCE	86	1	16	A
255	SEQUENCE PULSE 2	81	9	16	A
256	SEQUENCE SAW 2	81	16	16	A
257	CALLOPE 2	82	3	16	A
258	VENT SYNTH	82	1	16	A
259	PURE LEAD	82	4	16	A
260	CHIFF LEAD 2	83	3	16	A
261	DISTORTION LEAD	84	8	16	A
262	OCTAVE CHARANG	84	2	16	A
263	VOICE LEAD 2	85	3	16	A
264	CHURCH LEAD	85	4	16	A
265	DOUBLE VOICE LEAD	85	8	16	A
266	VOICE CHOIR LEAD	85	5	16	A
267	EP & VOICE LEAD	85	6	16	A
268	SYNTH-VOICE LEAD	85	7	16	A
269	FIFTH SAW LEAD	86	2	16	A
270	FIFTH SQUARE LEAD	86	3	16	A
271	BASS+SAW LEAD	87	1	16	A

1	2	3	4	5	6
387	GM STEEL STR. GUITAR			25	0
388	GM JAZZ GUITAR			26	0
389	GM CLEAN GUITAR			27	0
390	GM MUTE GUITAR			28	0
391	GM OVERDRIVE GT			29	0
392	GM DISTORTION GT			30	0
393	GM GT HARMONICS			31	0
394	GM ACOUSTIC BASS			32	0
395	GM FINGERED BASS			33	0
396	GM PICKED BASS			34	0
397	GM FRETLESS BASS			35	0
398	GM SLAP BASS 1			36	0
399	GM SLAP BASS 2			37	0
400	GM SYNTH-BASS 1			38	0
401	GM SYNTH-BASS 2			39	0
402	GM VIOLIN			40	0
403	GM VIOLA			41	0
404	GM CELLO			42	0
405	GM CONTRABASS			43	0
406	GM TREMOLO STRINGS			44	0
407	GM PIZZICATO			45	0
408	GM HARP			46	0
409	GM TIMPANI			47	0
410	GM STRINGS 1			48	0
411	GM STRINGS 2			49	0
412	GM SYNTH-STRINGS 1			50	0
413	GM SYNTH-STRINGS 2			51	0
414	GM CHOIR/AHHS			52	0
415	GM VOICE DOO			53	0
416	GM SYNTH-VOICE			54	0
417	GM ORCHESTRA HIT			55	0
418	GM TRUMPET			56	0
419	GM TROMBONE			57	0
420	GM TUBA			58	0
421	GM MUTE TRUMPET			59	0
422	GM FRENCH HORN			60	0
423	GM BRASS			61	0
424	GM SYNTH-BRASS 1			62	0
425	GM SYNTH-BRASS 2			63	0
426	GM SOPRANO SAX			64	0
427	GM ALTO SAX			65	0
428	GM TENOR SAX			66	0
429	GM BARITONE SAX			67	0
430	GM OBOE			68	0
431	GM ENGLISH HORN			69	0
432	GM BASSOON			70	0
433	GM CLARINET			71	0
434	GM PICCOLO			72	0
435	GM FLUTE			73	0
436	GM RECORDER			74	0
437	GM PAN FLUTE			75	0
438	GM BOTTLE BLOW			76	0
439	GM SHAKUHACHI			77	0
440	GM WHISTLE			78	0
441	GM OCARINA			79	0
442	GM SQUARE LEAD			80	0
443	GM SAWTOOTH LEAD			81	0
444	GM CALLOPE			82	0
445	GM CHIFF LEAD			83	0

