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CASIO

CASIO COMPUTER CO., LTD.
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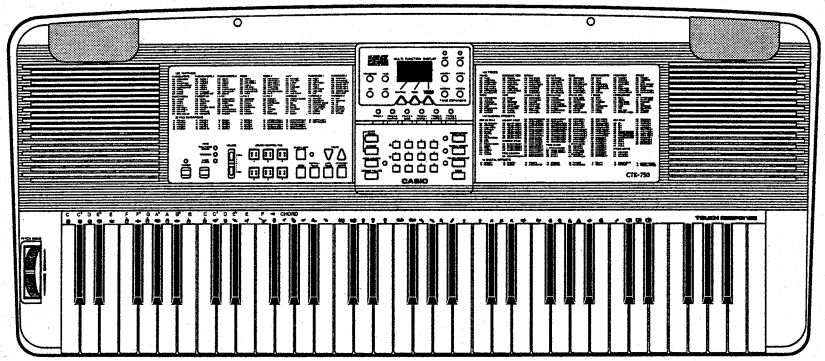
MA1210231A (英) (西) Printed in Japan
CTK750ES-1

128 GENERAL MIDI TONES

CTK-750

ELECTRONIC MUSICAL INSTRUMENT
INSTRUMENTO MUSICAL ELECTRONICO

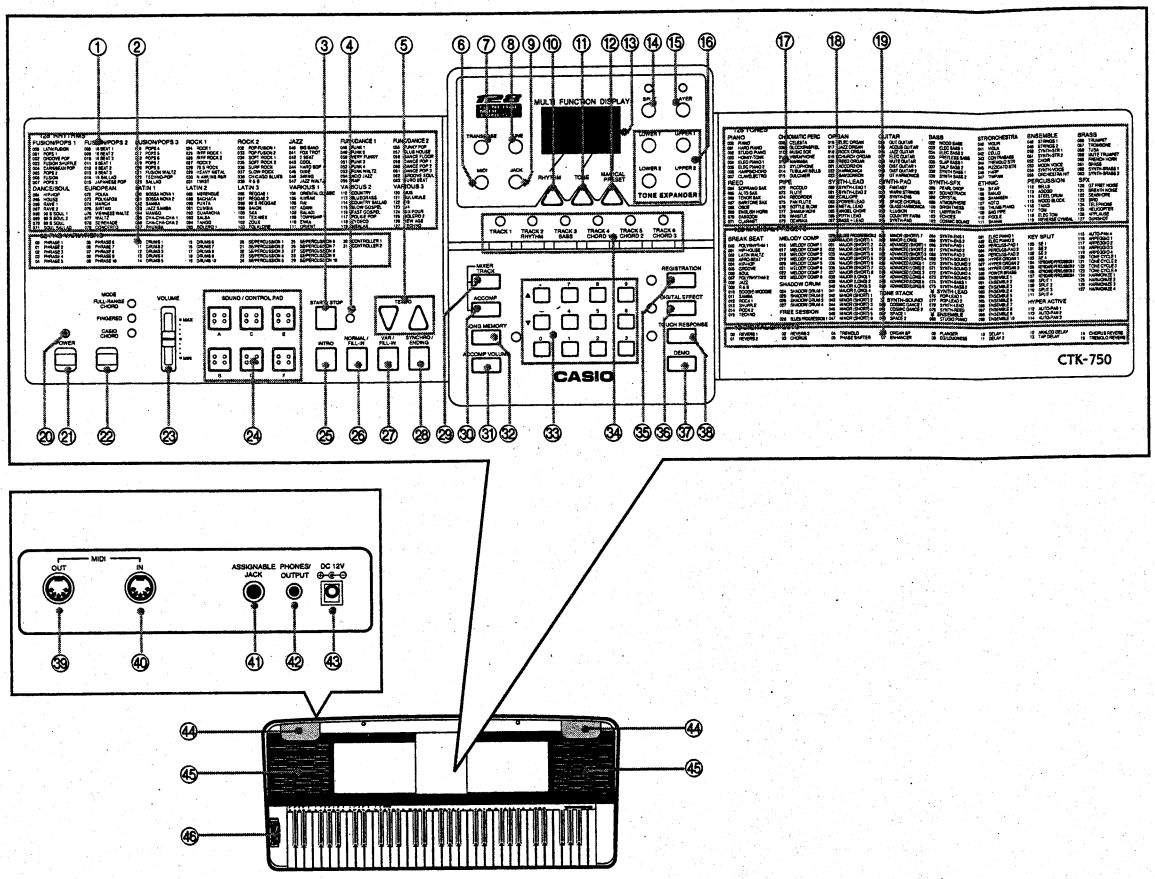
OPERATION MANUAL
MANUAL DE OPERACION



(英) (西)
CTK750ES-1

CASIO

Control Locations/Ubicación de los controles



① 128 RHYTHMS list
② 32 PAD VARIATIONS list
③ START/STOP button
④ TEMPO indicator
⑤ TEMPO buttons
⑥ MIDI button
⑦ TRANSPOSE button
⑧ TUNING button
⑨ Assignable JACK button
⑩ RHYTHM button
⑪ TONE button
⑫ MAGICAL PRESET button
⑬ MULTI FUNCTION DISPLAY
⑭ SPLIT button
⑮ LAYER button
⑯ TONE EXPANDER buttons
⑰ 128 TONES list
⑱ 128 MAGICAL PRESETS list
⑲ 16 DIGITAL EFFECTS list
⑳ POWER indicator
㉑ POWER button
㉒ MODE button
㉓ VOLUME slider
㉔ SOUND/CONTROL PADS
㉕ INTRO button
㉖ NORMAL/FILL-IN button
㉗ VARIATION/FILL-IN button
㉘ SYNCHRO/ENDING button
㉙ TRACK MIXER button
㉚ ACCOMP MIXER button
㉛ ACCOMP VOLUME button
㉜ SONG MEMORY button
㉝ 10-key/+/– pads
㉞ TRACK/ACCOMPANIMENT mixer part buttons
㉟ REGISTRATION button
㊱ DIGITAL EFFECT button
㊲ DEMO button
㊳ TOUCH RESPONSE button
㊴ MIDI terminals, MIDI out
㊵ MIDI terminals, MIDI in
For connection of other MIDI instruments and devices.
㊶ ASSIGNABLE jack
For connection of an optional sustain pedal (SP-2/SP-10).
㊷ PHONES/OUTPUT jack
For connection of commercially available headphones. Output from the speakers is automatically cut when headphones are connected.
㊸ DC 12V jack
For connection of an optional AC adaptor AD-12.
㊹ Bass-reflex speakers
㊺ Speakers
㊻ Pitch bend wheel

Welcome...

To the happy family of satisfied CASIO electronic musical instrument owners! To get the most out of the many features and functions of the CTK-750, be sure to carefully read this manual and keep it on hand for future reference.

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
- Abnormally low speaker/headphone volume
- Distortion of sound output
- A totally different tone may sound
- Abnormal rhythm pattern and demo tune play
- Continued sound output even after you release a button
- Occasional interruption of sound when playing at high volumes
- Sudden power failure when playing at high volumes

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.

Main Features

❑ 128 amazingly realistic tones

❑ Layer and Split Keyboard capabilities for play of two tones at the same time

- **Layer Function**
  Play two tones at the same time.
- **Split Function**
  Split the keyboard between two different tones.

❑ Magical Preset for a new dimension in keyboard play

- Perform such "magical" functions as changing the tone each time you press a key, play of a different chord each time you press a key, play of tones along with percussion sounds, and more!

❑ Sound/Control pads

- Choose from among 32 different set-ups.
- Set up to play percussion sounds.
- Set up for subtle control over tones played on the keyboard.

❑ Enhanced auto-accompaniment function for greater versatility

- 128 built in auto-accompaniment patterns.
- Combine different rhythms to create your own patterns.
- Full-Range Chords allow both chord and melody play across the entire keyboard range.

❑ Song Memory

- Store up to six tracks for simultaneous playback.

❑ Touch Response

- Automatic adjustment of output to match keyboard pressure.

❑ Transpose Function

- An easy operation instantly changes the key of the keyboard.

❑ 16 versatile digital effects

- Choose from various reverb effects or even an rotating speaker effect.

❑ MIDI compatible

- Hook up to other MIDI devices and expand your creative potential.

❑ Registration Memory

- Store up to 10 set-ups for instant recall when you need them.

❑ Bass-reflex speaker system

- Put more richness into lower range tones.

Contents

Quick Reference

This part of the manual provides a brief overview of keyboard operation. This is meant for experienced users, so be sure to read the rest of the manual for details before trying to actually use the keyboard.

■ To switch power on and off (Page E-16)

Press the POWER button to switch power on and off.

■ To change tones (Page E-16)

1. Press the TONE button.

2. Use the 10-key pad to input the 3-digit number that identifies the tone you want to select.

■ To switch Touch Response on and off (Page E-18)

Press the TOUCH RESPONSE button to switch Touch Response on and off.

■ To play the demo tunes (Page E-19)

Press the DEMO button to start and stop demo tune play.

■ Using effects (Page E-20)

To select an effect

1. Press the DIGITAL EFFECT button to switch digital effects on.

2. Use the 10-key pad to input the number for the effect you want to use.

To switch effects on and off

Press the DIGITAL EFFECT button to switch the currently selected effect on and off.

■ To select and play a rhythm (page E-21)

1. Use the MODE button to enter the NORMAL mode (all MODE indicators unlit).

2. Press the RHYTHM button.

3. Use the 10-key pad to input the 3-digit rhythm number for the rhythm you want to use.

4. Press the START/STOP button to start play of the rhythm.

5. To stop rhythm play, press the START/STOP button again.

■ Using auto-accompaniment (page E-24)

To play a CASIO CHORD auto-accompaniment

1. Use the MODE button to select CASIO CHORD.

2. Select an auto-rhythm.

3. Start play of the rhythm.

4. Press either one or up to four keys on the accompaniment keyboard (page E-25), and the corresponding accompaniment starts to play automatically.

5. Continue pressing different keys on the accompaniment keyboard.

6. To stop auto-accompaniment play, press START/STOP again

To play a FINGERED auto-accompaniment

1. Use the MODE button to select FINGERED.

2. Select an auto-rhythm.

3. Start play of the rhythm.

4. Play a chord on the accompaniment keyboard (page E-24) to start play of the auto-accompaniment.

5. Continue pressing keys on the accompaniment keyboard.

6. To stop auto-accompaniment play, press START/STOP again.

To start an accompaniment with synchro start

1. Use the MODE button to select either CASIO CHORD or FINGERED.

2. Select a rhythm.

3. Press the SYNCHRO/ENDING button. At this time, the TEMPO indicator lights.

4. Play a chord on the accompaniment keyboard.

5. To stop the accompaniment pattern, press START/STOP again.

■ Adjusting the accompaniment volume (Page E-32)

Use the following procedure to set the volume that the accompaniment is played. You can set the volume to any value in the range of 000 to 127.

To adjust the accompaniment volume

1. Press the ACCOMP VOLUME button.

2. Use the 10-key pad to input a 3-digit number and specify the accompaniment volume level.

■ Using the sound/control pads (Page E-39)

To play a pad

Simply press one of the six pads to play the sound assigned to it.

To change the pad functions

1. Press any one of the six pads and the number that identifies the set of functions currently assigned to the pads appears on the display.

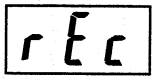
2. While the function set number is on the display, use the 10-key pad to input the number of the set of functions you want to change to.

■ Using the Song Memory (Page E-50)

To record to Song Memory

1. Set up the keyboard to play the tune you want to play.

2. Press the SONG MEMORY button until the message rEc appears on the display.



3. Use the 10-key pad to input 0 or 1 to specify the song number.

4. Press TRACK NUMBER button 1 to select track 1.

5. Press the START STOP button to start recording.

6. Play the song that you want to perform.

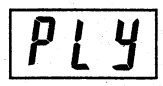
START/STOP

7. After the song is finished, press the START/STOP button to stop the recording operation.

To play back a song from Song Memory

SONG MEMORY

1. Press the SONG MEMORY button until the message PLY appears on the display.



2. Use the 10-key pad to input 0 or 1 to specify the song number.

3. Press TRACK NUMBER button 1 to select track 1.

START/STOP

4. Press the START/STOP button to start playback.

■ To tune the keyboard (Page E–74)

TUNE

1. Press the TUNE button.

2. Use the 10-key pad's [+] and [–] buttons to tune the keyboard.

■ To transpose the keyboard (Page E–75)

TRANSPOSE

1. Press the TRANSPOSE button.

2. Use the 10-key pad's [+] and [–] buttons to select a key.

■ To set the touch sensitivity (Page E–76)

TOUCH RESPONSE

1. Press the TOUCH RESPONSE button.

2. Use the 10-key pad to input the number that identifies the touch sensitivity you want to use.

Part 1 Before using the keyboard

Be sure to read the contents of this part of the manual before using the keyboard for the first time.

■ About the power supply

You can power your keyboard with 6D (SUM-1/R20P, AM1/LR20) batteries, standard AC power (with an optional AC adaptor) .

Installing the batteries

This keyboard can be powered by 6 D size dry cell batteries. Make sure that the unit is turned off when installing batteries.

1. Open the battery compartment cover on the bottom of the unit.

2. Load new batteries as illustrared, taking care that the plus (+) and minus (–) poles are facing in the correct directions.

3. Replace the battery compartment cover.
   - Standard battery life: Approximately 3 hours (SUM-1/R20P).
     Approximately 10 hours (AM1/LR20).

Important!

Any of the following conditions indicates that battery power is low and that you should replace batteries or shift to one of alternate power sources as soon as possible.

- Dim power supply indicator
- Abnormally low speaker/headphone volume
- Distortion of sound output
- A totally different tone may sound
- Abnormal rhythm pattern and demo tune play
- Continued sound output even after you release a button
- Occasional interruption of sound when playing at high volume.
- Sudden power failure when playing at high volumes

Precautions

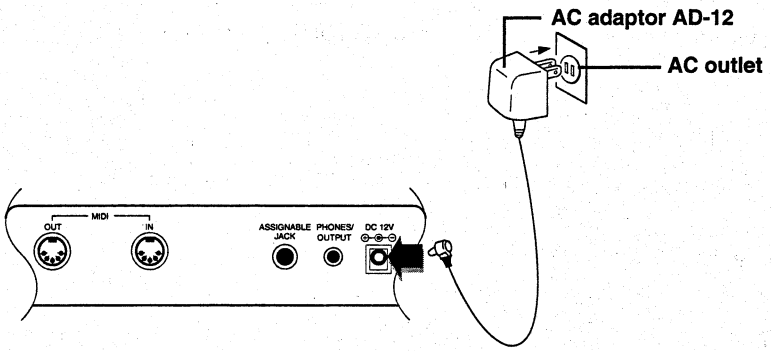
Incorrectly using batteries can cause them to leak or burst, and may damage your unit. Note the following precautions:

- Be sure that the plus (+) and minus (–) poles are facing in the correct directions.
- Do not mix battery types.
- Do not mix new batteries with old ones.
- Never leave dead batteries in the battery compartment.

- Remove batteries when not using the unit for extended periods.
- Never try to recharge the batteries that are specified for the power supply of this unit.
- Do not expose batteries to direct heat, let them become shorted or try to take them apart.
  (If a battery leaks, clean out the battery compartment of the unit immediately, taking care to avoid letting the battery fluid come into direct contact with your skin.)

Using AC power

An AC adaptor (AD-12, optional) is required when using household current. Use only genuine CASIO adaptor with the same voltage rating (100, 117, 220 or 240V) as the power supply in your area to prevent damage to internal components. Be sure to turn the power of the unit off before you connect the adaptor to the unit. Plug the AC adaptor into the AC outlet and the cord into the unit. This will automatically cut off the battery power supply.



Important!

- The adaptor may become warm when it is being used. This is normal and does not indicate any problem.
- Be sure to unplug the adaptor from the power source when you are not using the unit.
- Whenever connecting or disconnecting the adaptor, be sure that the power of the unit is switched off.
- Never use a power supply that does not match that specified for the unit. Doing so can damage the adaptor or your unit.

Auto Power Off Function

The Auto Power Off function automatically switches power off if you do not perform any operation for about six minutes. You can also use the following operation to cancel the Auto Power Off function so that it does not switch power off.

To cancel the Auto Power Off function

While holding down the TONE button, switch power on.

- The Auto Power Off function remains cancelled until you manually switch power off.

About settings and memory contents

- Whenever power is switched off by pressing the POWER button or by operation of the Auto Power Off function, tone and rhythm settings, Song Memory contents (page E-50), and Registration Memory contents (page E-47) are retained. All of these settings and memory data items are available when you switch power on again.
- The settings and data described above are retained while power is switched off as long as electrical power is supplied to the unit. This means that if you remove batteries or if batteries go dead, and you disconnect the unit from an external power supply (AC adaptor), settings and data stored in memory will all be lost.
- Note that the following settings are not retained when power is switched off, and they are initialized whenever you switch power on.

Setting	Initialized Default	Page
Displayed Number	Tone number	E-16
Transpose	0	E-73
Tuning	00	E-72
Split Point	060 (B2/C3)	E-34
Local Control On/Off	On	E-30
Mixer (Accomp) parameter	vol : 127, Snd : 100, PAn : 00*	E-29

* With Chord 2 : –40, Chord 3 : +40

■ General overview of CTK-750 operation

This section provides a general overview of main CTK-750 operations. It mainly focuses on how the display shows data and how to change between different modes. Be sure to read this section before using the keyboard for the first time.

How the display shows data

The 3-digit display is used to show a variety of numeric data and other indicators. An indicator on the display also tells you what kind of data is currently displayed.

Sample Display	Indicator Meaning
00.0 dr.5	Tone number display
0.00	Rhythm number display (standard)
000	Rhythm number display (for rhythm assigned to INTRO, NORMAL/FILL-IN, VAR/FILL-IN, or SYNCHRO/ENDING buttons). This display appears only when you press INTRO, NORMAL/FILL-IN, VAR/FILL-IN or SYNCHRO/ENDING, to identify the number of the rhythm assigned to the button. After a few seconds the display returns to the normal rhythm display.
000.	Magical Preset number display
d-0	Demo tune number
P00	Pad function number display (appears for about one second after the pad is pressed)

About CTK-750 modes

With the CTK-750, you must enter various modes in order to perform certain operations. This section describes the main modes of the CTK-750.

