Technics

KEYBOARD

in _knyeka a

sx-KN550 sx-KN650 sx-KN470





Cechnics

OWNER'S MANUAL

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

BEFORE YOU PLAY, PLEASE READ THE CAUTIONARY COPY APPEARING ON PAGE 66.

FOR CANADA

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Before you play

For long and pleasurable use of this instrument, and to gain a thorough understanding of your KN Series Keyboard, it is strongly recommended that you read through this Owner's Manual.

The Owner's Manual is comprised of:

BASIC FUNCTIONS:

This section includes an explanation of basic procedures and points you should be aware of for proper operation of your instrument.

PRACTICAL APPLICATIONS:

This section comprises a detailed explanation of sounds, effects, rhythms, automatic accompaniment, SEQUENCER, COMPOSER (KN650), functionsetting, and MIDI functions.

SOUND AND RHYTHM GUIDE:

(separate booklet)

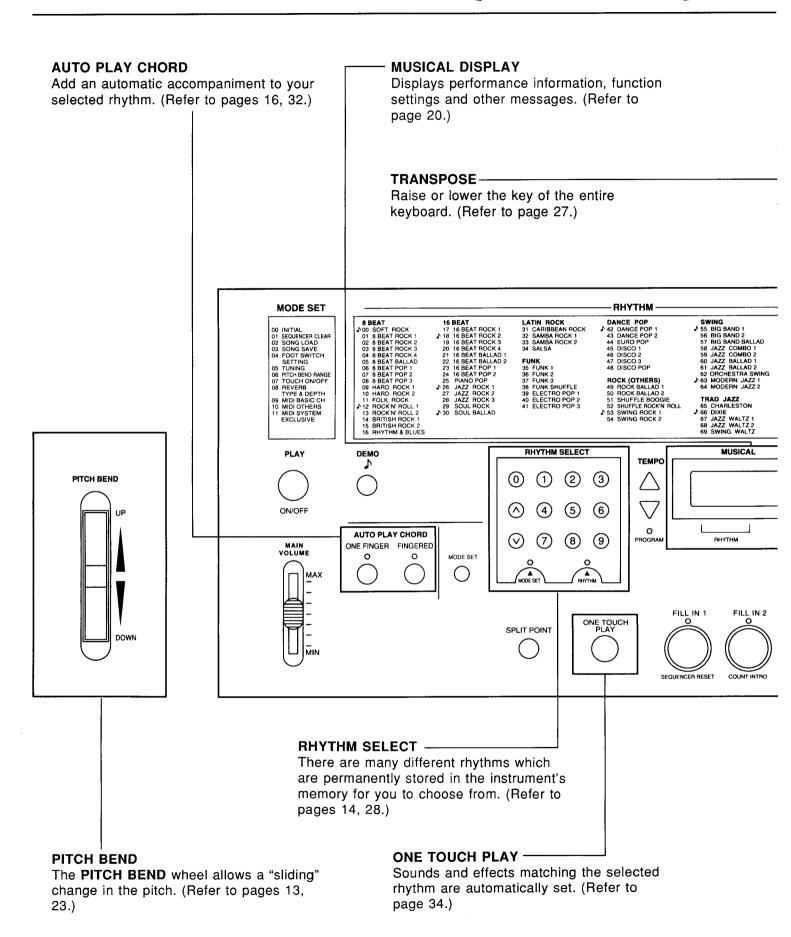
Reference guide for the contents of the SOUND VARIATION settings, KEYBOARD PERCUSSION settings, etc.