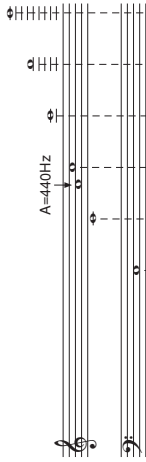
1	2	3	4	5	6
330	POLY DROP	102	4	16	A
331	STAR THEME 2	103	1	16	A
	ETHNIC/CHINESE				
332	SITAR 1	104	2	16	A
333	WARM SITAR	104	1	16	A
334	BANJO	105	2	32	A
335	MUTE BANJO	105	1	32	A
336	SHAMISEN 1	106	2	32	A
337	TSUGARU	106	1	32	A
338	KOTO	107	2	32	A
339	THUMB PIANO	108	2	32	A
340	SHANAI	111	2	32	A
341	STEEL DRUMS	114	2	16	A
342	ER HU 1	110	8	32	A
343	ER HU 2	110	9	32	A
344	YANG QIN 1	15	9	16	A
345	YANG QIN 2	15	9	16	A
346	DI ZI	72	16	32	A
347	ZHENG	107	1	32	A
348	SUO NA	111	32	32	A
349	PI PA 1	105	32	32	A
350	SHENG	109	8	32	A
351	KOTO PAD	107	5	16	A
352	SITAR 2	104	3	32	A
353	TAMBRA	104	8	16	A
354	SITAR PAD	104	4	32	A
355	RABAB	105	8	16	A
356	PI PA 2	105	4	16	A
357	SHAMISEN 2	106	3	16	A
358	DETUNE KOTO	107	4	16	A
359	SYNTH-KOTO	107	3	16	A
360	XIAO	77	32	16	A
361	SANTUR	15	16	32	A
	GM TONES				
362	GM PIANO 1	0	0	32	A
363	GM PIANO 2	1	0	32	A
364	GM PIANO 3	2	0	32	A
365	GM HONKY-TONK	3	0	16	A
366	GM E.PIANO 1	4	0	32	A
367	GM E.PIANO 2	5	0	16	A
368	GM HARPSICHORD	6	0	32	A
369	GM CLAVI	7	0	32	A
370	GM CELESTA	8	0	32	A
371	GM GLOCKENSPIEL	9	0	32	A
372	GM MUSIC BOX	10	0	16	A
373	GM VIBRAPHONE	11	0	32	A
374	GM MARIMBA	12	0	32	A
375	GM XYLOPHONE	13	0	32	A
376	GM TUBULAR BELL	14	0	32	A
377	GM DULCIMER	15	0	16	A
378	GM ORGAN 1	16	0	16	A
379	GM ORGAN 2	17	0	16	A
380	GM ORGAN 3	18	0	16	A
381	GM PIPE ORGAN	19	0	16	A
382	GM REED ORGAN	20	0	32	A
383	GM ACCORDION	21	0	16	A
384	GM HARMONICA	22	0	32	A
385	GM BANDONEON	23	0	16	A
386	GM NYLON STR. GUITAR	24	0	32	A

NOTE

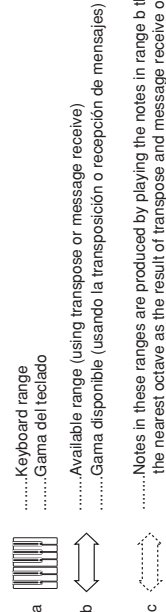
- The meaning of each range type is described below.

NOTA

- El significado de cada tipo de gama se describe debajo.



Range Type/Tipo de gama	C-1	C0	C1	C2	C3	C4	C5	C6	C7	C8	C9	G9
A (Standard type) (Tipo estándar)												
B ("211 PICCOLO 1'") ("222 PICCOLO 2'")												
C (Low pitch instruments) (Instrumentos de altura tonal baja)												
D (Sound Effect) (Efecto de sonido)												