Button	Mode	Description
MODE	NORMAL	The keyboard plays like a standard piano or organ. This mode is selected when all the MODE indicators are unlit.
MODE	CASIO CHORD	You can use the auto-accompaniment functions described on page E-25.
MODE	FINGERED	You can finger chords as you normally do, and have the accompaniment pattern follow along with you (page E-26).
MODE	FULL-RANGE CHORD	You can use the entire range of the keyboard for FINGERED play and melody play (page E-31).
MAGICAL PRESET	MAGICAL PRESET	Use this mode to select the Magical Preset function you want to use (page E-42).
DEMO	DEMO	Use this mode to play the demo tunes (page E-19).
SONG MEMORY	SONG MEMORY	Use this mode to record songs to and play songs back from memory (page E-50).
MIDI	MIDI	This mode lets you set up the keyboard to exchange data with another MIDI device (page E-60).
SPLIT	SPLIT	Use this mode to split the keyboard between two different tones (page E-33).
LAYER	LAYER	Use this mode to assign two different tones to each keyboard key (page E-34).
DIGITAL EFFECT	DIGITAL EFFECT	Use this mode to select the digital effect you want to use (page E-20).

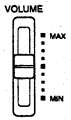
Part 2 Basic operations

This part of the manual provides you with the basic information you need to use your keyboard.

■ To switch power on and off

1. Press the POWER button to switch power on. The indicator above the button is lit while power is on.

2. Adjust the volume.



- Be sure to adjust the volume to a relatively low setting before playing the keyboard.

3. Press the keyboard keys.
   - Adjust the volume to the level you want while playing the keyboard.
   - Whenever you switch power on, the tone that was selected when you last switched power off is still selected.

4. To switch power off, press the POWER button again.

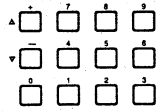
■ To change tones

1. Look at the tone list printed on the keyboard's console and find the one you want.
   - A total of 128 tones and 6 drum sounds are available.

2. Press the TONE button.

- The number for the tone that is currently selected is shown on the display.

3. Use the 10-key pad to input the 3-digit number that identifies the tone you want to select.



- Use the numeric buttons to input a 3-digit number.
- You can also use the [+] and [–] buttons. Pressing [+] increases the displayed tone number by 1, while [–] decreases it.
- Be sure to always specify a 3-digit number.

- If you specify a number greater than 133, tone number [dr.5] is selected automatically.

- If you discover a mistake before you input the third digit, press the TONE button to return to the previously set tone number.

Digital Sampling

Number of the tones that are available with this keyboard have been recorded and processed using a technique called digital sampling. To ensure a high level of tonal quality, samples are taken in the low, mid, and high ranges and then combined to provide you with sounds that are amazingly close to the originals. You may notice very slight differences in volume or sound quality for some tones when you play them at different positions on the keyboard. This is an unavoidable result of multiple sampling, and it is not a sign of malfunction.

Polyphony

The term polyphony refers to the maximum number of notes you can play at the same time. The CTK-750 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.

■ About drum sounds

Tone numbers 128 through 133 are drum sounds, that you can use to drum notes on the keyboard. When you select one of these tones, the display shows a value from [dr.0] through [dr.5] ("dr" indicating that these are drum sounds).
The percussion sounds that are available are illustrated on the keyboard's console. Note that the upper nine keys that are not marked do not produce any drum sounds when pressed.

■ Touch Response

Touch Response makes it possible for the keyboard to match the power of the note produced with the amount of pressure you use to press the keyboard keys. Note that beginners or those with insufficient strength in their fingers can use the procedure to switch Touch Response off.

To switch Touch Response on and off

Press the TOUCH RESPONSE button to switch Touch Response on and off.

- When Touch Response is switched off, the notes produced by the keyboard are not affected by the keyboard pressure.
- Touch Response is on when the TOUCH RESPONSE indicator is lit.
- Note that when you switch power on, the Touch Response on/off setting is the one that was selected when you last switched power off.
- Touch Response is not applied to the accompaniment keyboard when you are using auto-accompaniment (page E-24). It is, however, applied to the melody keyboard.
- The TOUCH RESPONSE button is automatically deactivated whenever a demonstration tune is playing. If Touch Response is switched on when you start play of the demo tune, it remains on and cannot be switched off during demo tune play. If it is switched off when you start play of the demo tune, is remains off.
- You can also adjust the Touch Response sensitivity using the procedures described on page E-76.

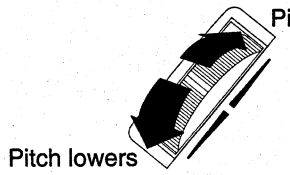
■ Using the PITCH BEND wheel

Rotating the PITCH BEND wheel raises and lowers the pitch of the tones you play on the keyboard. Use it to add interesting effects to your performances.

Tones that are best suited for use with the PITCH BEND wheel

Use tones that continue to sound as long as you keep a keyboard key pressed, such as the STRINGS, SYNTH-LEAD and SYNTH BASS tones.

PITCH BEND wheel techniques



Releasing the finger from the wheel regains the original pitch.

- You can add vibrato to a note by moving the PITCH BEND wheel slightly forward and back as the note is sounding. When you release the wheel, the note returns to its original status.

- Try changing the pitch of a note after it is sounding,
- Another interesting effect is produced by turning the PITCH BEND wheel before pressing the keyboard. Then, after the note starts to sound, either release the PITCH BEND wheel or change its setting.

Bend range

- The PITCH BEND wheel is initially set for a range of two semitones in either direction (up or down). You can increase this up to a range of three semitones (page E-67).

■ Playing the demo tunes

This keyboard comes with the following three pre-recorded demo tunes that you can use for practice or simply for your listening enjoyment.

Tune Number	Name	Composer	Play Time
0	Caza De Grillos	Edward Alstrom	2:09
1	Kick Some Bass	Mark Hewins	2:50
2	Connect The Dots	Edward Alstrom	2:32

- Note that you cannot start playback of a demo tune while you are recording to Song Memory (page E-51).

To start demo tune play

1. Switch power on and adjust the volume level.
2. Press the DEMO button.

- Demo tune play continues in a sequential endless loop until you switch it off.
- The number of the demo tune currently playing is shown on the display.
- You can play along on the keyboard while a demo tune is playing back.

3. You can change the demo tune being played by pressing [+] (to advance) or [–] (to move back) in the 10-key pad.

To stop demo tune play

Press the DEMO button again or START/STOP button to stop Demo tune play.

■ Using effects

A total of 16 digital effects can be applied to the keyboard's tone to create exactly the mood that you want for your music. Note that only one effect can be selected at a time.

Types of effects

Effect	Effect Number	Description
REVERB 1	E00	Deep reverb
REVERB 2	E01	Medium reverb
REVERB 3	E02	Shallow reverb
CHORUS	E03	Adds depth and breadth to sound. Recommended for electric piano.
TREMOLO	E04	Causes pulsating sound. Recommended for electric piano or vibraphone.
PHASE SHIFTER	E05	Rotating effect
ORGAN SP	E06	Like a rotating speaker on an electronic organ. Recommended for organ tones.
ENHANCER	E07	Strong attack effect
FLANGER	E08	Adds depth and sharpness. Recommended for bass sounds.
EQ LOUDNESS	E09	Enhances low range.
DELAY 1	E10	Long echo. Recommended for synth reed tones.
DELAY 2	E11	Short echo. Recommended for synth reed tones.
ANALOG DELAY	E12	Simulation of analog delay machine. Recommended for synth reed tones.
TAP DELAY	E13	Left-right reflecting echo. Recommended for synth reed tones.
CHORUS REVERB	E14	Applies two effects at once. Recommended for electric piano tones.
TREMOLO REVERB	E15	Applies two effects at once. Recommended for electric piano tones.

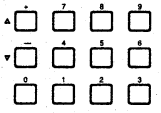
- Digital effects are applied to notes played on the keyboard, pad sounds, rhythms, and auto-accompaniments
- Effects E03 through E08 are quite strong, and may cause problems for the tone you are trying to play. When this happens, change the accompaniment mixer Snd setting to 00, which switches the rhythm and auto-accompaniment effects off (page E-28).
- Depending on the tone and rhythm you are using, the EQ LOUDNESS effect may cause distortion at high volume settings. When this happens, try lowering the volume.

To select an effect

1. Press the DIGITAL EFFECT button to switch digital effects on.

- When you do, the DIGITAL EFFECT indicator lights.
- The number that appears on the display indicates the currently selected rhythm.

2. Use the 10-key pad to input the 2-digit number for the effect you want to use. To select REVERB 1, for example, input 00.



- You can also use the [+] and [–] buttons. Pressing [+] increases the displayed effect number by 1, while [–] decreases it.

- Preset effects are automatically selected whenever you play a demo tune. These presets cannot be changed or switched off during demo tune play.
- If you change the effect while a note is still sounding, the keyboard may make an irregular sound when the effect change is made.

To switch effects on and off

Press the DIGITAL EFFECT button to switch the currently selected effect on and off.

■ Playing rhythms

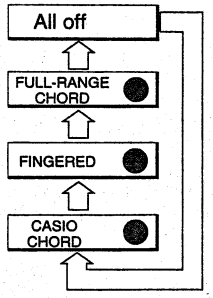
This keyboard features a collection of 128 exciting built-in rhythm patterns. Each pattern provides percussion back up for all your performances.

To select and play a rhythm

1. Make sure that power is switched on and that volume is adjusted to a comfortable level.

2. Use the MODE button to enter the NORMAL mode (all MODE indicators unlit).

- Each time you press the MODE button, the status of the indicators changes as illustrated here.

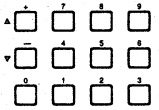


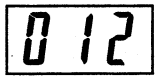
3. Look at the rhythm list printed on the keyboard's console and find the one you want.

4. Press the RHYTHM button.

- When you do, the RHYTHM indicator lights.
- The number that appears on the display indicates the currently selected rhythm.

5. Use the 10-key pad to input the 3-digit rhythm number for the rhythm you want to use. To select "012 8 BEAT 2", for example, input 0, 1, 2.





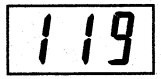
- You can also use the [+] and [–] buttons. Pressing [+] increases the displayed rhythm number by 1, while [–] decreases it.
  Be sure to always specify a 3-digit number.
- If you specify a number greater than 127, rhythm number 127 is selected automatically.
- If you discover a mistake before you input the third digit, press the RHYTHM button to return to the previously set rhythm number.

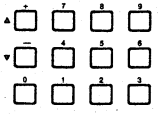
6. Press the START/STOP button to start play of the rhythm.

- When you do, the selected rhythm starts to sound, with the indicator next to the START/STOP button flashes with each beat.

7. Use the TEMPO buttons to adjust the tempo of the rhythm.

- When you press one of the TEMPO buttons, the tempo setting appears on the display. The value indicates the number of beats per minute. The display returns to normal shortly after you release the TEMPO button.
- Each time you press one of the TEMPO buttons while the tempo value is displayed, the tempo setting changes one step, within the range of 40 to 255.





- Holding down either of the TEMPO buttons changes the tempo setting at high speed.
- To reset the tempo to the standard value of each rhythm, press both TEMPO buttons or the 10-key pad's [+] and [–] buttons at the same time.
- You can also use the [+] and [–] buttons. Pressing [+] increases the displayed rhythm number by 1, while [–] decreases it.
  Be sure to always specify a 3-digit number.

8. To stop rhythm play, press the START/STOP button again.

■ Improvising with the preset patterns

Pressing the START/STOP button to start rhythm play causes the normal version of the pattern to be played. You can also play a variation of the rhythm using the operation described below.

Important!
In addition to the variations described below, you can also assign specific rhythm types to each of INTRO, NORMAL/FILL-IN, VAR/FILL-IN, and SYNCHRO/ENDING buttons. See page E-42 for details.

	• Press this button while the normal rhythm pattern is playing in order to switch to the variation pattern. • If you press this button while the variation pattern is playing, a one-measure fill-in pattern is played and then play of variation pattern continues.
	• Press this button while the variation rhythm pattern is playing in order to switch to the normal pattern. • If you press this button while the normal pattern is playing, a one-measure fill-in pattern is played and then play of normal pattern continues.

- Note that fill-in patterns can logically be inserted at specific locations inside a chord progression. Because of this, the fill-in pattern may not sound immediately when you press a fill-in button. Instead, it will sound at the next location that a fill-in pattern is possible.
- The fill-in patterns for rhythms 017 and 047 are two measures long. All others are one measure long.

To play intro and ending patterns

INTRO VAR/ FILL-IN	• When no rhythm is playing, press the INTRO button instead of the START/STOP button. When you do, an intro pattern is played to start the normal version of the selected rhythm pattern. • To start play of the variation pattern, press INTRO and then VAR/ FILL-IN.
SYNCHRO/ ENDING	• While a rhythm is playing, pressing SYNCHRO/ENDING instead of START/STOP plays an ending pattern, after which play of the pattern stops.

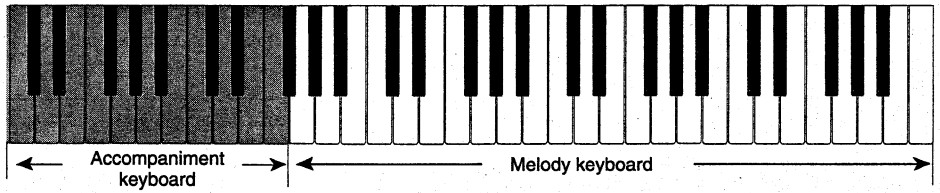
■ Using auto-accompaniment

This keyboard features 128 accompaniment patterns that let you add full accompaniments to your performances automatically. With auto-accompaniment, part of the keyboard is reserved as an accompaniment keyboard. As you play your chords on the accompaniment keyboard, the accompaniment patterns adjusts automatically to follow the progression you play.

You get a choice between two different methods for chord play. FINGERED lets you play chords as you normally do, while CASIO CHORD makes it possible to play fully formed chords with one finger. Note that this keyboard also features a FULL RANGE CHORD system (page E-31) that lets you use the entire keyboard for chord and melody play.

About the accompaniment keyboard

The lower (left) 1.5 octaves are reserved for use as an accompaniment keyboard whenever you select CASIO CHORD or FINGERED with the MODE button. The panel above the accompaniment keyboard keys is marked with the names of the notes they play. The remainder of the keyboard (the part that is not included in the accompaniment keyboard) is called the melody keyboard. Please be sure to remember these terms, because they will be used throughout the rest of this manual.



(When all the MODE button indicators are unlit, the entire keyboard becomes a melody keyboard.)

Using the CASIO CHORD system

The CASIO CHORD system lets you easily play the four main types of chords. Play of chords is simplified as shown in the chart below.

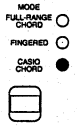
Keys	Chord Type	Example
Pressing **one** accompaniment keys	Major chord	C (C Major Chord)
Pressing **two** accompaniment keys	Minor chord	Cm (C Minor Chord)
Pressing **three** accompaniment keys	Seventh chord	C7 (C Seventh Chord)
Pressing **four** accompaniment keys	Minor seventh chord	Cm7 (C Minor Seventh Chord)

Note

The bottom (leftmost) note that you play determines the name of the chord. If the bottom note is a C for example, the keyboard produces a C chord.

To play a CASIO CHORD auto-accompaniment

1. Use the MODE button to select CASIO CHORD.



2. Select an auto-rhythm as described under "To select and play a rhythm" on page E-21.

3. Start play of the rhythm.

START/STOP

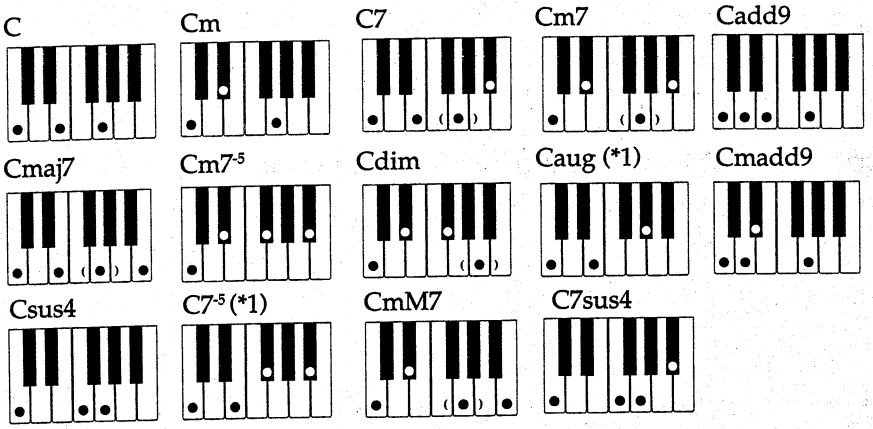
• If you want start play of the normal rhythm pattern, press START/ STOP.

- To start play of the variation rhythm pattern, press VAR/FILL-IN.
- You can also use synchro start (page E-28) to start rhythm play.

4. Press either one or up to four keys on the accompaniment keyboard, and the corresponding accompaniment starts to play automatically.
5. Continue pressing different keys on the accompaniment keyboard to play your chord progression.
6. To stop auto-accompaniment play, press START/STOP again.

Using standard fingerings

The FINGERED mode lets you play a wider variety of chords. In this mode, you can start play of an accompaniment pattern by pressing three or four of the accompaniment keyboard keys.
This keyboard is capable of recognizing 14 different chords. The following shows the fingerings of these chords with a root of C. Note that you can omit the fifth notes (which are shown inside parentheses in the illustrations below) to produce 7, m7, maj7, add9 and mM7 chords.

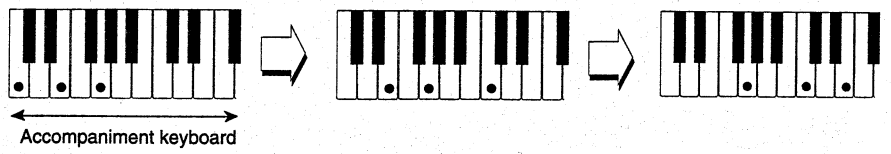


*1 With this chords, the lowest note in your fingering is always used as the root. Make sure that your fingering correctly identifies the root you want to use.