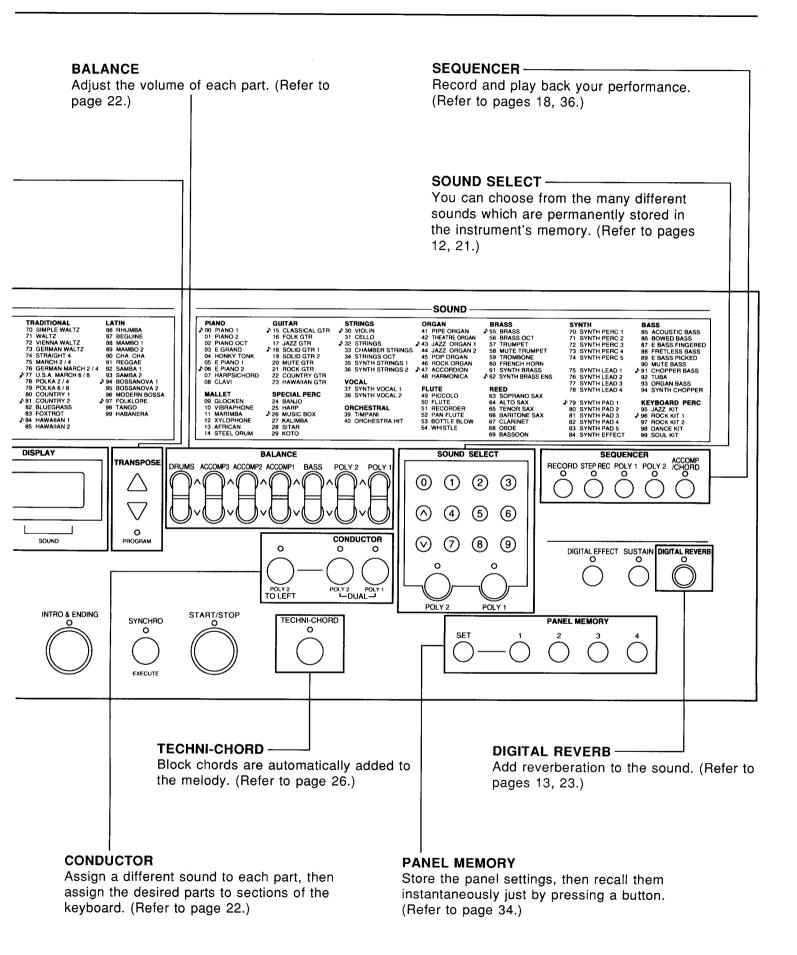
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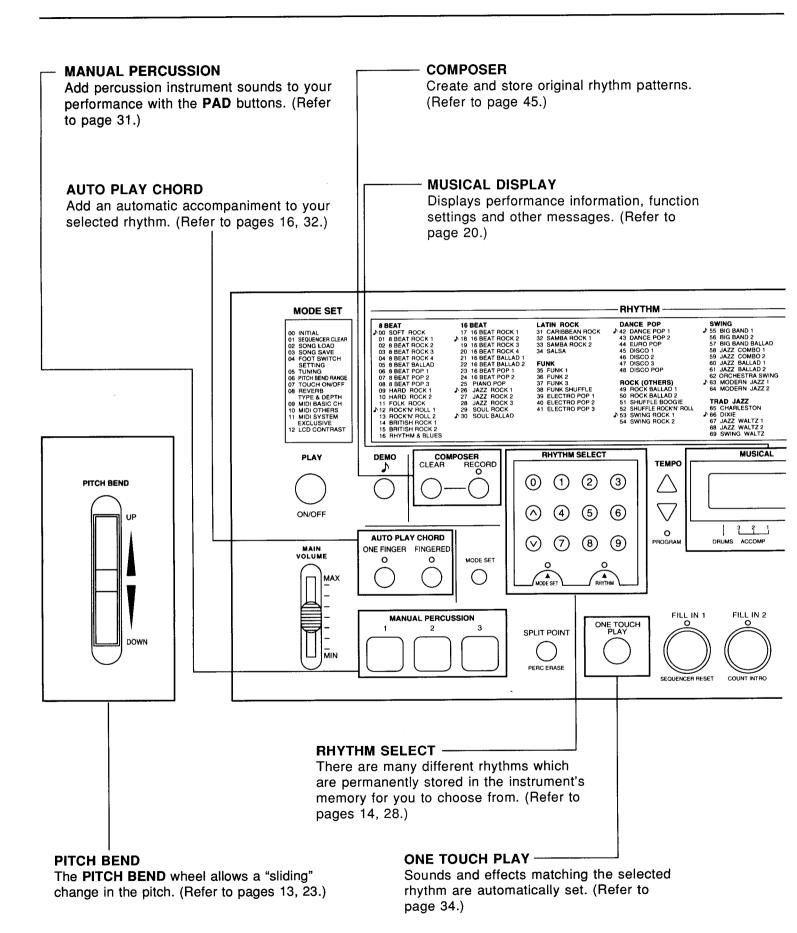
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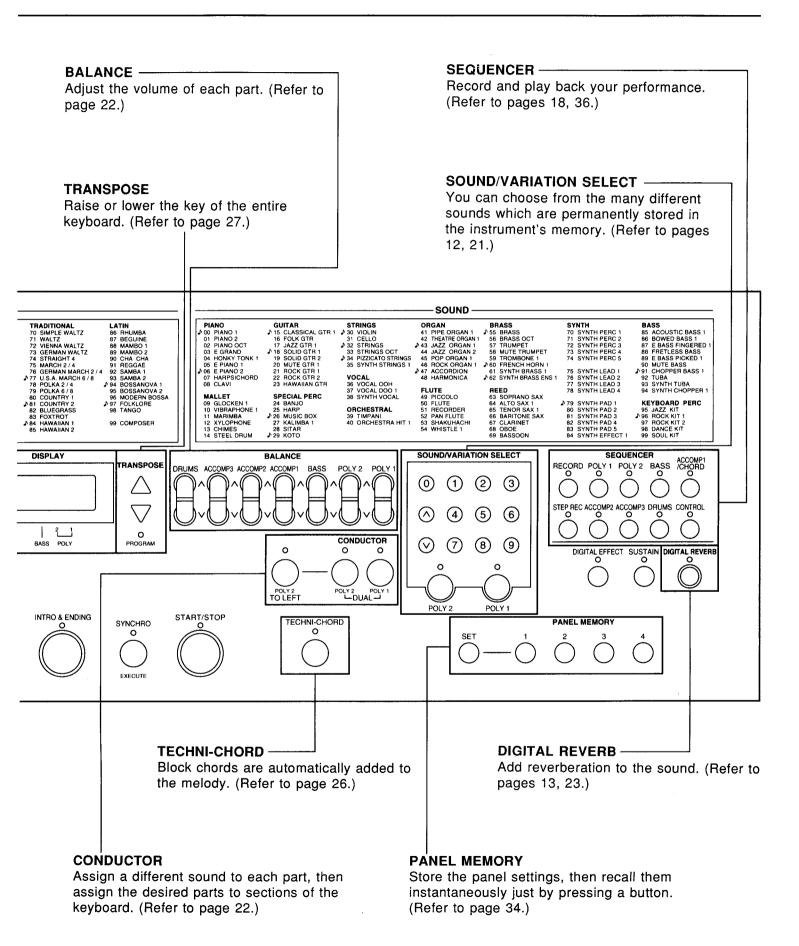
Controls and functions (SX-KN550)