1	2	3	4	5	6
446	GM CHARANG	84	0	16	A
447	GM VOICE LEAD	85	0	16	A
448	GM FIFTH LEAD	86	0	16	A
449	GM BASS+LEAD	87	0	16	A
450	GM FANTASY	88	0	16	A
451	GM WARM PAD	89	0	16	A
452	GM POLY SYNTH	90	0	16	A
453	GM SPACE CHOIR	91	0	16	A
454	GM BOWED GLASS	92	0	16	A
455	GM METAL PAD	93	0	16	A
456	GM HALO PAD	94	0	16	A
457	GM SWEEP PAD	95	0	16	A
458	GM RAIN DROP	96	0	16	A
459	GM SOUND TRACK	97	0	16	A
460	GM CRYSTAL	98	0	16	A
461	GM ATMOSPHERE	99	0	16	A
462	GM BRIGHTNESS	100	0	16	A
463	GM GOBLINS	101	0	16	A
464	GM ECHOES	102	0	16	A
465	GM SF	103	0	16	A
466	GM SITAR	104	0	16	A
467	GM BANJO	105	0	32	A
468	GM SHAMISEN	106	0	32	A
469	GM KOTO	107	0	32	A
470	GM THUMB PIANO	108	0	32	A
471	GM BAGPIPE	109	0	16	A
472	GM FIDDLE	110	0	32	A
473	GM SHANAI	111	0	32	A
474	GM TINKLE BELL	112	0	32	A
475	GM AGOGO	113	0	32	A
476	GM STEEL DRUMS	114	0	16	A
477	GM WOOD BLOCK	115	0	32	D
478	GM TAIKO	116	0	32	D
479	GM MELODIC TOM	117	0	32	D
480	GM SYNTH-DRUM	118	0	32	D
481	GM REVERSE CYMBAL	119	0	32	D
482	GM GT FRET NOISE	120	0	32	A
483	GM BREATH NOISE	121	0	32	A
484	GM SEASHORE	122	0	16	D
485	GM BIRD	123	0	16	D
486	GM TELEPHONE	124	0	32	D
487	GM HELICOPTER	125	0	32	D
488	GM APPLAUSE	126	0	16	D
489	GM GUNSHOT	127	0	32	D
490	DRUM SET				
490	STANDARD SET 1	0	120	—	D
491	STANDARD SET 2	1	120	—	D
492	ROOM SET	8	120	—	D
493	POWER SET	16	120	—	D
494	ELECTRONIC SET	24	120	—	D
495	SYNTH SET 1	25	120	—	D
496	SYNTH SET 2	30	120	—	D
497	JAZZ SET	32	120	—	D
498	BRUSH SET	40	120	—	D
499	ORCHESTRA SET	48	120	—	D