Important!
If you play one or two notes only in the left hand, or three notes that do not make up a recognizable chord formation (for example, C-D-D♯), no sound will be produced. FINGERED MODE requires a conventional three or four-note chord formation to produce an auto-accompaniment. Also, note that auto-chords only work in conjunction with rhythm patterns, and not independently of them.

Notes

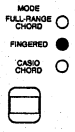
- The above examples show only one of the possible fingerings for each chord. Note that you can play the notes that form a chord in any combination. Each of the following fingerings for example, produces the same C chord.



- See the "List of fingered chords" on page A-1 for information on the fingerings of chords for all roots.

To play a FINGERED auto-accompaniment

1. Use the MODE button to select FINGERED.



2. Select an auto-rhythm as described under "To select and play a rhythm" on page E-21.
3. Start play of the rhythm.

- If you want start play of the normal rhythm pattern, press START/STOP.

- To start play of the variation rhythm pattern, press VAR/FILL-IN.
- You can also use synchro start (page E-28) to start rhythm play.

4. Play a chord on the accompaniment keyboard to start play of the auto-accompaniment.
5. Continue pressing keys on the accompaniment keyboard to play your chord progression.
6. To stop auto-accompaniment play, press START/STOP again.

To start an accompaniment with synchro start

1. Use the MODE button to select either CASIO CHORD or FINGERED.

2. Select a rhythm using the procedure described under "To select and play a rhythm" on page E-21.

3. Press the SYNCHRO/ENDING button. At this time the TEMPO indicator lights.

- If you want to start out with the variation pattern of the selected rhythm, press VAR/FILL-IN here.

4. Play a chord on the accompaniment keyboard and the accompaniment pattern starts to play.

5. To stop the accompaniment pattern, press START/STOP again.

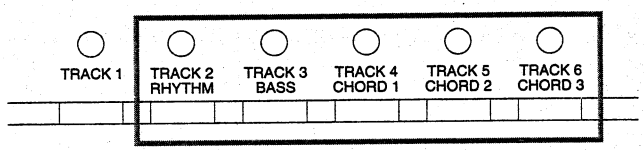
Improvising with the preset accompaniment patterns

You can use intro, fill-in, variation, and ending operations (see "Improvising with the preset patterns" on page E-23) with auto-accompaniment. Note the following when using intro and ending patterns.

- When an intro pattern is playing, the final measure of the pattern is indicated by the tempo indicator speed slowing down. This signals you to get ready to start playing.
- Intro patterns are available in major chord and minor chord versions. The keyboard automatically selects the appropriate version in accordance with the chord you play to start the accompaniment pattern.
- Ending patterns are also available in major chord and minor chord versions. The keyboard automatically selects the correct version in accordance with the last chord you play at the end of the accompaniment.

■ Switching auto-accompaniment parts on and off

Use the five part buttons to switch auto-accompaniment parts on and off.



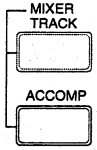
Each time you press a button, its part switches on and off. If the auto-accompaniment is not playing, the indicator above each button is lit if the part is switched on and not lit if the part is switched off. While the auto-accompaniment is playing, the indicators light while that particular part is sounding.

Note

With some auto-accompaniment, some parts contain all rests. This means that though the indicator above the button that controls such a part is lit while auto-accompaniment is not playing, nothing sounds for that part when you start auto-accompaniment play. One example of such a part is CHORD 3 of 000 LATIN FUSION.

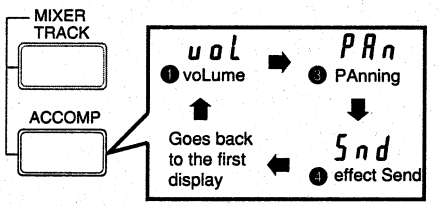
■ Mixer (Accomp mixer)

The Mixer function lets you control volume, stereo position (panning), and effect intensity for each of the five parts of an auto-accompaniment. Use the ACCOMP MIXER button to select the parameter you want to adjust.



How Mixer works

Each time you press the ACCOMP MIXER button, the display changes in the sequence shown below. Display the value for the parameter you wish to change and then use the 10-key pad keys to change it.

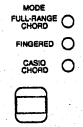


Display Number	Parameter	Range
1	Volume Balance	000 (min) - 127 (max)
2	Stereo Position	-63 (left end) - 0 (center) - 63 (right end)
3	Effect Volume	000 (off) - 127 (max)

The following example operation shows how to change the effect parameter only. Operation is identical for all of the other parameters, except for the range of the settings as shown in the table above.

To change a Mixer parameter

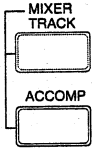
1. Start play of the auto-accompaniment that you want to work with.



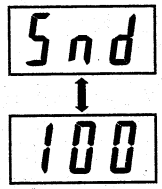
- Use the MODE button to select CASIO CHORD or FINGERED.

- Press the START/STOP button.
- Play a chord on the accompaniment keyboard.

2. Press the ACCOMP MIXER button until the display for the parameter you want to change appears.

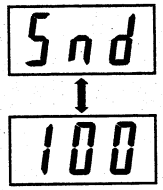


- Here we will change the effect volume for the Chord 2 part from 100 to 118, so press ACCOMP MIXER three times.
- The display alternates between the message Snd (indicating that this is the effect volume value) and a value that indicates the currently set effect volume value for one of the parts.
- The indicator above the part button that corresponds to the part whose effect depth value is displayed flashes.

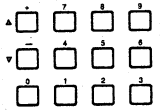


3. Press the part button for the part whose parameter you want to change.

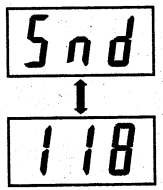
- The indicator above the part button you press starts to flash, and the display alternates between the message Snd (indicating that this is the effect volume value) and a value that indicates the currently set effect volume value.



4. Use the 10-key pad to input the 3-digit number for the effect volume value you want to use. In this example, we will input a value of 118.



- You can also use the [+] and [–] buttons. Pressing [+] increases the displayed effect number by 1, while [–] decreases it.



- Remember that you have five seconds after pressing the ACCOMP MIXER button to input the first digit or press a part button. You also have five seconds after pressing a part button to input the first digit. Otherwise, the value will disappear from the display, and you will have to press the ACCOMP MIXER button again to start again.

5. Repeat step 3 for other parts if you want.

6. Press the START/STOP button to stop auto-accompaniment play.

Using Full-Range Chords

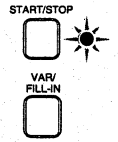
This function lets you use the entire range of the keyboard for play of accompaniment and melody. Unlike the FINGERED mode, the melody can be played in the accompaniment keyboard range, and chords can be played in the range of the melody keyboard.

To play a FULL-RANGE CHORD auto-accompaniment

1. Use the MODE button to select FULL-RANGE CHORD.

2. Select an auto-rhythm as described under "To select and play a rhythm" on page E-21.

3. Start play of the rhythm.



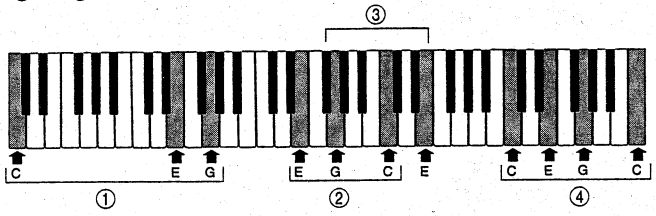
- If you want start play of the normal rhythm pattern, press START/STOP.
- To start play of the variation rhythm pattern, press VAR/FILL-IN.
- You can also use synchro start (page E-28) to start rhythm play.

4. Play the song on the keyboard.

- Anything you play using one or two keys at the same time is considered to be part of the melody, and so the corresponding notes sound as you play them.
- Anything you play using three or more keys at the same time is considered to be part of the accompaniment, and so the matching chord (using the same fingerings as FINGERED) is played.

Example - To play the chord C major

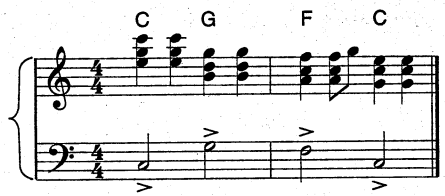
Any of the fingerings shown in the illustration below will produce C major.



- It makes no difference how far apart the keys you play are.
- As with the Fingered Mode (page E-26), you can play the notes that form a chord in any combination.
- It makes no difference if your fingering includes two or more of the same note.

Now try playing the following score using the settings noted below.

Tone :000
Rhythm :012
Tempo :085



■ Adjusting the accompaniment volume

Use the following procedure to set the volume that the accompaniment is played. You can set the volume to any value in the range of 000 to 127.

To adjust the accompaniment volume

1. Press the ACCOMP VOLUME button.

2. Use the 10-key pad to input a 3-digit number and specify the accompaniment volume level.

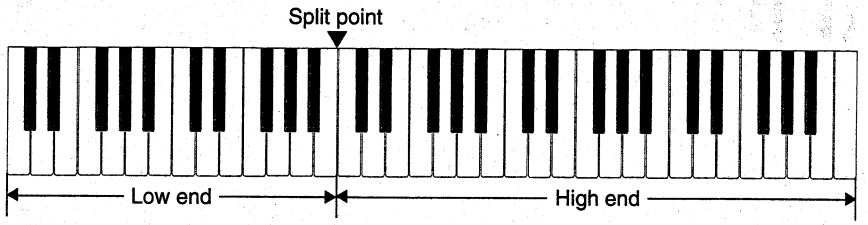
- You can also use the [+] and [–] buttons. Pressing [+] increases the volume by 1, while [–] decreases it.
- Holding down either of the key transpose buttons changes the displayed value at high speed.
- Be sure to specify a 3-digit number.
- If you specify a number greater than 127, an accompaniment volume of 127 is set automatically.
- Remember that you have about five seconds after pressing the ACCOMP VOLUME button to input the first digit. Otherwise, the accompaniment number will disappear from the display, and you will have to press the ACCOMP VOLUME button again to get it back.
- Pressing the [+] and [–] buttons at the same time automatically sets an accompaniment volume of 100.

Part 3 Advanced Operations

This part of the manual describes the more advanced features and functions of the CTK-750. Using these features effectively helps to add something extra to your performances.

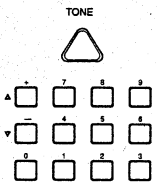
■ Using the Split function

Split lets you assign two tones to different locations on the keyboard.

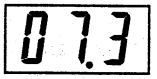


To split the keyboard

1. Select the tone that you want to assign to the high end of the keyboard.

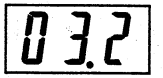


- As an example, we will assign FLUTE (tone number 073) to the high end.

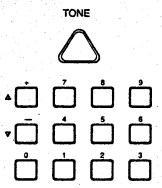


2. Press the SPLIT button to activate the Split function.

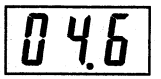
- When you do, the SPLIT indicator lights.
- The number that appears on the display indicates the tone currently assigned to the low end of the keyboard.



3. Select the tone that you want to assign to the low end of the keyboard.



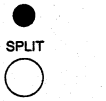
- As an example, we will assign HARP, (tone number 046) to the low end.



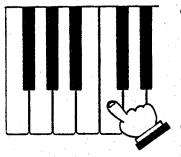
The keyboard is now split in the center, at the point shown in the illustration above.

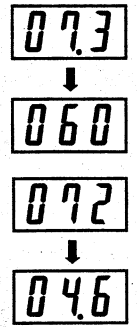
To change the location of the split point

1. Hold down the SPLIT button for about two seconds, and then press the keyboard key where you want the far left key of the high end to be.



- When you split the keyboard, the SPLIT indicator lights.
- When you holding down the SPLIT button, the first number that appears on the display indicates the current tone number. The next number that appears indicates the current split point location.
- After press a keyboard key to specify a new split point, the first number that appears on the display indicates the new split point. The next number that appears indicates the current tone number.
- The 61 keys of the keyboard are numbered, left to right, from 036 to 096.





The keyboard is now split to the left of the keyboard key you pressed in the above procedure.

Important!
The split button cannot be used during play along with demo tunes or while recording to Song Memory.

To unsplit the keyboard

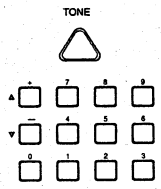
Simply press the SPLIT button so that the SPLIT indicator goes out.

■ Using the Layer function

Layer makes it possible to play two different tones at the same time by pressing a single key.

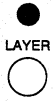
To layer tones

1. Select the tone that you want to assign as the base tone.

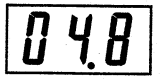


- As an example, we will set STUDIO PIANO (tone number 002) as the base tone.

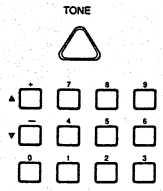
2. Press the LAYER button to activate the Layer function.



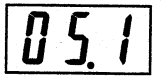
- When you do, the LAYER indicator lights.
- The number that appears on the display indicates the tone currently assigned as the layered tone.



3. Select the tone that you want to assign as the layered tone.



- As an example, we will assign SYNTH STRINGS 2, (tone number 051) as the layered tone.

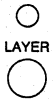


Now when you play any keyboard key, both tones that you assigned in the above procedure sound.

Important!
The layered button cannot be used during play along with demo tunes or while recording to Song Memory. Also note that layering causes a reduction in polyphony (to 8-, 10- or 16-note polyphony, depending on the tones that you layer).

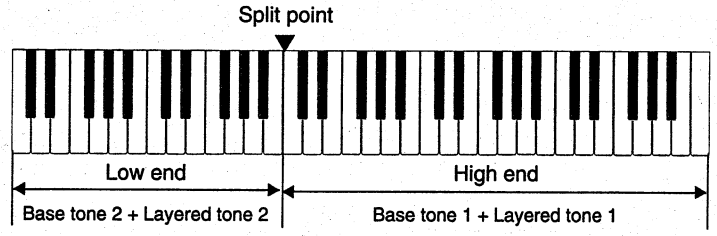
To unlayer the keyboard

Simply press the LAYER button so that the LAYER indicator goes out.



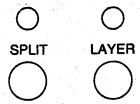
■ Using Split and Layer together

You can also use Split and Layer in combination, which results in a split keyboard configuration where the layering for the high end of the keyboard is different from the layering at the low end, as shown in the illustration, below.

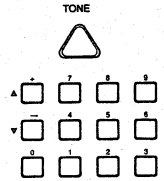


To split and layer the keyboard

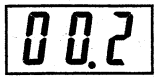
1. First, check the SPLIT and LAYER indicators to make sure that they are off. If they aren't, press the SPLIT and LAYER buttons to switch them off.



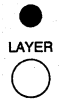
2. Select the tone that you want to assign as the base tone for the high end of the keyboard.



- As an example, we will assign STUDIO PIANO (tone number 002) as the high end base tone.

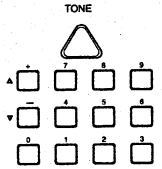


3. Press the LAYER button to activate the Layer function.

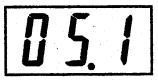


- When you do, the LAYER indicator lights.

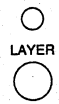
4. Select the tone that you want to assign as the layered tone for the high end of the keyboard.



- As an example, we will assign SYNTH STRINGS 2 (tone number 051) as the high end layered tone.

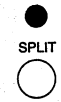


5. Press the LAYER button to deactivate the Layer function.



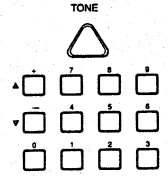
- When you do, the LAYER indicator goes out.

6. Press the SPLIT button to activate the Split function.

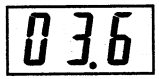


- When you do, the SPLIT indicator lights.

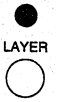
7. Select the tone that you want to assign as the base tone for the low end of the keyboard.



- As an example, we will assign SLAP BASS (tone number 036) as the low end base tone.

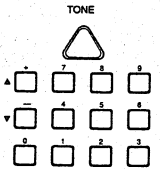


8. Press the LAYER button to activate the Layer function.

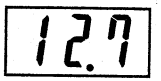


- When you do, the LAYER indicator lights.

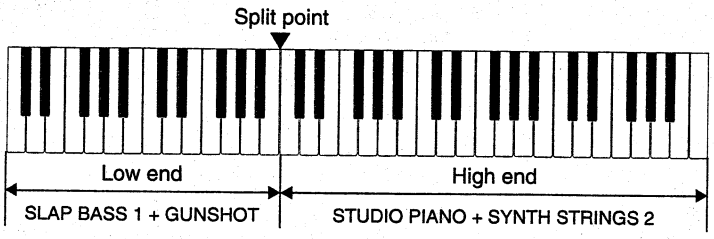
9. Select the tone that you want to assign as the layered tone for the low end of the keyboard.



- As an example, we will assign GUNSHOT (tone number 127) as the low end layered tone.

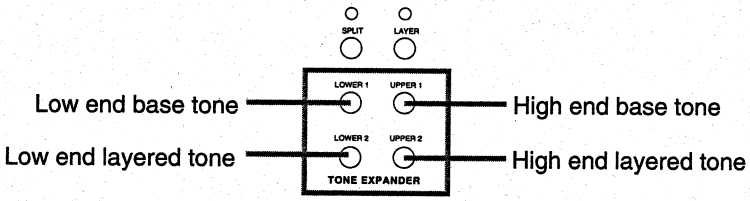


The keyboard is now split and layered in the configuration illustrated below.



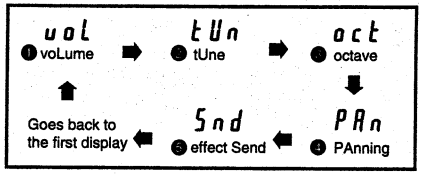
■ Tone Expander

The Tone Expander function gives you versatile control over the volume, effect intensity, and other parameters of the tones you use with Split and Layer. Use the Tone Expander buttons to select the parameter you want to adjust.



How Tone Expander works

Each time you press one of the above buttons, the display changes in the sequence shown below. Display the value for the parameter you wish to change and then use the 10-key pad keys to change it.



Display Number	Parameter	Range
1	Volume Balance	000 (min) - 127 (max)
2	Tuning*	-10 (min) - 00 (std) - 10 (max)
3	Octave	-1 (-1 octave) - 0 (std) - 1 (+1 octave)
4.	Stereo Position	-63 (left end) - 0 (center) - 63 (right end)
5	Effect Volume	000 (min) - 127 (max)

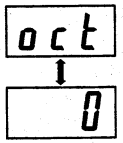
* When changing the Tuning parameter, remember that a slight change in the tuning can produce sounds that are richer and fuller bodied. If you change the tuning too far from the standard, however, the result will be distorted and out of key.