Controls and functions (SX-KN650)





Getting started

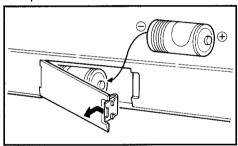
Before you play

This Keyboard can use either dry cell batteries or ordinary household AC current. If using batteries, use six R20/LR20 batteries ("D" size, UM-1). To use AC current, an SY-AD6 AC adaptor (12V, 2A) is required. (Note: Use of an AC adaptor other than the SY-AD6 may cause damage to your instrument.)

- The batteries or the AC adaptor is an included accessory (depending on the country where sold).
- The output power differs depending on whether the AC adaptor or batteries are being used.

When using batteries

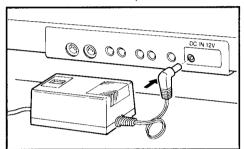
Open the battery compartment cover, found on the rear of the instrument. Insert six R20/LR20 batteries, and replace the battery compartment cover.



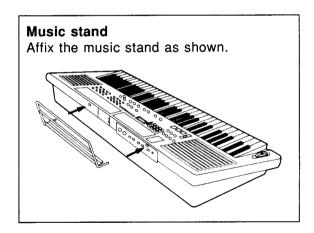
- To insert the batteries correctly, follow the + and - polarity indications.
- Do not use new and old batteries together.
- Remove the batteries from the battery compartment and store separately when the instrument is not to be used for a long time.

When using the AC adaptor

Connect the AC adaptor.

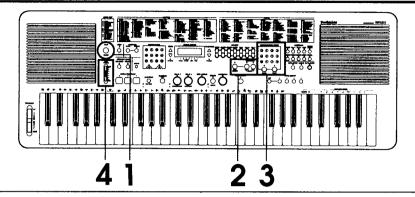


 Do not disconnect and connect the AC adaptor when the PLAY button is on.



- Even when batteries are installed, if the AC adaptor is used, the battery circuit is bypassed and the power is supplied through the AC adaptor.
- When batteries are used, if the instrument is left on but the controls are not touched for a while (about 5 minutes), the energysaving function is activated and the PLAY button turns off automatically.
- When the power is withdrawn from this instrument, the various storable memories and storable function settings of this instrument will be erased in about 10 minutes.
- When battery power is low during a performance, batteries" (KN550) or "WARN-ING!! Low Batteries" (KN650) is shown on the display. In this case, replace the batteries as soon as possible.