Drum Assignment List/Lista de asignación de batería

Key/ Note number	DRUMS SET LIST									
	STANDARD SET 1	STANDARD SET 2	ROOM SET	POWER SET	ELEC. SET	SYNTH SET 1	SYNTH SET 2	JAZZ SET	BRUSH SET	ORCHESTRA SET
C-1 0										
D-1 2	C#1 1									
E-1 4	E#1 3									
F-1 5	F#1 6									
G-1 7	A-1 8									
A-1 9	B-1 10									
B-1 11										
C0 12										
D0 14	C#0 13									
E0 16	E#0 15									
F0 17	F#0 18									
G0 19	A#0 20									
A0 21	B#0 22									
B0 23										
C1 24										
D1 26	C#1 25									
E1 28	E#1 27	HIGH Q								CLOSED HI-HAT
F1 29		SLAP								PEDAL HI-HAT
G1 31	F#1 30	SCRATCH PULL								OPEN HI-HAT
A1 33	A#1 32	STICKS								RIDE CYMBAL 1
B1 35	B#1 34	SQUARE CLICK								
C2 36		METRONOME CLICK								
D2 38	C#2 37	METRONOME BELL								
E2 40		STANDARD2 KICK 2	ROOM KICK 2	POWER KICK 2	ELEC. KICK 2	SYNTH 1 KICK 2	SYNTH 2 KICK 2	JAZZ KICK 2	BRUSH KICK 2	JAZZ KICK 1
F2 41		STANDARD1 KICK 1	ROOM KICK 1	POWER KICK 1	ELEC. KICK 1	SYNTH 1 KICK 1	SYNTH 2 KICK 1	JAZZ KICK 1	BRUSH KICK 1	CONCERT BD 1
G2 43	C#2 39	STANDARD2 SNARE 1	ROOM SNARE 1	POWER SNARE 1	ELEC. SNARE 1	SYNTH 1 SNARE 1	SYNTH 2 SNARE 1	JAZZ SNARE 1	BRUSH SNARE 1	CONCERT SD
A2 45	E#2 44	STANDARD1 SNARE 2	ROOM SNARE 2	POWER SNARE 2	ELEC. SNARE 2	SYNTH 1 SNARE 2	SYNTH 2 SNARE 2	JAZZ SNARE 2	BRUSH SNARE 2	CONCERT SD
B2 47	F#2 46	HAND CLAP 1	HAND CLAP 2			HAND CLAP 1			BRUSH SLAP	CASTANETS
C2 49	A#2 48	STANDARD2 SNARE 2	ROOM SNARE 2	POWER SNARE 2	ELEC. SNARE 2	SYNTH 1 SNARE 2	SYNTH 2 SNARE 2	JAZZ SNARE 2	BRUSH SLAP	CONCERT SD
D2 51	E#2 50	LOW TOM 2	ROOM LOW TOM 2	POWER LOW TOM 2	ELEC. LOW TOM 2	SYNTH 1 LOW TOM 2				TIMPANI F
E2 53	F#2 52	CLOSED HHAT	ROOM LOW TOM 1	POWER LOW TOM 1	ELEC. LOW TOM 1	SYNTH 1 CLOSED HH 1				TIMPANI F#
F2 55	A#2 54	LOW TOM 1	ROOM LOW TOM 1	POWER LOW TOM 1	ELEC. LOW TOM 1	SYNTH 1 LOW TOM 1				TIMPANI G
G2 57	B#2 56	PEDAL HI-HAT	ROOM MID TOM 2	POWER MID TOM 2	ELEC. MID TOM 2	SYNTH 1 CLOSED HH 2				TIMPANI G#
A2 59	C#3 49	MID TOM 2	ROOM MID TOM 1	POWER MID TOM 1	ELEC. MID TOM 1	SYNTH 1 MID TOM 2				TIMPANI A
B2 61	E#3 51	OPEN HI-HAT	ROOM MID TOM 1	POWER MID TOM 1	ELEC. MID TOM 1	SYNTH 1 OPEN HH				TIMPANI A#
C2 63	F#3 53	MID TOM 1	ROOM HIGH TOM 2	POWER HIGH TOM 2	ELEC. HIGH TOM 2	SYNTH 1 MID TOM 1				TIMPANI B
D2 65	A#3 55	HIGH TOM 2	ROOM HIGH TOM 1	POWER HIGH TOM 1	ELEC. HIGH TOM 1	SYNTH 1 HIGH TOM 2				TIMPANI C
E2 67	C#3 49	CRASH CYMBAL 1				SYNTH 1 CRASH CYMBAL				TIMPANI C#
F2 69	E#3 51	HIGH TOM 1				SYNTH 1 HIGH TOM 1				TIMPANI G
G2 71	F#3 53	RIDE CYMBAL 1				SYNTH 1 RIDE CYMBAL				TIMPANI G#
A2 73	A#3 55	CHINESE CYMBAL				REVERSE CYMBAL				TIMPANI A
B2 75	C#3 49	RIDE BELL								TIMPANI F
C2 77	E#3 51	TAMBOURINE				SYNTH 1 TAMBOURINE				
D2 79	F#3 53	SPLASH CYMBAL								