The following example operation shows how to change the octave parameter only. Operation is identical for all of the other parameters, except for the range of the settings as shown in the table above.

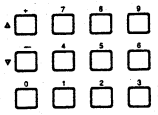
To change a Tone Expander parameter

1. Press one of the Tone Expander buttons to display the currently set value for the parameter you want to change.

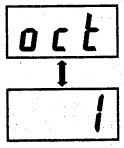
- You can press any one of the Tone Expander buttons. The one you press specifies which tone the change should be applied to.
- Here we will change the Octave setting of Lower 1 (Low end base tone), so press the LOW 1 button three times.
- The display alternates between the message oct (indicating that this is the octave value) and a value that indicates the currently set octave value for Lower 1.



2. Use the 10-key pad to input the 3-digit number for the octave value you want to use. In this example, we will input a value of 1.



- You can also use the [+] and [–] buttons. Pressing [+] increases the displayed effect number by 1, while [–] decreases it.
- Remember that you have five seconds after pressing the Tone Expander button to input the first digit. Otherwise, the value will disappear from the display, and you will have to press a Tone Expander button again to get it back.



■ Using the sound/control pads

The sound/control pads put a variety of useful sound effects and controls at your fingertips. You get a choice of 32 sets of sound effects and controls (see page E-40/E-41 for a full list) that you can assign to the pads. Once you set the pads to the functions that you want, they are always on hand whenever you need them.

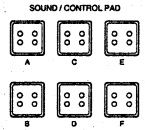
Types of operations available for the pads

Function	Function Numbers	Description
Phrases	00 to 09	Short musical phrases. 00 is the default setting for the pads.
Percussion/ Sound Effects	10 to 29	Percussion and sound effects
Controller	30 to 31	Controls for pitch, vibrato, etc.

To change the pad functions

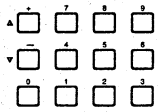
1. Look at the pad function list printed on the keyboard's console and find the one you want to assign to the pads.
   - Here we will assign set 05, which is PHRASE 6.

2. Press any one of the six pads and the number that identifies the set of functions currently assigned to the pads appears on the display.

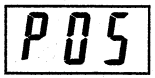


- The number remains on the display for about two seconds.

3. While the function set number is on the display, use the 10-key pad to input the number of the set of functions you want to change to.



- Remember that you have two seconds after pressing the pad to input the first digit. Otherwise, the pad function number will disappear from the display, and you will have to press a pad again to get it back.



The following lists show each of the sounds and controls that can be assigned to the pads. Note that assignment is made in sets of 6. You cannot assign to each pad individually.

Phrases (00 to 09)

The numbers in parentheses are the tone numbers used for each pad.

00	A	TIMPANY (047)	D	COUNTRY FARM (094)	05	A	FIFTHLEAD (086)	D	THUMB PIANO (108)
	B	HARP (046)	E	HONKY-TONK (003)		B	STRINGS (048)	E	GLOCKENSPIEL (009)
	C	BRASS (061)	F	ORCHESTRA HIT (055)		C	PIANO (000)	F	CELESTA (008)
01	A	ATMOSPHERE (099)	D	PEARL DROP (096)	06	A	GUNSHOT (127)	D	METAL LEAD (084)
	B	BRIGHTNESS (100)	E	CRYSTAL (098)		B	SYNTH-LEAD1(080)	E	DRUM
	C	COSMIC SOUND (103)	F	FANTASY (088)		C	DRUM	F	ELEC TOM (118)
02	A	PIANO (000)	D	TRUMPET (056)	07	A	PIANO (000)	D	PIANO (000)
	B	PIANO (000)	E	ORCHESTRA HIT (055)		B	PIANO (000)	E	PIANO (000)
	C	STRINGS (048)	F	FRENCH HORN (060)		C	PIANO (000)	F	PIANO (000)
03	A	FLUTE (073)	D	CHOIR (052)	08	A	DRUM	D	DRUM
	B	PICCOLO (072)	E	HARPSICHORD (006)		B	DRUM	E	DRUM
	C	VIOLA (041)	F	PIZZICATO STR (045)		C	DRUM	F	DRUM
04	A	ENGLISH HORN (069)	D	WOOD BASS (032)	09	A	DRUM	D	DRUM
	B	SITAR (104)	E	GLASS HARMONICA (092)		B	DRUM	E	DRUM
	C	STEEL DRUM (114)	F	WHISTLE (078)		C	DRUM	F	DRUM

Percussion/Sound Effects (10 to 29)

10	A	KICK 1	D	HIHAT-OPEN	14	A	KICK 3	D	HIHAT-OPEN
	B	SNARE 1	E	RIDE 1		B	SNARE 2	E	RIDE 1
	C	HIHAT-CLOSE	F	CLASH 1		C	HIHAT-CLOSE	F	CLASH 1
11	A	KICK 1	D	TOM-LOW	15	A	KICK 3	D	ELECTOM-LOW
	B	SNARE 1	E	HIHAT-CLOSE		B	SNARE 2	E	HIHAT-CLOSE
	C	TOM-HIGH	F	HIHAT-OPEN		C	ELECTOM-HIGH	F	HIHAT-OPEN
12	A	KICK 4	D	HIHAT-OPEN	16	A	KICK	D	HIHAT-OPEN
	B	SNARE 5	E	RIDE 1		B	SNARE	E	RIDE
	C	HIHAT-CLOSE	F	CLASH 1		C	HIHAT-CLOSE	F	CLASH
13	A	KICK 4	D	TOM-LOW	17	A	KICK	D	TOM-LOW
	B	SNARE 5	E	HIHAT-CLOSE		B	SNARE	E	HIHAT-CLOSE
	C	TOM-HIGH	F	HIHAT-OPEN		C	TOM-HIGH	F	HIHAT-OPEN

18	A	RIDE 2	D	CLASH 1	24	A	WHISTLE-SHORT	D	GUIRO-LONG
	B	RIDE 1	E	SPLASH		B	WHISTLE-LONG	E	VIBRASLAP
	C	CLASH 2	F	CHINA		C	GUIRO-SHORT	F	SHAKER
19	A	KICK 1	D	HAND-CLAP	25	A	TRIANGLE-MUTE	D	BELL
	B	SNARE 1	E	STICK		B	TRIANGLE-OPEN	E	AGOGO-HIGH
	C	SIDE-STICK	F	TAMBOURINE		C	COWBELL	F	AGOGO-LOW
20	A	CONG-HIGH	D	CLAVES	26	A	HAND-CLAP	D	SCRATCH 3
	B	CONG-LOW	E	BONG-HIGH		B	SCRATCH 1	E	TAMBOURINE
	C	CONG-MUTE	F	BONG-LOW		C	SCRATCH 2	F	STICK
21	A	TIMBALE-HIGH	D	AGOGO-LOW	27	A	STEELDRUM-HIGH	D	TAIKO-LOW
	B	TIMBALE-LOW	E	CUICA-MUTE		B	STEELDRUM-LOW	E	REVERSE-CYMBAL-HIGH
	C	AGOGO-HIGH	F	CUICA-OPEN		C	TAIKO-HIGH	F	REVERSE-CYMBAL-LOW
22	A	WOODBLOCK-HIGH	D	MARACAS	28	A	ORCHIT-LOW	D	TIMPANI-MID
	B	WOODBLOCK-LOW	E	CABASA		B	TIMPANI-LOW	E	ORCHIT-HIGH
	C	CLAVES	F	SHAKER		C	ORCHIT-MID	F	TIMPANI-HIGH
23	A	CUICA-MUTE	D	TAMBOURINE	29	A	APPLAUSE	D	TELEPHONE
	B	CUICA-OPEN	E	TIMBALE-HIGH		B	HELICOPTER	E	BIRD
	C	VIBRASLAP	F	TIMBALE-LOW		C	GUNSHOT	F	SEASHORE

Controller (30 to 31)

30	A	BEND UP (FAST)	D	MODULATION (DEEP)	31	A	BEND UP (SLOW)	D	BEND DOWN AND UP
	B	BEND DOWN (FAST)	E	BEND SAW		B	BEND DOWN (SLOW)	E	BEND TREMOLO
	C	MODULATION (SHALLOW)	F	BEND SAW		C	BEND UP AND DOWN	F	BEND TREMOLO

Notes

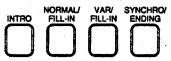
- Bend Up/Bend Down produces an effect like the one that is produced by bending the strings of a guitar. The range is two semitones up and down from the original note.
- The bend range for Bend Up/Bend Down is adjustable to either two semitones or three semitones ("To set the bend range" on page E-67).
- Modulation changes the amplitude of vibrato.
- Use the ACCOMP VOLUME button to control the volume for pads 08 and 09.

■ Assigning rhythms to the Intro, Variation, and Ending Buttons

Normally when you press an Intro, Variation, or Ending button, a corresponding pattern is played to match the main rhythm that you are currently using. Using the procedure described below, however, you can assign any of the 128 rhythms to each of the Intro, Fill-In, and Ending buttons. When you do, a pattern that matches the preset rhythm sounds when you press the button.

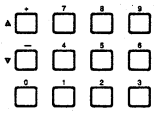
To change the Intro, Fill-In, and Ending button rhythm assignments

1. Press the Intro, Fill-In, or Synchro/Ending button whose rhythm you want to change and the number that identifies the rhythm currently assigned to the button appears on the display.

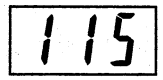


- The number remains on the display for about two seconds.

2. While the rhythm number is on the display, use the 10-key pad to input the number of the rhythm you want to change to.



- Remember that you have two seconds after pressing the button to input the first digit. Otherwise, the rhythm number will disappear from the display, and you will have to press the button again to get it back.



- Whenever you change to a different main rhythm, all of above buttons automatically change to the new rhythm.
- You can also change the rhythm assigned to the NORMAL/FILL-IN button. When you do, however, the display for the main rhythm continues to show the main rhythm setting, even though the rhythm you assigned to the NORMAL/FILL-IN button is the one that sounds.

  Example: When 000 is set as the main rhythms and you assign 111 to the NORMAL/FILL-IN button.
  In this case, pressing the NORMAL/FILL-IN button causes rhythm 111 to sound, but the rhythm display shows 000.

■ Using Magical Presets

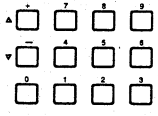
Magical Presets let you configure the keyboard to perform a variety of special effects, such as playing a short accompaniment phrase when you press a keyboard key, change tones each time you press a keyboard key, and much more. There are a total of 128 Magical Presets in memory for instant recall when you need them.

To change the Magical Preset

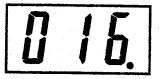
1. Look at the magical preset list printed on the keyboard's console and find the one you want.
   - Here we will assign Magical Preset 016, which is Melodycomp 1.
2. Press the MAGICAL PRESET button, and the number that identifies the current Magical Preset appears on the display.

- Note that the "•" indicator on the display moves to the far right to indicate the Magical Preset display.

3. Use the 10-key pad to input the number Magical Preset you want to change to.



- You can also use the [+] and [–] buttons. Pressing [+] increases the displayed Magical Preset number by 1, while [–] decreases it.
- Be sure to always specify a 3-digit number.
- If you specify a number greater than 127, Magical Preset number 127 is selected automatically.

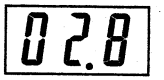


The keyboard is now assigned the Magical Preset that you specified in the above procedure. Following are detailed explanations of each type of Magical Preset.

To switch Magical Preset off

Press the MAGICAL PRESET button to switch the function off.

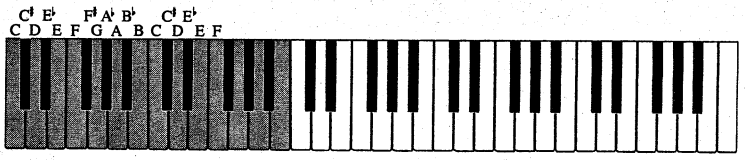
- Note that the "•" indicator on the display moves to the left to indicate that Magical Preset is switched off.



■ About Magical Presets

Following are detailed explanations of each type of Magical Preset.

Break Beat (000 to 015)
With Break Beat, pressing any of the keys in the range shown below, causes the selected Break Beat phrase to sound. Each phrase is four measures long, and it continues to sound as long as you keep the key depressed. The phrase is played in the key that corresponds to the keyboard key that you press (pressing C plays the phrase in C). Note that you can also control the tempo of the phrase using the TEMPO buttons.

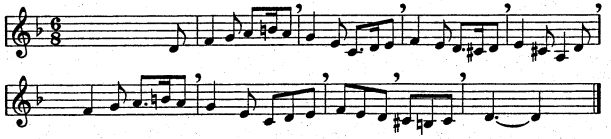


Break Beat Application Examples

- Keep a Break Beat keyboard key depressed and play along with a melody for ad-lib practice with a single chord.
- Press a different Break Beat keyboard key at the point where a progression changes chords and play the chord using the accompaniment keyboard.
- Play a song's base part on the Break Beat keyboard.

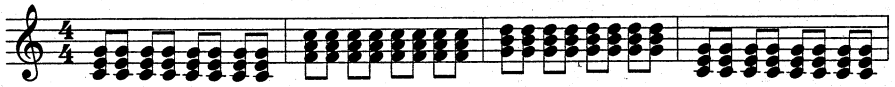
Melodycomp (016 to 023)
Melodycomp automatically plays chord-like tones, changing to the next chord as long as you press the keyboard key. Note that in some cases, a very slow or fast tempo may make it difficult for you to time chord changes correctly. In this case, it is best to have the tempo at a middle setting.
When playing a song with a melody that corresponds to a Melodycomp chord progression, a full orchestra effect can be achieved by simply playing the melody.

Example : Greensleeves
Magical Preset Number : 019
Tone Number : 046



- In general, play in legato without completely removing your fingers from the keyboard.
- Momentarily release all keys where marked with in the score.
- If you want to stop and start again from the beginning, reset the Magical Preset and tone numbers.

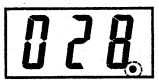
Shadow Drum (024 to 027)
With Shadow Drum, pressing a keyboard key plays the percussion sound. As shown in the score below, if you play notes at fixed intervals, it creates the effect of playing along with a drummer.



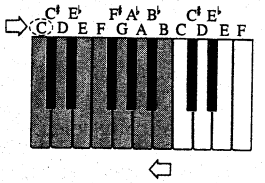
Free Session (028 to 059)
Free Session gives you a selection of preset chord progressions (see page A-4 for a full list) that you can play along with. Free Session chord changes play automatically, independent of what you play on the keyboard. Use the following procedure to start a Free Session progression.

To start a Free Session progression

1. After selecting the Free Session progression you want to use (see "To change the Magical Preset" on page E-43), press a key on the Free Session accompaniment keyboard to define the key of the progression.



- Pressing one of the keys in the above illustration starts auto-accompaniment play in the key that matches the key you press. You can then use any of the keyboard's keys to play Free Session chords. To select the key of C for example, press the C key.



2. You can also change the rhythm being used with a Free Session progression.

3. To stop play of the Free Session progression, press the START/STOP button.

- Note that you can use ending patterns (see "Improvising with the preset patterns" on page E-23) with Free Session progressions.
- Whenever you play a fill-in pattern during a performance using Free Session, play returns to the first chord of the selected chord progression.

Tone Stack (060 to 099)
Tone Stack brings you additional tones that are separate from the standard preset tones. Note, that you can play auto rhythms with Tone Stack tones, but you cannot use auto-accompaniment.

Key Split (100 to 111)
Key Split splits the keyboard between a number of different tones and sounds.

100 to 103	Sound Effects
104 to 107	Percussion (no sound produces on the 9 far right keyboard keys)
108 to 111	Bass + Keyboard tones

- You can play auto rhythms with Key Split tones, but you cannot use auto-accompaniment.
- 104 is the same as tone number [d-0].
- 105 is the same as tone number [d-1].
- 106 is the same as tone number [d-2] with effects.
- 107 is the same as tone number [d-4].

Hyperactive (112 to 127)

112 to 115	Each press of a key changes the stereo position
116 to 119	Pressing a single key plays an arpeggio pattern based on the note played. You can use the TEMPO buttons to change the tempo used for the arpeggio.
120 to 123	Each press of a key changes the tone
124 to 127	Pressing a single key automatically adds harmony

- The tone is automatically set to match the Hyperactive effect that is selected.
- You can use the TONE button to select another tone while using Hyperactive. When you do, the initial note is played in accordance with your selection, but arpeggio patterns and harmony notes are played using the initial tones automatically selected by the Hyperactive function.
- You can play auto rhythms with Hyperactive, but you cannot use auto-accompaniment.

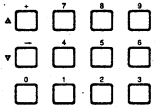
■ Using TONE buttons with Magical Presets

You can use the TONE button to change tones while you are using Magical Presets.

To change the tone

1. Press the MAGICAL PRESET button.

2. Use the 10-key pad to select the Magical Preset you want to use.



3. Press the TONE button.

4. Use the 10-key pad to input a tone number.

- To change to another Magical Preset, press the MAGICAL PRESET button. To use the Magical Preset that you were using again, press the MAGICAL PRESET button and then select that Magical Preset number again.
- When you press the TONE button, either the currently selected tone number, the currently selected Magical Preset number, or a number used by the keyboard for internal processing appears on the display. The type of number depends on the type of Magical Preset that you are using.

*1 When you are using Magical Preset 065, for example, pressing the TONE button displays 047.

*2 When you are using Magical Preset 060, for example, pressing the TONE button displays 145.

- Selecting one of the 128 preset tones and 6 drum sounds while using Tone Stack (060 to 099) causes the selected preset tone and the Tone Stack tone to sound together.
- Selecting one of the 128 preset tones while using Key Split (108 to 111) causes the selected preset tone to sound when you play on the high end of the keyboard.
- If you press the LAYER or SPLIT button while a Magical Preset number is shown on the display, the Magical Preset number is cleared and the display changes to show data for the button you pressed.

■ Using the Registration function

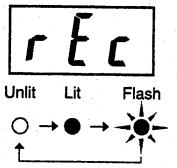
With the Registration function, you can save setups such as tone and rhythm selections, tempo settings, and effect selections for instant recall. You can store up to 10 set-ups (0 to 9) in registration memory.