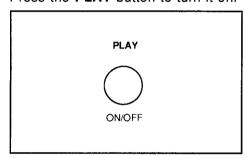
Playing



(KN650)

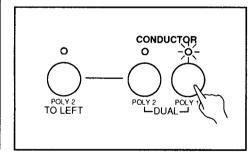
1

Press the PLAY button to turn it on.



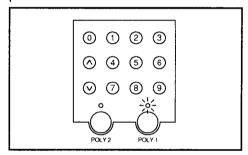
2

In the **CONDUCTOR** section on the panel, press the **POLY 1** button to turn it on.



3

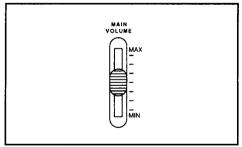
On the **SOUND SELECT** (KN550) or **SOUND/VARIATION SELECT** (KN650) number pad, press **0**, then press **5**.



Touch any note on the keyboard.
 You will hear the E PIANO 1 sound.

4

Set the **MAIN VOLUME** to an appropriate level with the sliding control.

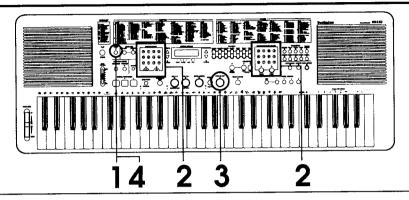


 Your Keyboard features Touch Response. You control the volume by playing the keys harder or softer.

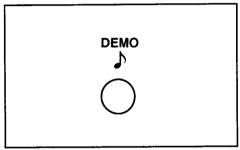
The pitch of this instrument can be adjusted for when playing with other instruments. (Refer to page 54.)

Listen to the demonstration

Listen to a particular sound or rhythm demonstration.



Press the **DEMO** hutton.

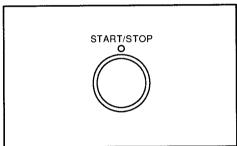


 dE (KN550) or "DEMO SONG" (KN650) is shown on the display.

On the SOUND SELECT (KN550) or SOUND/VARIATION SELECT (KN650) number pad or RHYTHM SELECT number pad, select a number (2 digits) for a demonstration performance.

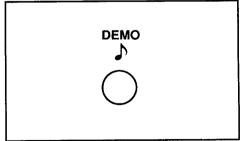
- Sounds or rhythms for which demonstration performances are available are indicated by a mark on the lists of sounds and rhythms on the panel. Therefore, when selecting a number for a demonstration sound or rhythm performance, refer to the lists and select a number which is marked with a ...
- The selected number is shown on the display.

KN550: r = rhythm; S = soundKN650: R = rhythm; S = sound Press the START/STOP button.

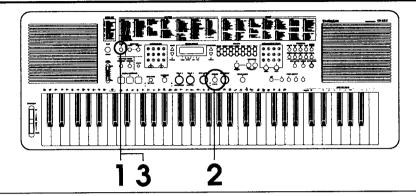


- The demonstration performance corresponding to your selection will begin.
- Repeat steps 2 and 3 to listen to other sounds and rhythms.
- To end the demonstration before it has finished, press the START/ STOP button again.

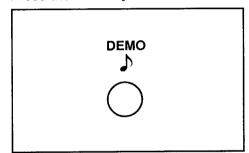
When you are finished listening to the demonstration tunes, press the **DEMO** button again.



Listen to the special demonstration performance.

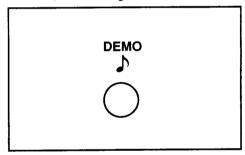


Press the **DEMO** hutton.



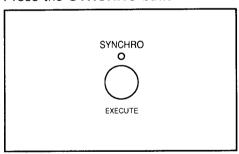
3

When you are finished listening to the demonstration tunes, press the **DEMO** button again.



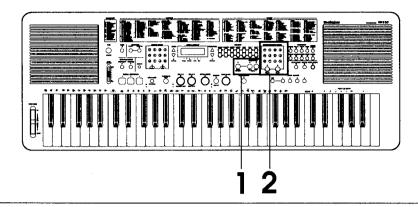
2

Press the SYNCHRO button.