E2 81	A#3 55	COWBELL				SYNTH 1 COWBELL	SYNTH 1 COWBELL			
F2 83	B#3 58	CRASH CYMBAL 2								CONCERT CYMBAL 2
G2 85	C#3 49	VIBRASLAP								
A2 87	E#3 51	RIDE CYMBAL 2								CONCERT CYMBAL 1
B2 89	F#3 53	HIGH BONGO				SYNTH 1 HIGH BONGO				
C2 91	A#3 55	LOW BONGO				SYNTH 1 LOW BONGO				
D2 93	C#4 61	MUTE HIGH CONGA				SYNTH 1 MUTE HI CONGA				
E2 95	E#4 63	OPEN HIGH CONGA				SYNTH 1 OPEN HI CONGA				
F2 97	F#4 65	OPEN LOW CONGA				SYNTH 1 OPEN LOW CONGA				
G2 99	A#4 68	HIGH TIMBALE								
A2 101	C#4 61	LOW TIMBALE								
B2 103	E#4 63	HIGH AGOGO								
C2 105	F#4 65	LOW AGOGO								
D2 107	A#4 68	CARASAS				SYNTH 1 MARACAS	SYNTH 1 MARACAS			
E2 109	B#4 70	MARACAS								
F2 111	C#4 61	SHORT HI WHISTLE								
G2 113	E#4 63	LONG WHISTLE								
A2 115	F#4 65	SHORT GUIRO								
B2 117	A#4 68	LONG GUIRO								
C2 119	C#5 73	CLAVES				SYNTH 1 CLAVES	SYNTH 1 CLAVES			
D2 121	E#5 75	HIGH WOOD BLOCK								
E2 123	F#5 78	LOW WOOD BLOCK								
F2 125	A#5 80	MUTE CUICA								
G2 127	C#5 73	OPEN CUICA								
A2 129	E#5 75	MUTE TRIANGLE								
B2 131	F#5 78	OPEN TRIANGLE								
C2 133	A#5 80	SHAKER								
D2 135	C#6 85	JINGLE BELL								
E2 137	E#6 89	BELL TREE								
F2 139	F#6 92	CASTANETS								
G2 141	A#6 95	MUTE SURDO								
A2 143	C#6 85	OPEN SURDO								
B2 145	E#6 89	APPLAUSE 1								
C2 147	F#6 92	APPLAUSE 2								
D2 149	A#6 95	FANFARE								
E2 151	C#6 85	ONE								
F2 153	E#6 89	TWO								
G2 155	F#6 92	THREE								
A2 157	A#6 95	FOUR								
B2 159	C#7 97	FIVE								
C2 161	E#6 89	BRAVO								
D2 163	F#6 92	GREAT								
E2 165	A#6 95	NOT BAD								
F2 167	C#7 97	TRY AGAIN								
G2 169	E#6 89	GOOD								
A2 171	F#6 92	THAT'S CLOSE								
B2 173	A#6 95	NICE TRY								
C2 175	C#7 97	KEEP TRYING								
D2 177	E#6 89	TAKE YOUR TIME								
E2 179	F#6 92	RANK UP								
F2 181	A#6 95	RANK DOWN								
G2 183	C#8 109	PIKO PIKO								
A2 185	E#6 89									
B2 187	F#6 92									
C2 189	A#6 95									
D2 191	C#8 109									
E2 193	E#6 89									
F2 195	F#6 92									
G2 197	A#6 95									
A2 199	C#8 109									
B2 201	E#6 89									
C2 203	F#6 92									
D2 205	A#6 95									
E2 207	C#8 109									
F2 209	E#6 89									
G2 211	F#6 92									
A2 213	A#6 95									
B2 215	C#8 109									
C2 217	E#6 89									
D2 219	F#6 92									
E2 221	A#6 95									
F2 223	C#8 109									
G2 225	E#6 89									
A2 227	F#6 92									
B2 229	A#6 95									
C2 231	C#8 109									
D2 233	E#6 89									
E2 235	F#6 92									
F2 237	A#6 95									
G2 239	C#8 109									
A2 241	E#6 89									
B2 243	F#6 92									
C2 245	A#6 95									
D2 247	C#8 109									
E2 249	E#6 89									
F2 251	F#6 92									
G2 253	A#6 95									