To store a set-up

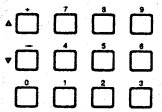
1. First of all, make the following settings and selections:
   - Tone number
   - Rhythm number
   - Tempo
   - Chord type (NORMAL, CASIO CHORD, FINGERED, FULL RANGE CHORD)
   - Accompaniment volume
   - Effects
   - Layer on/off
   - Split on/off
   - Auto-accompaniment part on/off setting
   - Accomp mixer setting
   - Tone expander setting
   - Pad function set
   - Assignable jack
   - MIDI sent channel on/off; GM on/off; local control on/off; bend range, auto-accompaniment on/off
   - Rhythm settings for the INTRO, NORMAL/FILL-IN, VAR/FILL-IN, and SYNCHRO/ENDING buttons

2. Press the REGISTRATION button twice.

- The REGISTRATION indicator starts to flash.
- Each press of the REGISTRATION button changes the REGISTRATION indicator as shown on the right. Make sure that [rEc] is shown on the display.
- Note that the REGISTRATION button is not operational while a Magical Preset number is displayed or while the Song Memory indicator is lit.



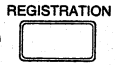
3. Use the 10-key pad to input the number of the registration memory where you want to store your set-up.



- Specify 0 to 9.
- You can also use the 10-key pad's [+] or [–] to change the displayed value.

- Remember that you have five seconds after pressing the REGISTRATION button to input the number. Otherwise, the [rEc] message will disappear from the display, and you will have to press the REGISTRATION button again to get it back.
- Note that if you store a set-up to a memory location that already contains a set-up, the previous set-up is replaced by the new one.

4. After inputting a number, press the REGISTRATION button again to store the set-up in memory.

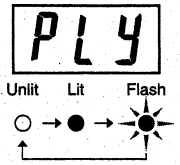


To recall a setup

1. Press the REGISTRATION button.

REGISTRATION

- The REGISTRATION indicator lights.
- Each press of the REGISTRATION button changes the REGISTRATION indicator as shown on the right. Make sure that PLY is shown on the display.
- Note that the REGISTRATION button is not operational while a Magical Preset number is displayed or while the Song Memory indicator is lit.



2. Use the 10-key pad to input the number of the registration memory that contains the set-up you want to recall.

- Specify 0 to 9.
- You can also use the 10-key pad's [+] or [–] to change the displayed value.
- Remember that you have five seconds after pressing the REGISTRATION button to input the number. Otherwise, the PLY message will disappear from the display, and you will have to press the REGISTRATION button again to get it back.

Important!

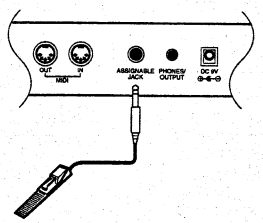
The following occurs whenever you recall a Registration Memory set-up while a rhythm is sounding.

- The currently selected rhythm does not change to the rhythm specified in the recalled Registration Memory set-up.
- If the number of the currently selected rhythm is on the display when you recall a Registration Memory set-up in which the last parameter you input was a rhythm number, the displayed number changes to the rhythm specified in the recalled Registration Memory set-up (though the rhythm itself does not change).
- If the number of the currently selected rhythm is on the display when you recall a Registration Memory set-up in which the last parameter you input was not a rhythm number, the displayed number continues to show the currently selected rhythm (which remains selected).
- All other parameters change to those specified in the Registration Memory set-up.
- After the Registration Memory set-up is recalled, any of the following operations will cause the rhythm to change to the one specified in the recalled Registration Memory set-up: NORMAL/FILL-IN, VAR/FILL-IN, SYNCHRO/ENDING, START/STOP, INTRO.

To switch the Registration function off

The keyboard automatically switches the Registration function off whenever you change any setting already stored in a Registration memory.

■ Assignable jack



The name suggests, an assignable jack is one to which you can assign a function. Specifically, you can assign pedal functions for an optionally available foot pedal (SP-2 or SP-10).

The following are the functions that can be assigned to the assignable jack.

Function	Display Indicator	Description
Sustain	SUS	• With piano and other attenuating tones, the pedal works like a piano's damper pedal to cause notes to linger. • With organ and other sustaining tones, pressing the pedal causes the played note to be held.
Sostenuto	SoS	• This function works similarly to Sustain, but the timing of the effect is different from that used for Sustain. If the pedal is pressed after a note is played (and the keyboard key is still depressed), only that note is sustained.
Soft	SFt	• Softens notes played on the keyboard
Rhythm Start/Stop	rHY	• This function assigns the function of the START/STOP button to the pedal.

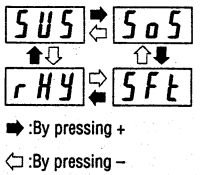
To change the assignable jack function

1. Press the JACK button.

JACK

2. Use the 10-key pad's [+] and [–] buttons to change the displayed assignable jack function to the one you want to use.

- Each press of [+] and [–] changes the assignable jack function in the following sequence.
- Remember that you have five seconds after displaying the JAc message to input the number. Otherwise, the JAc message will disappear from the display, and you will have to press the MIDI button again to get it back.



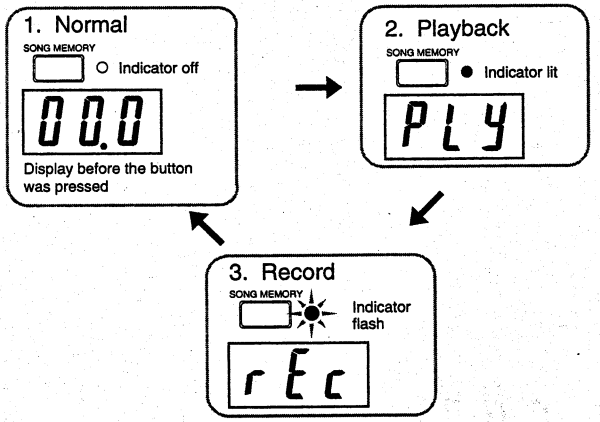
Part 4 Song Memory

The Song Memory lets you record up to two songs, with a total of approximately 5,800 notes in memory. You can then play it back and even play along with yourself on the keyboard. The following are some of the features that are available when using the Song Memory.

- You can adjust the tempo of the playback to practice at the speed you want.
- You can record over previous recordings up to five times (multi-track recording), and even use different tones for each recording.
- You can record auto-accompaniment parts and melody parts separately.

How Song Memory works

Each time you press the SONG MEMORY button, the status of the Song Memory indicator changes in the sequence shown below. Press the SONG MEMORY button until its indicator shows the status you want.



Status Number	Name	Operation
1	Normal	Song Memory operations off
2	Playback	Playing back notes from Song Memory
3	Record	Recording notes to Song Memory

Important!

- Be sure to switch song memory operations off (by pressing the SONG MEMORY button until its indicator is off) after using the Song Memory. Some of the functions of this keyboard (For example; Magical Presets, Registration Memory recording and recall) are disabled while the Song Memory indicator is lit or flashing.

■ Recording to Song Memory

This section describes how to make an initial recording to Song Memory as you play on the keyboard. Use this operation to make a base recording, to which you can later add other tracks (page E-53).

Important!

- Any time you store something into Song Memory, anything that was previously there is automatically deleted and replaced with the new recording.
- Song Memory contents are retained in memory as long as power is supplied from batteries or an AC outlet. If power is cut off (by dead batteries and unplugging from an AC outlet), everything stored in Song Memory will be deleted.
- If the POWER indicator goes out while recording is in progress, anything recorded up to that point is deleted.

Song Memory capacity

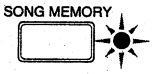
Song Memory can hold up to two songs, with a total of approximately 5,800 notes. You can record one song with 5,800 notes, or two songs with a total of up to 5,800 notes. Whenever the Song Memory has less than 100 notes of capacity remaining while you are recording, the Song Memory indicator starts to flash quickly. If you are using auto-accompaniment, it stops when memory becomes full.

To record a base track to Song Memory

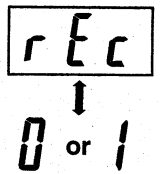
1. First, set up the keyboard to play the tune you want to play.

- Switch power on.
- The SONG MEMORY button is not operational while a Magical Preset number (page E-43) is displayed. If a Magical Preset number is displayed, press MAGICAL PRESET to switch the Magical Preset function off.
- Select a rhythm.
- Set the tempo.
- Switch off the auto-accompaniment parts you don't want to use. Do this now, because you will not be able to switch parts on and off while recording is in progress.

2. Press the SONG MEMORY button twice.

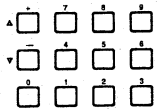


- The SONG MEMORY indicator starts to flash.
- Each press of the SONG MEMORY button changes the status of the SONG MEMORY indicator between lit, flashing, and off. Make sure that the indicator is flashing and that rEc is shown on the display.
- The display alternates between the message rEc (indicating that this is the Record Mode) and a value that indicates the currently selected song number (0 or 1).



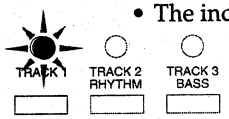
- Note that pressing the SONG MEMORY button automatically cancels any Layer or Split settings (page E-33/E-34) if you were using these functions.

3. Use the 10-key pad to input 0 or 1 to specify the song number. You can think of song numbers as Side A and Side B of an audio cassette.



- You can also use the [+] and [–] buttons. Pressing [+] selects song number 1, while [–] selects song number 2.
- Remember that you have five seconds after pressing the SONG MEMORY button to input the song number. Otherwise, the song number will disappear from the display, and you will have to press the SONG MEMORY button again to get it back.

4. Press TRACK NUMBER button 1 to select track 1.



- The indicator of the TRACK NUMBER button 1 starts to flash.

5. Use the MODE button to select CASIO CHORD or FINGERED.

6. Press the START/STOP button to start recording.

- If you want to use synchro start (page E-28), press the SYNCHRO/ENDING button instead of START/STOP here.
- If you want to use an intro with synchro start (page E-28), press the SYNCHRO/ENDING button and then the INTRO button instead of START/STOP here.
- If you want to record without auto-accompaniment, set up the keyboard for normal mode and skip this step. If you do not press START/STOP here, recording starts automatically when you start playing the song in the next step.

7. Play the song that you want to record.
   - If you want auto-accompaniment play to start after you start keyboard play, set up the keyboard for synchro start in the preceding step, and start keyboard play using the melody keyboard (page E-24) only. When you want the auto-accompaniment to start, play on the accompaniment keyboard.
   - If you are using auto-accompaniment, both the melody and the auto-accompaniment pattern is recorded.

8. After the song is finished, press the START/STOP button to stop the recording operation.

- To end with an ending pattern, press the SYNCHRO/ENDING button (page E-24). The ending pattern will play and then recording and the rhythm pattern will stop automatically.
- After you finish a recording to the Song Memory, the Song Memory indicator is lit.
- You can play back the song you have just recorded by pressing the START/STOP button. See page E-57 for details on playing back from Song Memory.

About Song Memory data

In addition to the notes you play on the keyboard, the following data is also stored in Song Memory. These operations are also performed whenever you play back from Song Memory. Note that transpose, tuning, tempo changes you make during recording, effect type, split on/off and layer on/off, accompaniment volume setting are not reproduced during playback.

- Tone numbers
- Rhythm numbers
- Intros
- Endings
- Accompaniment patterns (NORMAL and VARIATION)
- Fill-ins (NORMAL and VARIATION)
- Chord progressions
- Pitch bender operations
- Optional pedal operations
- Pad operations
- Chord type (NORMAL, CASIO CHORD, FINGERED, FULL RANGE CHORD)
- Assignable jack settings
- Rhythm numbers assigned to the four auto-accompaniment buttons (INTRO, NORMAL/FILL-IN, VAR/FILL-IN, SYNCHRO/ENDING)

How Touch Response is handled by Song Memory

A song recorded into Song Memory includes Touch Response data. Note, however, that the Touch Response applied for playback is in accordance with the Touch Response sensitivity settings (see "To set the touch sensitivity" on page E-74) in effect on the keyboard during playback.

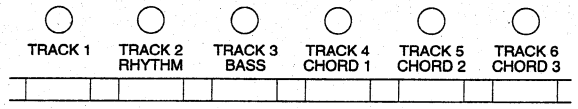
- Whenever you change Touch Response sensitivity while playing back from the Song Memory, that setting is not immediately applied to the playback of the song that is playing. It will be applied starting from playback of the next song. You should note, however, that the new Touch Response sensitivity setting is immediately applied to keyboard play, even during playback of the current song.

Important!

Transpose, Tuning, Tempo, Effect Volume, and accompaniment volume setting are not stored into Song Memory.

■ Multi-Track Recording

Song Memory gives you six tracks for recording, which means that once you record a basic track, you can add up to five more tracks while listening to what you have already recorded. Then when you play back the tracks, all of the parts you have recorded are played back as a single song.



What is a track?

A track is a recorded part. The Song Memory of this keyboard has a total of six tracks.

	Start	End
Track 1	Auto-accompaniment (Rhythm, bass, Chord 1, Chord 2, Chord 3), pad operations, melody	
Track 2	Keyboard play	
Track 3	Keyboard play	
Track 4	Keyboard play	
Track 5	Keyboard play	
Track 6	Keyboard play	

How tracks are organized

- As shown in the above illustration, there is one basic track that contains the melody you play on the keyboard, as well as auto-accompaniment patterns and pad operations. With the other tracks, you can record parts you play on the keyboard only.
- Each track is independent of the others. This means that if you record over a track, only that track's contents are replaced with the new recording. If you make a mistake while recording a track, you need only to re-record that track.
- You can use different Mixer settings for each track (page E-56).

Ways to use multi-track recording

- If you have problems playing chords and melody at the same time, record the auto- accompaniment in Track 1, and then add the melody with another track. This frees both hands for melody play and pitch bender operations.
- You can record your own bass and chord patterns in Tracks 2 through 6 and then use them in place of the keyboard's built-in patterns. To do this, cancel the bass and chord parts of the auto-accompaniment and play back the tracks.

Important!

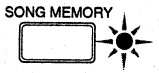
Remember that the total number of notes that can be played at the same time (polyphony) is 32. If your multi-track recording causes more than 32 notes to be played at the same time, the earliest notes sounded will be eliminated.

To perform a multi-track recording

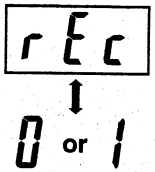
1. First, set up the keyboard to play the tune you want to play.

- Switch power on.
- You will not be able to record to Song Memory while a Magical Preset number (page E-43) is displayed. If a Magical Preset number is displayed, press MAGICAL PRESET to switch the Magical Preset function off.
- Set the tempo.
- Select a tone.

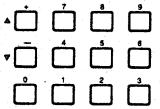
2. Press the SONG MEMORY button twice.



- The SONG MEMORY indicator starts to flash.
- Each press of the SONG MEMORY button changes the status of the SONG MEMORY indicator between lit, flashing, and off. Make sure that the indicator is flashing and that rEc is shown on he display.
- The display alternates between the message rEc (indicating that this is the Record Mode) and a value that indicates the currently selected song number (0 or 1).

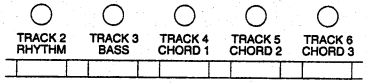


3. Use the 10-key pad to input 0 or 1 to specify the song number. Make sure that you correctly select the song that you want to use for multi-track recording.



- You can also use the [+] and [-] buttons.
- Remember that you have five seconds after pressing the SONG MEMORY button to input the song number. Otherwise, the song number will disappear from the display, and you will have to press the SONG MEMORY button again to get it back.

4. Press a TRACK NUMBER button to select any track from 2 through 6.



- The indicator of the TRACK NUMBER button you press starts to flash.

5. Start recording.

- Press START/STOP or play something on the keyboard.
- When you start recording, any tracks already recorded start to play back.

6. Play the part that you want to record.

- In addition to the notes you play, pitch bender operations, optional pedal operations, and tone changes are also stored in the track.

7. After the song is finished, press the START/STOP button to stop the recording operation.

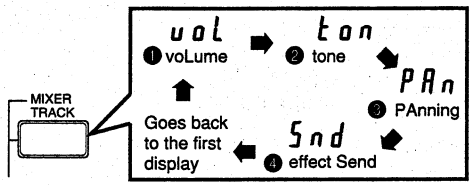
- Note that even if the auto-accompaniment pattern stops playing, the record operation continues until you press START/STOP.
- You can play back the song you have just recorded by pressing the START/STOP button. See page E-57 for details on playing back from Song Memory.
- If you want to re-record to the current track to another track, proceed from step 4.

■ Recording Mixer (TRACK MIXER) settings

You can record individual Mixer settings for volume, tone, panning, and effect depth for each of the six Song Memory tracks.

General operation

Each time you press the TRACK MIXER button, the display changes in the sequence shown below. Display the value for the parameter you wish to change and then use the 10-key pad keys to change it.

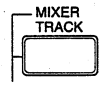


Display Number	Parameter	Range
1	Volume Balance	000 (min) - 127 (max)
2	Tone	000 - 127 - dr.0 - dr.5*
3	Stereo Position	-63 (left end) - 0 (center) - 63 (right end)
4	Effect Volume	000 (min) - 127 (max)

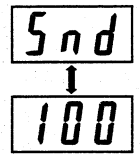
* Note that the tone number does not appear on the display while the Magical Preset function is activated.

To change a Track Mixer parameter

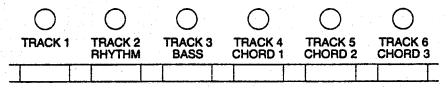
1. Press the TRACK MIXER button until the display for the parameter you want to change appears.



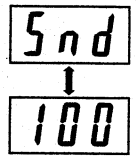
- The track that this change will be applied to is the one whose indicator is flashing.
- Here we will change the effect volume for the Chord 2 part from 100 to 118, so press TRACK MIXER three times.
- The display alternates between the message Snd (indicating that this is the effect volume value) and a value that indicates the currently set effect volume value for one of the parts.



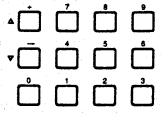
2. Press the TRACK NUMBER button for the track whose Mixer settings you want to change.