NOTE " ← " Indicates the same sound as STANDARD SET 1.

NOTA " ← " Indica el mismo sonido que STANDARD SET 1.

FINGERED Chord Chart

Cuadro de acordes digitados

Chord Root	M	m	7	m7	dim7	M7	m7/5	dim	Chord Root	aug	sus4	7 sus4	m add9	m M7	7-5	add9
C									C							
C# (D♭)									C# (D♭)							
D									D							
E♭ (D#)									E♭ (D#)							
E									E							
F									F							
F# (G♭)									F# (G♭)							
G									G							
A♭ (G#)									A♭ (G#)							
A					*				A							
B♭ (A#)					*				B♭ (A#)	*						
B					*				B	*						

NOTE

- These chords can be fingered if you expand the accompaniment area of the keyboard by changing the split point. For details, see "Using Split" on page E-43.

NOTA

- Estos acordes se pueden digitar si expande el área de acompañamiento del teclado cambiando el punto de división. Para más información, vea "Usando la división" en la página S-43.

Rhythm List

Lista de ritmos

POPS	JAZZ	FOR PIANO
000 POP 1	050 BIG BAND 1	100 PIANO BALLAD 1
001 WORLD POP	051 BIG BAND 2	101 PIANO BALLAD 2
002 8 BEAT POP	052 BIG BAND 3	102 PIANO BALLAD 3
003 SOUL BALLAD	053 SWING	103 EP BALLAD 1
004 POP SHUFFLE 1	054 SLOW SWING	104 EP BALLAD 2
005 8 BEAT DANCE	055 FOX TROT	105 BLUES BALLAD
006 POP BALLAD 1	056 JAZZ COMBO 1	106 MELLOW JAZZ
007 POP BALLAD 2	057 JAZZ COMBO 2	107 JAZZ COMBO 3
008 BALLAD	058 JAZZ VOICE	108 RAGTIME
009 FUSION SHUFFLE	059 JAZZ WALTZ	109 BOOGIE-WOOGIE
010 8 BEAT 1		110 ARPEGGIO 1
011 8 BEAT 2	EUROPEAN	111 ARPEGGIO 2
012 8 BEAT	060 POLKA	112 ARPEGGIO 3
013 16 BEAT 1	061 POP POLKA	113 PIANO BALLAD 4
014 16 BEAT 2	062 MARCH 1	114 6/8 MARCH
015 16 BEAT SHUFFLE	063 MARCH 2	115 MARCH 3
016 GUITAR POP	064 WALTZ 1	116 2 BEAT
017 POP 2	065 SLOW WALTZ	117 WALTZ 2
018 6/8 BALLAD	066 VIENNESE WALTZ	118 WALTZ 3
019 POP WALTZ	067 FRENCH WALTZ1	119 WALTZ 4
	068 SERENADE	
DANCE/FUNK	069 TANGO	
020 DANCE	LATIN/VARIOUS	
021 DISCO	070 BOSSA NOVA 1	
022 MODERN R&B	071 BOSSA NOVA 2	
023 LATIN DISCO	072 BEGUINE	
024 DANCE POP	073 SAMBA	
025 GROOVE SOUL	074 MAMBO	
026 TECHNO	075 RHUMBA	
027 TRANCE	076 CHA-CHA-CHA	
028 HIP-HOP	077 MERENGUE	
029 FUNK	078 BOLERO	
ROCK	079 SALSA	
030 POP ROCK 1	080 REGGAE	
031 POP ROCK 2	081 PUNTA	
032 FOLKIE POP	082 CUMBIA	
033 POP SHUFFLE 2	083 PASODOBLE	
034 ROCK BALLAD 1	084 SKA	
035 ROCK BALLAD 2	085 BLUEGRASS	
036 SOFT ROCK	086 DIXIE	
037 ROCK 1	087 TEX-MEX	
038 ROCK 2	088 COUNTRY 1	
039 HEAVY METAL	089 COUNTRY 2	
040 60'S SOUL	090 FOLKLORE	
041 60'S ROCK	091 FAST GOSPEL	
042 SLOW ROCK	092 SLOW GOSPEL	
043 SHUFFLE ROCK	093 SIRTAKI	
044 50'S ROCK	094 HAWAIIAN	
045 BLUES	095 ADANI	
046 NEWORLNS R&R	096 BALADI	
047 TWIST	097 ENKA	
048 R&B	098 SYMPHONY	
049 ROCK WALTZ	099 STR QUARTET	

Song List/Lista de canciones

SONG BANK/SING ALONG List

Lista SONG BANK/SING ALONG

00	CAN YOU FEEL THE LOVE TONIGHT ("LION KING" THEME)
01	DON'T KNOW WHY
02	WE WISH YOU A MERRY CHRISTMAS
03	JINGLE BELLS
04	SILENT NIGHT
05	JOY TO THE WORLD
06	O CHRISTMAS TREE
07	WHEN THE SAINTS GO MARCHING IN
08	GREENSLEEVES
09	SWING LOW, SWEET CHARIOT
10	JOSHUA FOUGHT THE BATTLE OF JERICHO
11	AMAZING GRACE
12	AULD LANG SYNE
13	TWINKLE TWINKLE LITTLE STAR
14	LIGHTLY ROW
15	UNDER THE SPREADING CHESTNUT TREE
16	COME BIRDS
17	THE MUFFIN MAN
18	LONG LONG AGO
19	DID YOU EVER SEE A LASSIE?
20	LONDON BRIDGE
21	THE FARMER IN THE DELL
22	ON THE BRIDGE OF AVIGNON
23	SIPPIN' CIDER THROUGH A STRAW
24	GRANDFATHER'S CLOCK
25	MICHAEL ROW THE BOAT ASHORE

26	ANNIE LAURIE
27	MY BONNIE
28	MY DARLING CLEMENTINE
29	HOME SWEET HOME
30	ON TOP OF OLD SMOKEY
31	I'VE BEEN WORKING ON THE RAILROAD
32	LITTLE BROWN JUG
33	AURA LEE
34	OH! SUSANNA
35	HOUSE OF THE RISING SUN
36	SHE WORE A YELLOW RIBBON
37	CAMPTOWN RACES
38	SWANEE RIVER (OLD FOLKS AT HOME)
39	JEANNIE WITH THE LIGHT BROWN HAIR
40	YANKEE DOODLE
41	RED RIVER VALLEY
42	TURKEY IN THE STRAW
43	MY OLD KENTUCKY HOME
44	HOME ON THE RANGE
45	JAMAICA FAREWELL
46	ALOHA OE
47	SAKURA SAKURA
48	SANTA LUCIA
49	WALTZING MATILDA

50-54 User Songs/Canciones del usuario

PIANO BANK List

Lista PIANO BANK

CONCERT PIECES

00	FÜR ELISE
01	TURKISH MARCH (MOZART)
02	SONATA op.27 no.2 "MOONLIGHT" 1st Mov.
03	ETUDE op.10 no.3 "CHANSON DE L'ADIEU"
04	GYMNOPIÉDIES no.1
05	THE ENTERTAINER
06	MAPLE LEAF RAG
07	HUNGARIAN DANCES no.5
08	TRÄUMEREI
09	LA FILLE AUX CHEVEUX DE LIN
10	HUMORESKE (DVOŘÁK)
11	PROMENADE FROM "TABLEAUX D'UNE EXPOSITION"
12	MOMENTS MUSICAUX op.94 no.3
13	LE CYGNE FROM "LE CARNAVAL DES ANIMAUX"
14	VALSE op.64 no.1 "PETIT CHIEN"
15	CHANSON DU TOREADOR FROM "CARMEN"
16	LARGO (HÄNDEL)
17	WEDDING MARCH FROM "MIDSUMMER NIGHT'S DREAM"
18	AMERICAN PATROL
19	CSIKOS POST
20	DOLLY'S DREAMING AND AWAKENING
21	LA CHEVALERESQUE
22	SONATA K.545 1st Mov.
23	LA PRIÈRE D'UNE VIERGE

24	TURKISH MARCH (BEETHOVEN)
25	NOCTURNE op.9 no.2 (CHOPIN)
26	LIEBESTRÄUME no.3
27	MARCHE MILITAIRE no.1
28	BLUMENLIED
29	GRANDE VALSE BRILLANTE op.18 no.1