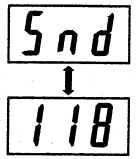
- The indicator of the TRACK NUMBER button you press starts to flash.
- The indicator above the part button you press starts to flash, and the display alternates between the message Snd (indicating that this is the effect volume value) and a value that indicates the currently set effect volume value.



3. Use the 10-key pad to input the 3-digit number for the effect volume value you want to use. In this example, we will input a value of 118.



- You can also use the [+] and [–] buttons. Pressing [+] increases the displayed effect volume value by 1, while [–] decreases it.
- Remember that you have five seconds after pressing the TRACK MIXER button to input the first digit or press a part button. You also have five seconds after pressing a part button to input the first digit. Otherwise, the value will disappear from the display, and you will have to press the TRACK MIXER button again to start again.



4. Repeat this procedure from step 2 for other tracks if you want.

Notes

- The above procedure is used to select the tones that are used when you start play in each track. Note that tone changes you make while recording are also recorded as part of the track's data.
- You can also perform the above operation for Song Memory playback.
- Volume, tuning, octave, panning, and effect depth settings during recording are automatically set to the same parameters as the Tone Expander's high-end base tone (page E-38). When you are using MIDI, tuning and octave for tracks 1 through 6 are initialized whenever a program change is received for receive track 11 throught 16. The following shows tha relationship between receive and initialize tracks.

Receive Tracks	11	12	13	14	15	16
Initialize Tracks	1	2	3	4	5	6

■ Playing back from Song Memory

Use the following procedure to play back songs recorded in Song Memory.

To play back a song from Song Memory

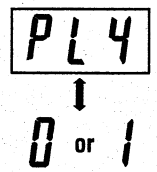
1. First, set up the keyboard

- Switch power on.
- You will not be able to playback a song from Song Memory while a Magical Preset number (page E-43) is displayed. If a Magical Preset number is displayed, press MAGICAL PRESET to switch the Magical Preset function off.

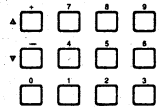
- Set the tempo.
- Switch off any auto-accompaniment parts that you don't need. Do this now, because you will not be able to switch parts off while playback is in progress.

2. Press the SONG MEMORY button once.

- The SONG MEMORY indicator lights.
- Each press of the SONG MEMORY button changes the status of the SONG MEMORY indicator between lit, flashing, and off. Make sure that the indicator is lit and that [PLY] is shown on the display.
- The display alternates between the message [PLY] (indicating that this is the Playback Mode) and a value that indicates the currently selected song number (0 or 1).



3. Use the 10-key pad to input 0 or 1 to specify the song number.



- You can also use the [+] and [–] buttons.
- Remember that you have five seconds after pressing the SONG MEMORY button to input the song number. Otherwise, the song number will disappear from the display, and you will have to press the SONG MEMORY button again to get it back.

4. Press the START/STOP button to start playback.

- Each beat of the rhythm count is indicated by the START/STOP indicator.
- You can change the tempo and volume settings while playback is in progress.
- You can use the entire keyboard for play along with playback from the Song Memory.
- The indicators for each auto-accompaniment part light whenever the corresponding parts are sounding.
- Playback stops automatically (and the START/STOP indicator stops flashing) when the end of the Song Bank piece is reached.
- You can manually stop playback from the Song Memory at any point by pressing the START/STOP button.

■ Deleting tracks from Song Memory

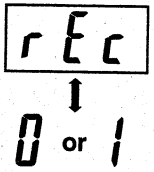
Use the following procedure to delete track from the Song Memory.

To delete a track from Song Memory

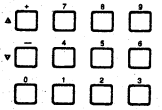
1. First, set up the keyboard.
   - Switch power on.
   - You will not be able to delete tracks from Song Memory while a Magical Preset number (page E-43) is displayed. If a Magical Preset number is displayed, press MAGICAL PRESET to switch the Magical Preset function off.

2. Press the SONG MEMORY button twice.

- The SONG MEMORY indicator lights.
- Each press of the SONG MEMORY button changes the status of the SONG MEMORY indicator between lit, flashing, and off. Make sure that the indicator is flashing and that [rEc] is shown on the display.
- The display alternates between the message [rEc] (indicating that this is the Record Mode) and a value that indicates the currently selected song number (0 or 1).



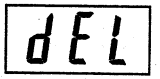
3. Use the 10-key pad to input 0 or 1 to specify the number of the song that contains the tracks you want to delete.



- You can also use the [+] and [-] buttons.
- Remember that you have five seconds after pressing the SONG MEMORY button to input the song number. Otherwise, the song number will disappear from the display, and you will have to press the SONG MEMORY button again to get it back.

4. Hold down the SONG MEMORY button until the message [dEL] appears on the display.

- At this time, the indicators above the TRACK NUMBER buttons that contain recordings light.

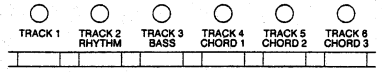


Important!

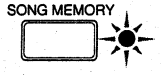
The next step deletes the notes recorded in the track you specify. This operation cannot be undone. Make sure that you really want to delete a track before performing the next step.

To abort this operation at this point without deleting anything, press the SONG MEMORY button.

5. Hold down the TRACK NUMBER button of the track that you want to delete.



6. Hold down the SONG MEMORY button.



- Remember that you have five seconds after holding down the SONG MEMORY button to specify a track number. Otherwise, the [dEL] message will disappear from the display, and you will have to perform the above procedure again to get it back.
- Repeat this procedure from step 4 to delete other tracks if you want.
- Note that there is no song delete function. To delete a song, you must delete each of its tracks, one-by-one.

7. Press the SONG MEMORY button to return to the normal mode.

Part 5 MIDI

■ What is MIDI?

"MIDI" stands for Musical Instrument Digital Interface, which is a worldwide standard for the exchange of digital signals produced by electronic musical instruments and devices. MIDI lets you easily exchange data with other MIDI devices, regardless of maker or model.

■ What the MIDI Mode allows you to do

The MIDI mode of this keyboard makes it possible for you to send and receive a variety of digital data.

Send

- You can connect to a MIDI device to sound the notes you play on the keyboard. This provides you with the means of playing two instruments at once, for richer sound and expanded versatility.
- You can connect to a sound module*1 to provide you with a wider superscript selection of tones.
- You can connect to a commercially available MIDI sequencer*2 to record your keyboard play.
- Each part of this keyboard's rhythm and auto-accompaniment patterns can be output over separate channels.

Receive

- You can connect to a MIDI device and sound notes played on the device using the keyboard's tones.
- You can connect to a commercially available MIDI sequencer*2 to play back on your keyboard. With this configuration, you can simultaneously play multiple parts*3 as they are received.

*1 A sound source that can be controlled by an external MIDI devices.

*2 An external module that performs recording capabilities. Using a sequencer that can store data on disks or cards provides you with virtually unlimited storage for your recordings.

*3 For the send and receive operation, channels are allocated as follows.

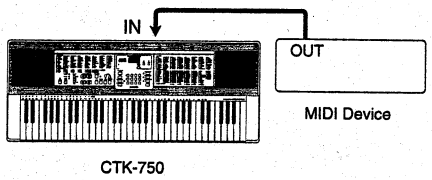
- Channels 1 to 4: Keyboard play (see page E-33 and E-34 for information on Split and Layer).
- Channel 5: Pad data
- Channels 6~10: Auto-accompaniment parts

■ About the MIDI terminals

MIDI terminals are equipped to provide a place to connect special MIDI cables that carry digital signals between MIDI devices. The CTK-750 features MIDI IN and MIDI OUT terminals.

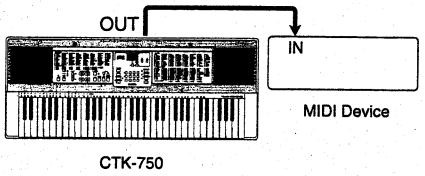
MIDI IN

- This is an input terminal that connects to the MIDI OUT terminal of another device. Data passes from the MIDI OUT terminal of the sending unit to the MIDI IN terminal of the receiving unit.



MIDI OUT

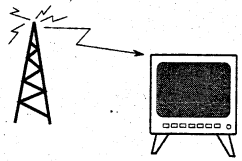
- This is an output terminal that connects to the MIDI IN terminal of another device. Data passes from the MIDI OUT terminal of the sending unit to the MIDI IN terminal of the receiving unit.



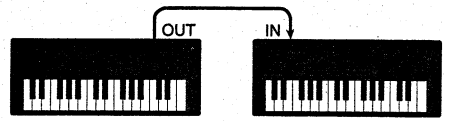
■ What is a MIDI channel?

MIDI channels range from 1 through 16, and you can think of them as being similar to the channels on your television. Just as your TV has to be tuned into channel 3 to receive broadcasts on that channel, a receiving MIDI device cannot receive MIDI channel 3 data unless it is set properly to channel 3.

Channel 3 broadcast



Receivable on Channel 3



MIDI data sent on Channel 3

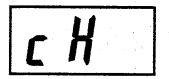
MIDI data can be received on Channel 3

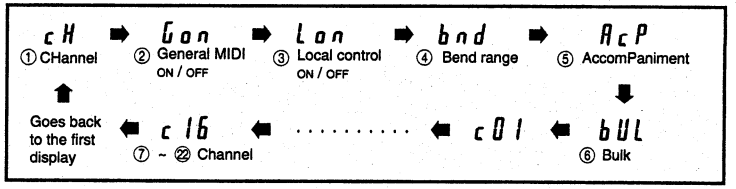
To set the basic channel

1. Press the MIDI button until the message [cH] appears on the display.

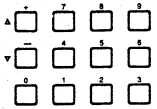
MIDI

- Each press of the MIDI button changes the displayed message in the following sequence.





2. Use the 10-key pad to input the number of the channel that you want to set as the basic channel.



- You can also use the [+] and [–] buttons. Pressing [+] increases the displayed channel number by 1, while [–] decreases it.
- Be sure to always specify a 2-digit number.
- Remember that you have five seconds after displaying the [cH] message to input the number. Otherwise, the [cH] message will disappear from the display, and you will have to press the MIDI button again to get it back.

MIDI Send Channel Allocation

MIDI Channel	1	2	3	4
Application	Real-time accompaniment			
Normal	Keyboard play			
Layered	Base tone	Layered tone		
Split	High end		Low end tone	
Layered & Split	High end base tone	High end layered tone	Low end base tone	Low end layered tone

MIDI Channel	5	6	7	8
Application	Pad	Auto-accompaniment		
Normal	Pad	Chord 1	Chord 2	Chord 3
Layered	Pad	Chord 1	Chord 2	Chord 3
Split	Pad	Chord 1	Chord 2	Chord 3
Layered & Split	Pad	Chord 1	Chord 2	Chord 3

MIDI Channel	9	10	11	12
Application			Song Memory Playback	
Normal	Bass	Rhythm	Track 1	Track 2
Layered	Bass	Rhythm	Track 1	Track 2
Split	Bass	Rhythm	Track 1	Track 2
Layered & Split	Bass	Rhythm	Track 1	Track 2

MIDI Channel	13	14	15	16
Application				
Normal	Track 3	Track 4	Track 5	Track 6
Layered	Track 3	Track 4	Track 5	Track 6
Split	Track 3	Track 4	Track 5	Track 6
Layered & Split	Track 3	Track 4	Track 5	Track 6

Important!

- Do not send data produced by playing on this keyboard over channel 10 to a General MIDI compatible module. With General MIDI, channel 10 is the percussion instrument channel. Because of this, percussion sounds will play in accordance with the keys you press on this keyboard at the same time the rhythm sounds in accordance with received rhythm part data.
- Do not press a SOUND/CONTROL pad while Channel 5 is set as the keyboard play channel. Doing so will cause the sounds being played on the keyboard to be muted when the pad sound cuts off. This is because the keyboard sends "pad sound off" data as "sound off" data.

Ranges

When notes that are higher or lower than the range covered by this keyboard are received, it automatically selects the same note in the nearest octave covered, and sounds the note using the appropriate tone type. For full details on the ranges of notes that can be sounded, see the Note Table on page A-6.
While using Magical Presets 108 through 111 (Key Split), only performances within the split high range is sent as MIDI data.

Pedal effects (Page E-49)

The effects produced when using separately available sustain, sostenuto and soft pedals can be sent and received over MIDI.
When a tone change command (program change) is received from an external device, it is sounded without the pedal depressed.

Tone type changes

The tone numbers from 000 through 127 used by this keyboard correspond to the numbers defined by General MIDI standards (page E-65). This means that if tone number 8 is selected on the unit sending data to this keyboard, tone number 008 (Celesta) is selected by this keyboard for the received data. This selection is performed regardless of what tone number 008 is on the sending unit.
When this keyboard sends tone data (002 STUDIO PIANO, for example), it includes data that states "select tone number 002," and the receiving unit selects tone 002. This selection is performed regardless of what tone number 002 is on the receiving unit.

Touch Response

- Even when Touch Response is switched off, this unit sends data that indicates the pressure used to operate the keyboard keys.
- When this unit receives data, it applies Touch Response data in accordance with whether or not its own Touch Response function is switched on or off.
- When this keyboard receives data, MIDI channels 1 through 4 and 11 through 16 are affected by Touch Response sensitivity settings (r-0, r-1, r-2).

Volume balance between channels

Channels 1 through 4
Volume balance is in accordance with Tone Expander settings (page E-37) or with specifications (Control Change 7) received from an external device. Both specifications are applied if they are made at the same time. The two specifications are multiplied by each other and the result is used.
Consequently, if either specification is zero, volume setting becomes zero.

Channel 5
This setting is impossible on this keyboard. Specification (Control Change 7) can be made only by receiving it from an external device.

Channels 6 through 10
Volume balance is in accordance with Accomp Mixer settings (page E-29) or with specifications (Control Change 7) received from an external device. The last specification made is applied.

Channels 11 through 16
Volume balance is in accordance with Track Mixer settings (page E-56) or with specifications (Control Change 7) received from an external device. Both specifications are applied if they are made at the same time. The two specifications are multiplied by each other and the result is used. Consequently, if either specification is zero,volume setting becomes zero.

Modulation volume

This keyboard is not equipped with a modulation volume setting function, but changes can be made by sending data from a connected MIDI device. Receipt of a program change causes the modulation volume to be initialized.

Stereo position and effect depth

Alteration of these parameters are made in accordance with external changes.
Whenever a tone change (program change) is received from an external device, settings become as shown below.

Channels 1 to 4: return to Tone Expander settings
Channels 6 to 10: return to Accomp Mixer settings
Channels 11 to 16: return to Track Mixer settings

Note

- When effect number 03 (CHORUS) is set, the stereo position is fixed in the center and external changes are ignored.
- When effect numbers 07 (ENHANCER) or 09 (LOUDNESS) is set, the effect depth is fixedas maximum and external changes are ignored.

Sound/Control pads

The sound and sound number of a pad 00~09 is sent when a pad is pressed. Pad functions 30 and 31 (Bend Up, Bend Down) are not sent. When receiving data, you can use the pads 30 and 31 to apply their effects to the sounds being received.

■ Song Memory and demo tunes

You can send each track of Song Memory playback over channels 11 through 16. You cannot send demo tune contents. You cannot record data received over MIDI into the Song Memory.

■ General MIDI

The General MIDI System Level 1 (popularly known as General MIDI) was published in 1991 to define a certain class of MIDI synthesizer modules that are more standardized and easier to use. Note that the numbers of the tones of this keyboard conform with General MIDI specifications, but in other aspects it does not conform. This means that you may experience some compatibility problems when connecting this keyboard to a General MIDI device.
Use the following operation to switch the General MIDI capabilities of this keyboard on and off. When this keyboard receives data with General MIDI on, some tones* of the keyboard are raised one octave, in accordance with General MIDI specifications.

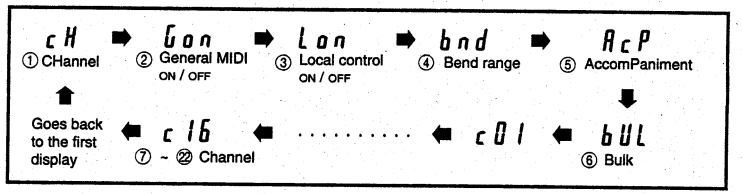
* Tone number 32~39, 43, 67, 70.

To switch General MIDI on and off

1. Press the MIDI button until the message Gon (General MIDI on) appears on the display.

MIDI

- Each press of the MIDI button changes the displayed message in the following sequence.



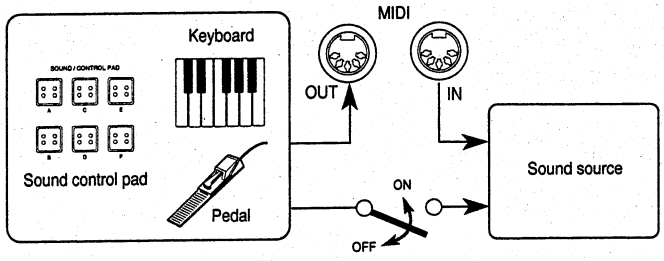
2. Use the 10-key pad's [+] and [–] buttons to switch General MIDI on and off.

[+] [–]

- Pressing [+] switches General MIDI on, while [–] switches it off.
- Remember that you have five seconds after displaying the [Gon] / [on] or [oFF] message to make your selection. Otherwise, the message will disappear from the display, and you will have to press the MIDI button again to get it back.

■ Local control settings

You can use local control to specify whether keyboard, sound control pad, or pedal operations should be output through MIDI OUT only, or whether they should be applied to the local sound source (the instrument you are playing).



LOCAL CONTROL

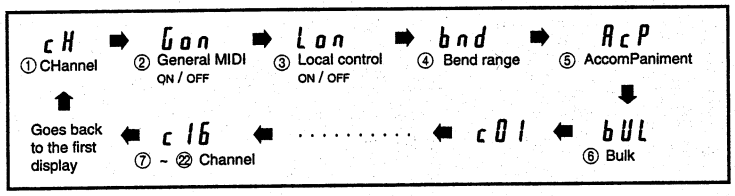
Local control is normally switched on, and it is always switched on automatically whenever you switch the power of the keyboard on or whenever you play a demo tune. When local control is switched off, playing the keyboard and operating the pedal does not affect the keyboard itself, but only affects the connected MIDI device.

To switch Local Control on and off

1. Press the MIDI button until the message [Lon] (Local Control on) appears on the display.

MIDI

- Each press of the MIDI button changes the displayed message in the following sequence.