ETUDES

30	MINUET (J.S.BACH)
31	GAVOTTE (GOSSEC)
32	ARABESQUE (BURGMÜLLER)
33	CHOPSTICKS
34	FRÖHLICHER LANDMANN
35	INVENTIONEN no.1
36	AVE MARIA (GOUNOD)
37	JESUS BLEIBET MEINE FREUDE
38	CANON (PACHELBEL)
39	SONATINA op.36 no.1 1st Mov.
40	SONATA op.13 "PATHÉTIQUE" 2nd Mov.
41	PRELUDE op.28 no.7 (CHOPIN)
42	JE TE VEUX
43	RÊVERIE
44	ODE TO JOY
45	SERENADE FROM "EINE KLEINE NACHTMUSIK"
46	MARCH FROM "THE NUTCRACKER"
47	GOING HOME FROM "FROM THE NEW WORLD"
48	BEAUTIFUL DREAMER
49	DANNY BOY

Model **CTK-800** Version: 1.0

MIDI messages that can be sent and received using the USB port Los mensajes MIDI pueden enviarse y recibirse usando el puerto USB

Function ...	Transmitted	Recognized	Remarks
Basic Channel Default Changed	1 1-16	1-16 1-16	
Mode Default Messages Altered	Mode 3 X *****	Mode 3 X *****	
Note Number: True voice	36 - 96 *****	0-127 12 - 108 *1	*1: See Tone List on page A-1. *1: Vea la lista de sonidos en la página A-1.
Velocity Note ON Note OFF	0 9nH v = 1-127 X 8nH v = 64	0 9nH v = 1-127 X 9nH v = 0, 8nH v = XX	XX = no relation XX = sin relación
After Touch Key's Ch's	X X	X O*2	
Pitch Bender	X	O	
Control Change 0, 32 1 6, 38 7 10 11 64 66	O X X X X X X O*4 O*4	O O*2 O*3 O O O O O	Bank select Modulation Data entry Volume Pan Expression Hold1 Sostenuto

67 91 93 100, 101 120 121	O*4 X O X X X	O*4 X O X X X	O O O*3 O O	Soft pedal Reverb send Chorus send RPN LSB, MSB All sound off Reset all controller
Program Change:	True #	O 0-127 *****	O 0-127 *****	
System Exclusive	O*5 X X X	O*5 X X X	O*5 *6 X X X	
System Common : Song Pos : Song Sel : Tune	O O	O O	X X	
System Real Time : Clock : Commands	X X X X	X X X X	X O O X	
Aux Messages : Local ON/OFF : All notes OFF : Active Sense : Reset				
Remarks	<p>*2 Modulation and after touch for each channel are the same effect. *2 La modulación y después del toque para cada canal tienen el mismo efecto. *3 FINE TUNE, COARSE TUNE receive, and PITCH BEND SENSE, RPN Null receive *3 FINE TUNE: recepción COARSE TUNE, y PITCH BEND SENSE: recepción RPN Null. *4 In accordance with sustain/assignable jack setting *4 De acuerdo con el ajuste de la toma asignable. *5 • Reverb Type [F0] [F7] [F4] [05] [01] [01] [01] [01] [01] [00] [v] [F7] vv=00: Room1, 01: Room2, 04: Hall1, 03: Hall2</p> <p>*6 Chorus Type [F0] [F7] [F7] [04] [05] [01] [01] [01] [01] [02] [00] [v] [F7] vv=00: Chorus1, 01: Chorus2, 02: Chorus3, 03: Chorus4 *6 Tipo de reverberación [F0] [F7] [F7] [04] [05] [01] [01] [01] [01] [01] [01] [00] [v] [F7] vv=00: Room1, 01: Room2, 04: Hall1, 03: Hall2 *6 Tipo de Chorus [F0] [F7] [F7] [04] [05] [01] [01] [01] [01] [01] [02] [00] [v] [F7] vv=00: Chorus1, 01: Chorus2, 02: Chorus3, 03: Chorus4 *6 GM on/off GM ON : [F0] [7E] [F7] [09] [01] [F7] GM OFF : [F0] [7E] [F7] [09] [02] [F7] *6 Activación/desactivación GM GM ON: [F0] [7E] [F7] [09] [01] [F7] GM OFF: [F0] [7E] [F7] [09] [02] [F7]</p>			

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

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

O : Yes
X : No




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6-2, Hon-machi 1-chome
Shibuya-ku, Tokyo 151-8543, Japan

 MA0505-B Printed in China
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