2. Use the 10-key pad's [+] and [–] buttons to switch Local Control on and off.

[+] [–]

- Remember that you have five seconds after displaying the [Lon] / [on] or [oFF] message to make your selection. Otherwise, the message will disappear from the display, and you will have to press the MIDI button again to get it back.

■ Bend range settings

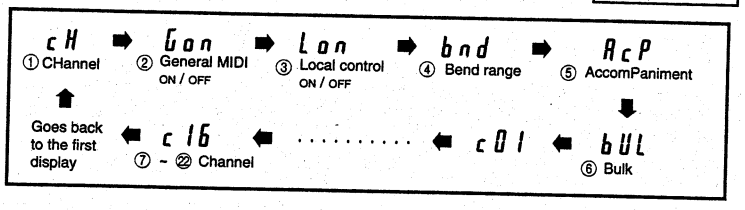
This setting defines the amount that tones are changed by the pitch bend controller. You can select between two different settings. The setting you make here determines the pitch bend amount applied when you rotate the pitch bend wheel or press sound/control pads (SOUND CONTROL PAD) 30 and 31.

To set the bend range

1. Press the MIDI button until the message [bnd] appears on the display.

MIDI

- Each press of the MIDI button changes the displayed message in the following sequence.



- After a short while, the current bend range setting (2 or 3) appears on the display.

2. Use the 10-key pad to input 2 (two semitones) or 3 (three semitones) to specify the bend range.

[+] [7] [8] [9]
[–] [4] [5] [6]
[0] [1] [2] [3]

- You can also use the [+] and [–] buttons. Pressing [+] increases the displayed number, while [–] decreases it.
- Remember that you have five seconds after displaying the [bnd] message to make your selection. Otherwise, the message will disappear from the display, and you will have to press the MIDI button again to get it back.
- Auto-accompaniment patterns such as rhythm number 110 (ENKA) that include pitch bend operations were programmed using a bend range of 2. If you play these rhythms using a bend range of 3, the resulting rhythm will sound strange.

■ Accompaniment data

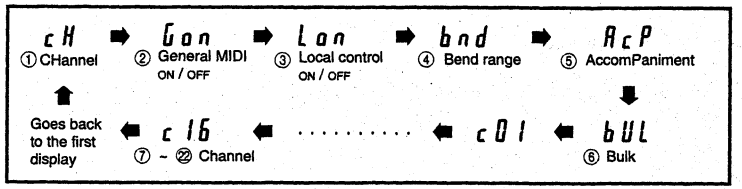
With this setting, you can specify whether or not the rhythm, bass, and chord data for the auto-accompaniment played on the keyboard should be output through the MIDI OUT terminal.

To switch accompaniment data output on and off

1. Press the MIDI button until the message [AcP] appears on the display.

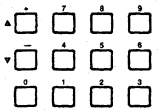
MIDI

- Each press of the MIDI button changes the displayed message in the following sequence.



- After a short while, the current [on] (send)/[oFF] (do not send) setting appears on the display.

2. Use the 10-key pad's [+] and [–] buttons to switch accompaniment data output on and off.



- Remember that you have five seconds after displaying the [AcP] message to make your setting. Otherwise, the message will disappear from the display, and you will have to press the MIDI button again to get it back.

Accompaniment data is sent using the following MIDI OUT channels.

Channel	6	7	8	9	10
Part	Chord 1	Chord 2	Chord 3	Bass	Rhythm (percussion)*

* Percussion instrument types and MIDI note numbers conform with General MIDI specifications. The following shows the relationship between percussion numbers and names.

General MIDI Percussion Map (Channel 10) :

MIDI Key	Drum Sound	MIDI Key	Drum Sound	MIDI Key	Drum Sound
35	Acoustic Bass Drum	41	Low Floor Tom	47	Low-Mid Tom
36	Bass Drum 1	42	Closed Hi Hat	48	Hi Mid Tom
37	Side Stick	43	High Floor Tom	49	Crash Cymbal 1
38	Acoustic Snare	44	Pedal Hi-Hat	50	High Tom
39	Hand Clap	45	Low Tom	51	Ride Cymbal 1
40	Electric Snare	46	Open Hi-Hat	52	Chinese Cymbal

MIDI Key	Drum Sound	MIDI Key	Drum Sound	MIDI Key	Drum Sound
53	Ride Bell	63	Open Hi Conga	73	Shot Guiro
54	Tambourine	64	Low Conga	74	Long Guiro
55	Splash Cymbal	65	High Timbale	75	Claves
56	Cowbell	66	Low Timbale	76	Hi Wood Block
57	Crash Cymbal 2	67	High Agogo	77	Low Wood Block
58	Vibraslap	68	Low Agogo	78	Mute Cuica
59	Ride Cymbal 2	69	Cabasa	79	Open Cuica
60	Hi Bongo	70	Maracas	80	Mute Triangle
61	Low Bongo	71	Short Whistle	81	Open Triangle
62	Mute Hi Conga	72	Long Whistle		

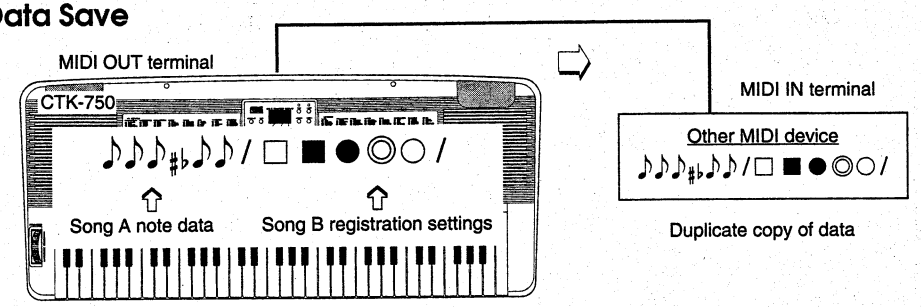
■ Bulk send of internal data

This keyboard is equipped Song Memory and Registration Memory functions that make it possible to store a variety of musical data. You can send such memory data as MIDI exclusive data, which is manufacturer-specific or keyboard-specific data. Note that memory data is sent in bulk, and that you cannot specify which items should be sent. The following is a list of the memory data that can be sent as MIDI exclusive data.

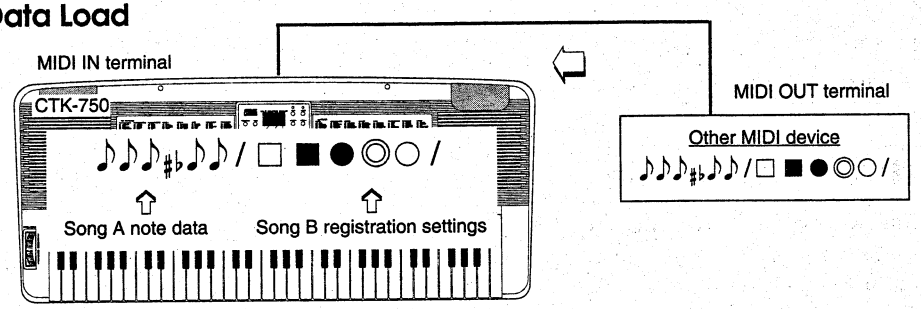
- Tone, rhythm, Magical Preset, and pad numbers
- Effect depth
- Registration memory contents
- Rhythm numbers assigned to four auto-accompaniment buttons (INTRO, NORMAL/FILL-IN, VARIATION/FILL-IN, SYNCHRO/ENDING)
- Track Mixer settings
- General MIDI on/off
- Layer and Split on/off
- Layer and Split tones
- Touch Response settings
- Song memory contents
- Assignable jack, tempo, and accompaniment volume settings
- Bend range
- Tone expander parameter settings
- MODE button setting
- Tones for each MIDI channel
- Keyboard play MIDI send channel

You can send this data from the keyboard to a separate MIDI device (MIDI sequencer, MIDI data filer, MIDI-equipped personal computer) for long term storage. Then when you need the data again, send it back for instant set up of the keyboard.

Data Save



Data Load

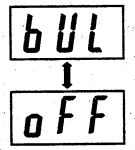


To bulk send data

1. First, set up another MIDI device to receive the data.
   - Consult with the manual that comes with the receive MIDI device for details on how to set it up to receive data.
2. Press the MIDI button six times until the message [bUL] appears on the display.

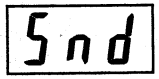
MIDI

- The display alternates between the message [bUL] (indicating that this is the Bulk Mode) and a message that indicates the current status of the mode: [oFF] (off), [Snd] (send), or [rcu] (receive).



3. Use the 10-key pad's [+] and [–] keys to change the status of the mode to [Snd] (send).

- Each press of [+] and [–] changes the status of the mode as shown below.



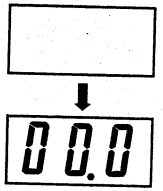
oFF ⇄ Snd
rcu
⇨ : By pressing +
⇦ : By pressing -

- You have five seconds after pressing the MIDI button to change the status of the mode. Otherwise, the mode status will disappear from the display, and you will have to press the MIDI button again to get it back.

4. Press MIDI button to start the send operation.

MIDI

- You have five seconds after changing the status of the mode to press the MIDI button. Otherwise, the mode status will disappear from the display, and you will have to press the MIDI button again to get it back.
- The display clears while the send operation is in progress. After the send is complete, the display changes back to what it was showing before you pressed the MIDI button.



To bulk receive data

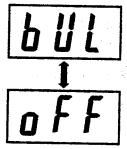
Important!

- The following operation causes the current settings and data of the keyboard to be replaced with the received data. Make sure you do not need the current settings or bulk save them to another device before performing this operation.
- If any data communication problem occurs while receiving data, the keyboard's memories are automatically cleared and initialized.

1. Press the MIDI button six times until the message [bUL] appears on the display.

MIDI

- The display alternates between the message [bUL] (indicating that this is the Bulk Mode) and a message that indicates the current status of the mode: [oFF] (off), [Snd] (send), or [rcu] (receive).



2. Use the 10-key pad's [+] and [-] keys to change the status of the mode to [rcu] (receive).

- Each press of [+] and [–] changes the status of the mode as shown below.

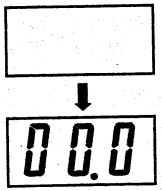
oFF ⇄ Snd
rcu
⇨ : By pressing +
⇦ : By pressing -

- You have five seconds after pressing the MIDI button to change the status of the mode. Otherwise, the mode status will disappear from the display, and you will have to press the MIDI button again to get it back.

3. Start the send operation on the other MIDI device.

MIDI

- You have five seconds after changing the status of the mode to press the MIDI button. Otherwise, the mode status will disappear from the display, and you will have to press the MIDI button again to get it back



- Consult with the manual that comes with the send MIDI device for details on how to set it up to send data.
- The display clears while the receive operation is in progress. After the receive is complete, the display changes back to what it was showing before you pressed the MIDI button.

■ Specifying a tone for each receive channel

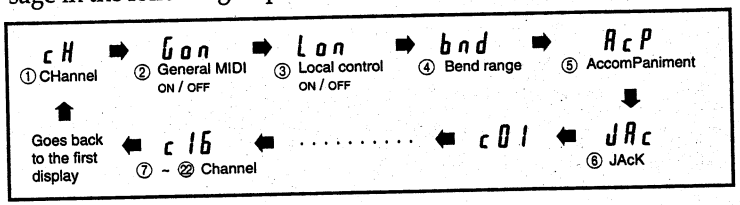
Individual tones can be specified for each of the 16 channels when receiving data from another MIDI device. This means that you can connect to a commercially available MIDI multi-track sequencer, and play up to 16 tones simultaneously. Remember, however, that the maximum polyphony for this keyboard is 32 notes.

To specify a tone for a receive channel

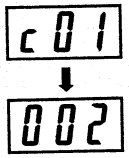
1. Press the MIDI button until the message [c01]~[c16] appears on the display.

MIDI

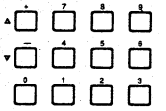
- Each press of the MIDI button changes the displayed message in the following sequence.



- Here, we selected channel 1 [c01], but you could also select any of the 16 channels through [c16].
- After a short while, the number of the tone currently assigned to the channel you selected appears on the display.



2. Use the 10-key pad to input the 3-digit number that identifies the tone you want to select.



- Use the numeric buttons to input a 3-digit number.
- You can also use the [+] and [–] buttons. Pressing [+] increases the displayed tone number by 1, while [–] decreases it.
- Be sure to always specify a 3-digit number.
- If you specify a number greater than 133, tone number [dr.5] is selected automatically.
- If you discover a mistake before you input the third digit, press the MIDI button to return to the previously set tone number.
- Channel 10, which is reserved for percussion instruments under General MIDI standards, has eight presets, from 0 to 7. This keyboard also reserves channel 10 for percussion instruments, but you can select only one of the eight presets.
- This keyboard cannot shut off receive channels. If you do not want to receive a channel, switch that channel off on the sending unit.
- Magical Preset uses MIDI channels 1 through 4. If you are using Tone Stack, for example, these tones are combined by up to four different tone and assigned to MIDI channels 1 through 4.

MIDI Receive Channel Allocation

MIDI Channel	1	2	3	4
Application				
Normal				
Layered	Base tone	Layered tone		
Split	High end		Low end tone	
Layered & Split	High end base tone	High end layered tone	Low end base tone	Low end layered tone

MIDI Channel	5	6	7	8	9	10	11	12	13	14	15	16
Application		Auto-accompaniment										
Normal		Chord 1	Chord 2	Chord 3	Bass	Rhythm						
Layered		Chord 1	Chord 2	Chord 3	Bass	Rhythm						
Split		Chord 1	Chord 2	Chord 3	Bass	Rhythm						
Layered & Split		Chord 1	Chord 2	Chord 3	Bass	Rhythm						

Part 6 Other Settings

This part of the manual details other general settings.

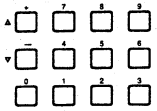
■ To tune the keyboard

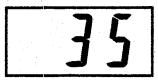
1. Press the TUNE button.

TUNE

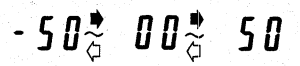
Current setting

2. Use the 10-key pad's [+] and [–] buttons to tune the keyboard.





- Each press of the [+] and [–] buttons changes the setting in the following sequence.
- Holding down either button changes the tuning at high speed.
- Remember that you have five seconds after displaying the current setting to tune the keyboard. Otherwise, the message will disappear from the display, and you will have to press the TUNE button again to get it back.
- Pressing the [+] and [–] buttons at the same time automatically sets the tuning to 00.



➡ : Each time you press +

⇦ : Each time you press –

Notes

- You can tune the keyboard within the range of ±50 cents (101 levels). 100 cents is equivalent to one semitone.
- Switching power on or playing a demo tune automatically sets the keyboard tuning to 00.
- You can change the tuning of the keyboard when recording to or playing back from the Song Memory. Note however, that keyboard tuning data is not stored in Song Memory.

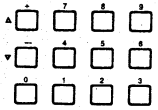
■ To transpose the keyboard

1. Press the TRANSPOSE button.

TRANSPOSE

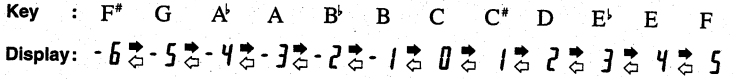
Current setting

2. Use the 10-key pad's [+] and [–] buttons to select a key.



- Each press of the [+] and [–] buttons changes the key of the keyboard in the following sequence.

Key : F♯ G A♭ A B♭ B C C♯ D E♭ E F



➡ : Each time you press +

⇦ : Each time you press –

- Holding down either button changes the tuning at high speed.
- You can also specify 0 through 5 by pressing the corresponding 10-key pad button.
- Pressing the [+] and [–] buttons at the same time automatically sets the key of C (0).
- Remember that you have five seconds after displaying the current setting to tune the keyboard. Otherwise, the message will disappear from the display, and you will have to press the TRANSPOSE button again to get it back.

Important

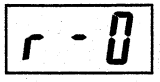
- The above operation also causes pad sounds to be transposed. Note, however, that some tones do not sound correct after being transposed. Because of this, the keyboard automatically substitutes a different tone to the pad.
- Each of the 128 preset tones has a specific range in which it can sound (see the Note Table on page A-6). If a transpose operation causes a note to exceed its upper or lower range, the same note in the nearest upper or lower octave is used instead.

■ To set the touch sensitivity

1. Press the TOUCH RESPONSE button.

TOUCH RESPONSE

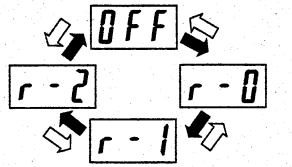
- When you do, the current Touch Response sensitivity setting appears on the display.



- r-0 : A strong sound is produced even when you press the keys lightly.
- r-1 : Standard sensitivity
- r-2 : A medium-level sound is produced when you press the keys strongly.
- OFF : Touch Response off.

2. Use the 10-key pad to input the 1-digit number that identifies the touch sensitivity you want to use.

- Inputting 0 sets r-0, inputting 1 sets r-1, any other input sets r-2.
- You can also use the [+] and [–] buttons. Each press of these buttons changes the setting in the following sequence.



➡ : Each time you press +
⇦ : Each time you press –

Part 7 Technical Reference

■ Troubleshooting

Be sure to check the following table whenever you experience problems with keyboard operation.

Problem	Possible Causes	Action
No sound when playing the keyboard.	1. Power supply problem.	1. Connect AC adaptor correctly and make sure that batteries are loaded with the positive (+) and negative (–) poles facing correctly.
	2. VOLUME setting is too low.	2. Move the VOLUME slider more towards the maximum setting.
	3. Headphones are plugged in.	3. Unplug the headphones.
	4. You are attempting to play normally on the accompaniment keyboard while CASIO CHORD or FINGERED is selected.	4. Enter the NORMAL mode (all mode indicators unlit).
	5. Magical Presets 104 through 107 are selected. Drum Sounds Tone dr.0 ~ dr.5 are selected.	5. With these Magical Presets and Drum Sounds, the far right nine keys normally do not sound.
	6. MIDI Local Control is off.	6. Switch MIDI Local control on.
	7. Command from external MIDI device has set the volume of channel 1 to zero.	7. Use the external MIDI device to adjust the volume of channel 1.
	8. Upper 1 volume of the Tone Expander is set to 0.	8. Increase Upper 1 volume.
Rhythm and auto-accompaniment do not play.	1. Accompaniment volume is set to 000.	1. Use the ACCOMP VOLUME button to increase accompaniment volume.
	2. Rhythm part is off.	2. Switch rhythm part on.
	3. Accomp Mixer rhythm volume is set to 0.	3. Increase rhythm volume.
	4. Part is off.	4. Switch part on.
	5. Accomp Mixer part volume is set to 0.	5. Increase part volume.
Following symptoms occur when using batteries. • Dim power supply indicator • Abnormally low speaker/headphone volume • Distortion of sound output • A totally different tone may sound • Abnormal rhythm pattern and demo tune play • Continued sound output even after you release a button • Occasional interruption of sound when playing at high volumes • Sudden power failure when playing at high volumes	Low battery power.	Replace the batteries with new ones.
Rhythm sounds, auto-accompaniment sounds, and bass tones (tone numbers 032 to 039) sound distorted.	Effect number E09 (EQ Loudness) is being used while the volume is set to a high level.	Lower the Volume setting. Change to another effect or switch off effects completely.

■ Care of your keyboard

Avoid heat, humidity or direct sunlight.
Do not overexpose the unit to direct sunlight, or place near an air conditioner, or in any extremely hot place.

Take care not to drop the unit and avoid strong impact.
Strong impact may cause malfunctions. When carrying or transporting the unit, protect the keyboard and switches with soft cloth or other material.

Keep the unit free of liquids, dust, etc.
Do not allow foreign matter to get between the keys, especially metallic objects such as hairpins, sewing needles or coins. Also, do not let the unit get wet.

Never attempt to modify any parts of the unit.
The unit is a precision instrument, made of electronic parts. Any modification of, or tampering with inner parts may cause malfunction.

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.)

■ Specifications

Model: CTK-750

Keyboard: 61 standard-size keys; 5 octaves; Touch Response (can be switched on and off, sensitivity; 3 sets)

Tones: 128 presets (000~127) + 6 drum sounds (dr.0~dr.5)

Polyphony: 32 - note (max.)

Magical preset:

BREAK BEAT	16	MELODYCOMP	8
SHADOW DRUM	4	FREE SESSION	32
TONE STACK	40	KEY SPLIT	12
HYPERACTIVE	16		

Auto-accompaniment:

Rhythm patterns	128presets
Tempo	Adjustable (40 ~ 255)
Chords	Three systems: CASIO CHORD, FINGERED, FULL-RANGE CHORD
Other	Variation pattern, fill-in pattern, intro/ ending pattern for each rhythm

Song memory:

Song:	Two (max)
Tracks:	6
System:	Real-time recording
Memory capacity:	Up to approximately 5,800 notes

Registration memory: 10 setups

Contents: Tone number, rhythm number, tempo, accompaniment volume, chord type (NORMAL, CASIO CHORD, FINGERED, FULL RANGE CHORD), effects, layer on/ off, split on/off, pad function set, assignable jack, MIDI sent channel on/off; GM on/off; local control on/off; bend range, auto-accompaniment on/off, rhythm settings for the INTRO, NORMAL/FILL-IN, VAR/ FILL-IN, and SYNCHRO/ENDING buttons

Sound control pads:

Phrases	10
Drums	10
SE/PERCUSSION	10
Controller	2

Digital Effects: REVERB 1, REVERB 2, REVERB 3, CHORUS, TREMOLO, PHASE SHIFTER, ORGAN SP, ENHANCER, FLANGER, EQ LOUDNESS
DELAY 1, DELAY 2, ANALOG DELAY, TAP DELAY, CHORUS REVERB, TREMOLO REVERB

Auto-play tunes: 3 tunes

Other Functions: Transpose (G~C~F#:half-note)
Tuning Adjustable A4 = 440Hz 100cents increments
Volume control (Main/Accompaniment)
SPLIT/LAYER, TONE EXPANDER

Speakers: 12 cm diameter x 2 (Output: 5W+5W)

I/O Terminals:

Power Supply	12V DC jack
Headphones	Stereo mini jack [output impedance: 100 Ω, output voltage: 1.7V (RMS) MAX],
Assignable jack	Standard jack
MIDI	IN, OUT

Power Supply: 2-way AC/DC power sources;

Batteries	Six D-size
Battery life	approximately 3 hours on R20P (SUM-1) manganese batteries/10 hours on LR 20 (AM1) alkaline batteries
AC	Required optional AD-12 AC adaptor

Auto power off: Approximately 6 minutes after the last operation

Power consumption: 18W

Dimensions: 968 x 411 x 141 mm (38 1/16 " x 16 5/16 " x 5 11/16 ")

Weight: Approximately 7.0 kg (15.5 lbs) excluding batteries

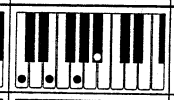
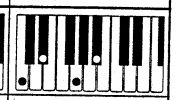
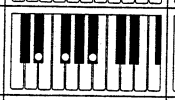
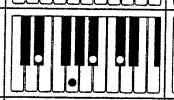
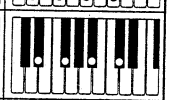
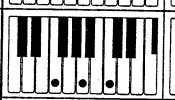
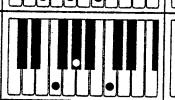
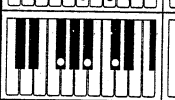
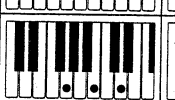
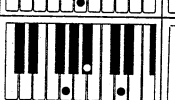
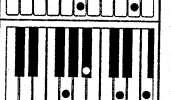
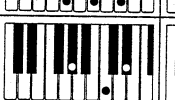
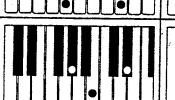
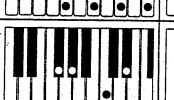
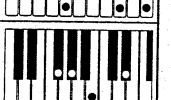
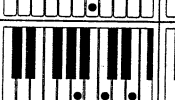
Accessory: Score stand

* Designs and specifications are subject to change without notice.

Part 8 Appendix/Apéndice

■ Fingered Chord Charts

■ Cuadros de acordes Fingered

Root \ Chord Type	M	m	7	m7
C				
C♯/(D♭)				
D				
(D♯)/E♭				
E				
F				
F♯/(G♭)				
G				
(G♯)/A♭				
A				
(A♯)/B♭				
B				

Root \ Chord Type	M7	m7-5	dim	aug	sus4
C					
C♯/(D♭)					
D					
(D♯)/E♭					
E					
F					
F♯/(G♭)					
G					
(G♯)/A♭					
A					
(A♯)/B♭					
B					

Root \ Chord Type	7sus4	madd9	mM7	7^{-5}	add9
C					
C♯/(D♭)					
D					
(D♯)/E♭					
E					
F					
F♯/(G♭)					
G					
(G♯)/A♭					
A					
(A♯)/B♭					
B					

■ Melodycomp Chord Charts

■ Cuadros de acordes Melodycomp

No. Numero	Chord Chart/Acordes								
16	CM7	Dm7	CM7	G7sus4	FM7	Em7	Dm7	F / G	
17	CM7	Am7	Dm	G7sus4	CM7	Am7	Dm9	G7sus4	
18	Dm	Am/C	B♭M7	Gm7	Dm	Am/C	B♭M7	Gm7	Am7
19	F	C	Dm	A	F	C	Dm	A	D
20	Am	G/A	CM7	FM7	B♭M7	E♭M7	Dsus4	E7	Am
21	Am9	Bm9	GM7	Asus4	A	Am9	D6	B♭M7	A
22	CM7 Am7	FM7 Am	D/F♯ Gsus4	G CM7	E/G♯	Am	Am/F♯	B	Em7
23	Am	F	Gsus4	Em	F	Dm	Em	Am	

■ Free Session Chord Progression Charts: Key of C

■ Cuadros de progresión de acordes Free Session: Clave de DO

No. Numero	Chord Chart/Acordes
28	‖ C | 𝄎 | 𝄎 | 𝄎 | F | 𝄎 | C | 𝄎 | G ‖ F | C | 𝄎 ‖
29	‖ C | 𝄎 | 𝄎 | 𝄎 | F | 𝄎 | C | 𝄎 | G ‖ G | C | 𝄎 ‖
30	‖ C | Am | Dm | G7 ‖
31	‖ C | A7 | Dm7 | G7 ‖
32	‖ C | D7 | Dm7 | G7 ‖
33	‖ C | C7 | F | Fm ‖
34	‖ C | Am | F | Dm ‖
35	‖ C | Em | F | G7sus4 ‖
36	‖ C | G | Am | F ‖

No. Numero	Chord Chart/Acordes
37	‖ F | Em | Dm | C ‖
38	‖ C | G | Am | Em | F | C | F | G7 ‖
39	‖ C | 𝄎 | Am | 𝄎 | Dm | 𝄎 | G7sus4 | G ‖
40	‖ C | 𝄎 | 𝄎 | 𝄎 | Dm7 | 𝄎 | C | 𝄎 ‖
41	‖ C | 𝄎 | G | 𝄎 | Dm | 𝄎 | F | G7sus4 ‖
42	‖ Am | C | $Bm7^{-5}$ | E7 ‖
43	‖ Am | F | $Bm7^{-5}$ | E7 ‖
44	‖ Am | F | Dm7 | E7 ‖
45	‖ Am | G | F | E7 ‖
46	‖ Am | G | F | 𝄎 ‖
47	‖ Am | C | D | Dm ‖
48	‖ Am | G | D | E7 ‖
49	‖ Am | 𝄎 | G | 𝄎 | F | 𝄎 | Dm7 | G7sus4 ‖
50	‖ F | G7 | Em | Am ‖
51	‖ F | G | Am | 𝄎 ‖
52	‖ C | E♭7 | Dm7 | G7 ‖
53	‖ C | B♭ | F | C ‖
54	‖ C | G | Am | F | C | G | F | C ‖
55	‖ C | Dm7 | C | Dm7 | C7 | F | Em7 | G7sus4 ‖
56	‖ C | 𝄎 | F | 𝄎 | A♭ | 𝄎 | B♭ | G7sus4 ‖
57	‖ C | C7 | F | F♯dim | C | A7 | D7 | G7 ‖
58	‖ C | 𝄎 | E♭ | 𝄎 | C | 𝄎 | A♭ | G7sus4 ‖
59	‖ C | 𝄎 | B♭ | 𝄎 | C | 𝄎 | D♭ | 𝄎 ‖

■ Note Table

■ Tabla de notas

A = Tone number
Número de sonido

B = Maximum polyphony
Polifonía máxima

C = Range type
Tipo de gama

A	B	C
000	32	A
001	32	A
002	16	A
003	16	A
004	32	B
005	32	B
006	32	B
007	32	B
008	32	B
009	32	B

A	B	C
010	16	B
011	32	B
012	32	B
013	32	B
014	32	B
015	32	B
016	16	B
017	16	B
018	16	B
019	16	B

A	B	C
020	32	B
021	32	B
022	32	B
023	32	B
024	32	B
025	32	B
026	32	B
027	32	B
028	32	B
029	32	B

A	B	C
030	32	B
031	32	D
032	32	C
033	32	C
034	32	C
035	32	C
036	32	C
037	32	C
038	32	C
039	32	C

A	B	C
040	32	B
041	32	B
042	32	B
043	32	D
044	32	B
045	32	B
046	32	B
047	32	B
048	32	B
049	32	B

A	B	C
050	16	B
051	32	B
052	32	B
053	16	B
054	32	B
055	32	B
056	32	B
057	32	B
058	32	D
059	32	B

A	B	C
060	32	B
061	32	B
062	16	B
063	32	B
064	32	B
065	32	B
066	32	B
067	32	C
068	32	B
069	32	B

A	B	C
070	32	D
071	32	B
072	32	E
073	32	B
074	32	B
075	32	B
076	32	B
077	32	B
078	32	B
079	32	B

A	B	C
080	16	B
081	16	B
082	16	B
083	16	B
084	16	B
085	16	B
086	16	B
087	16	B
088	16	B
089	16	B

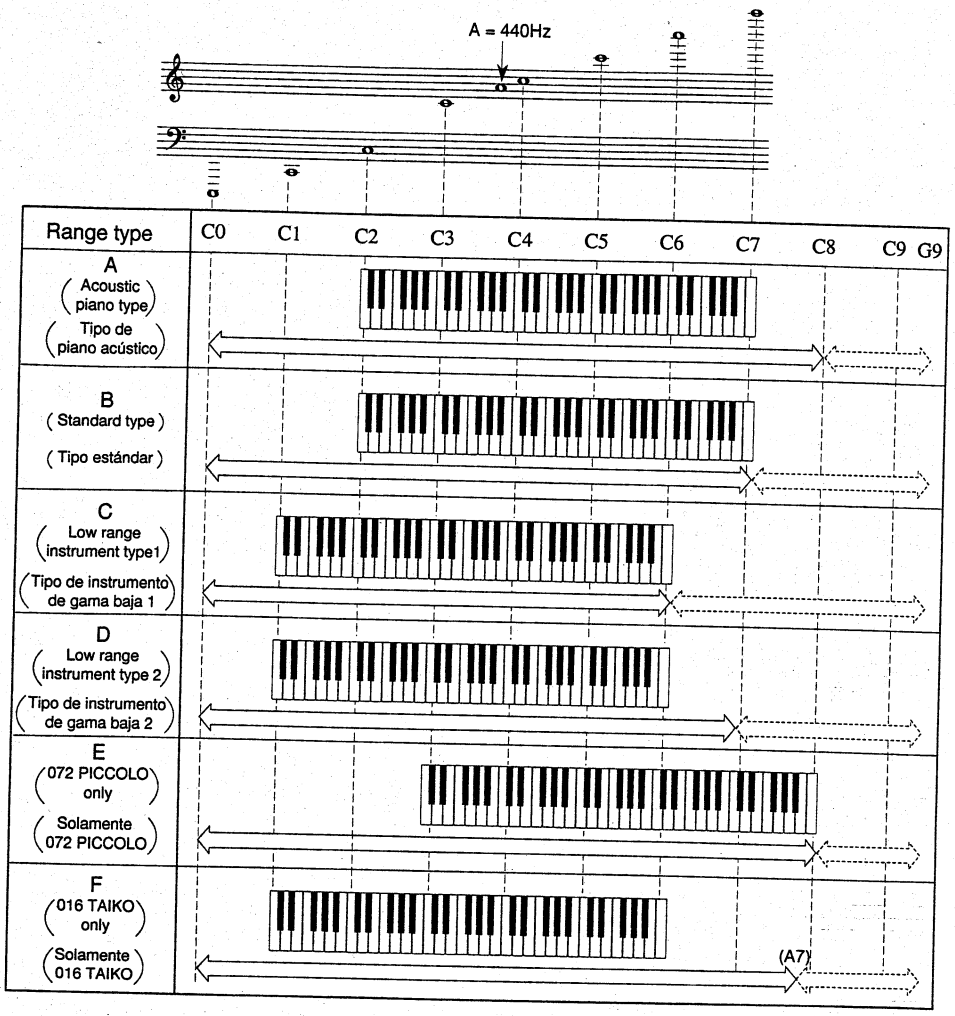
A	B	C
090	16	B
091	16	B
092	16	B
093	16	B
094	16	B
095	16	B
096	16	B
097	16	B
098	16	B
099	16	B

A	B	C
100	16	B
101	16	B
102	16	B
103	16	B
104	32	B
105	32	B
106	32	B
107	32	B
108	32	B
109	32	B

A	B	C
110	32	B
111	32	B
112	32	B
113	32	B
114	16	B
*115	32	B
*116	32	F
*117	32	B
*118	16	B
*119	32	B

A	B	C
*120	32	B
121	32	B
*122	16	B
*123	32	B
*124	32	B
*125	32	B
*126	16	B
*127	32	B

* Tones without scale
* Sonidos sin escala



a ····· Range of keyboard play
····· Gama de ejecución de teclado

b ····· Playable range (Transpose, When receiving MIDI data)
····· Gama ejecutable (Transposición, al recibir datos MIDI)

c ····· Range in which same note is played in nearest octave as a result of transpose and MIDI data receive operation (Transpose、When receiving MIDI data)

····· Gama en la que la misma nota se ejecuta en la octava más cercana como un resultado de la transposición y operación de recepción de datos MIDI. (Transposición, al recibir datos MIDI)

Model **CTK-750**

MIDI Implementation Chart

Version: 1.0

Function ...		Transmitted	Recognized	Remarks
Basic	**Default**	1-16*	1-16	*Hold in memory as long as the power is supplied
Channel	**Changed**	1-16	1-16	
Mode	**Default**	Mode 3	Mode 3	
	Messages	X	X	
	Altered	**********	**********	
Note		36 - 96	0-127	See Note table on page A-6.
Number:	**True voice**	**********	36 - 96	
Velocity	**Note ON**	O 9nH v = 1-127	O 9nH v = 1-127	
	Note OFF	X 9nH v = 0	X 9nH v = 0, 8n v = XX	XX = no relation
After	**Key's**	X	X	
Touch	**Ch's**	X	X	
Pitch Bender		O	O	
Control Change	**01**	X	O	Modulation
	07	X	O	Volume
	10	X	O	PAN
	64*	O	O	Sustain*1
	66*	O	O	Sostenuto*1
	67*	O	O	Soft*1
	91	X	O	Effect send
Program		O 0-127	O 0-127	
Change:	**True #**	**********	**********	
System Exclusive		O	O	Bulk send/receive*2
System	**: Song Pos**	X	X	
Common	**: Song Sel**	X	X	
	: Tune	X	X	
System	**: Clock**	O	X	
Real Time	**: Commands**	O	X	
Aux	**: Local ON/OFF**	X	X	
	: All notes OFF	X	X	
Messages	**: Active Sense**	X	X	
	: Reset	X	X	
Remarks		*1 Data is sent for the currently selected assignable jack function. *2 Bulk send/receive data (hexadecimal values) : [F0][44][08][01] [$0L_0$][$0H_0$][$0L_1$][$0H_1$].....[$0L_{126}$][$0H_{126}$][$0L_{127}$][$0H_{127}$] [$0L_{cs}$][$0H_{cs}$][F7] x 247 Block I.D. Number Data C128 x 2 = 256byte Check Sum : L x 2 = 2 bytes		

Mode 1 : OMNI ON, POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No