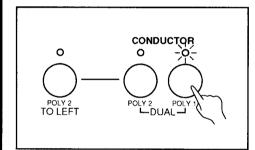


- PR ID (KN550) or "MAIN DEMO" (KN650) is shown on the display, and the special demonstration performance begins.
- Press the SYNCHRO button again to stop the performance.
- If you press and hold the DEMO ♪ button for a few seconds, or if you press first the DEMO ♪ button and then the START/
 STOP button, the rhythms and sounds are demonstrated in order in a medley performance. The medley performance continues until the START/STOP button or the DEMO ♪ button is pressed again.
- Some of the buttons do not function while the demonstration performances are being played.
- You can play the keyboard along with the demonstration tunes.

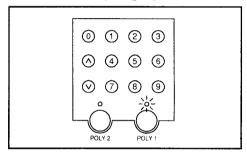
Selecting other sounds



In the **CONDUCTOR** section, turn on the **POLY 1** button.



On the SOUND SELECT (KN550) or SOUND/VARIATION SELECT (KN650) number pad, select a sound number (2 digits).



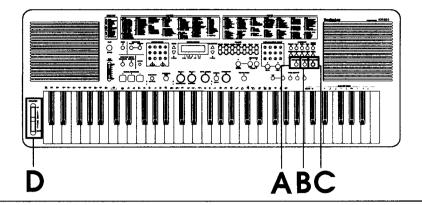
- The list of sounds and their numbers is shown at the upper right of the operation panel.
- For single-digit sound numbers: for sound 03, for example, press 0 then 3.
- You can use the

 And

 buttons to change to the next higher or lower sound number.

- Other things you can do are mixing sounds and playing different sounds on the left and right areas of the keyboard. (Refer to pages 24 and 25.)
- KN650: Each sound also has a variation sound that you can select. (Refer to page 21.)

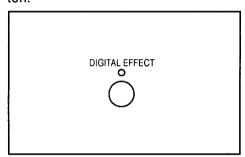
Add effects



Add a feeling of spaciousness to the sound.

A

Turn on the **DIGITAL EFFECT** button.

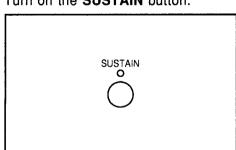


• The sound is broader and deeper.

Add sustain.

B

Turn on the SUSTAIN button.

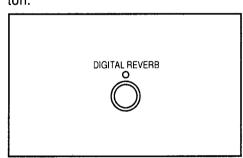


 Play and release a key. The tones fade out gradually after the key is released.

Add reverberation.

C

Turn on the **DIGITAL REVERB** button

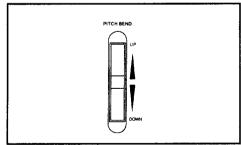


The reverberation effect is applied to all sounds.

Change the pitch.

D

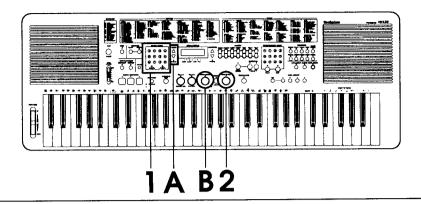
While playing a key on the keyboard, move the **PITCH BEND** wheel up and down.



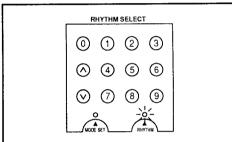
 The pitch of the played key slides up and down, as when you bend the strings on a guitar.

The type of **DIGITAL EFFECT** differs depending on the selected sound.

Playing automatic rhythms

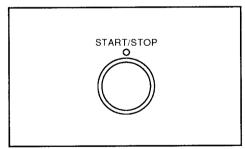


On the **RHYTHM SELECT** number pad, select a rhythm number (2 digits).



- The list of rhythms and their numbers is shown at the upper left of the operation panel.

2 Start the rhythm by pressing the START/STOP button.

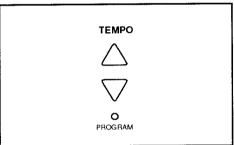


 Stop the rhythm by pressing the START/STOP button again.

Adjust the tempo.

Adjust button

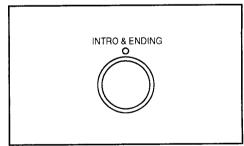
Adjust the tempo with the **TEMPO** buttons.



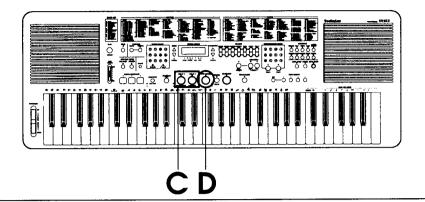
 The tempo is shown on the display.

Insert an intro pattern.

To start your performance with an introduction, press the INTRO & ENDING button before starting the rhythm.



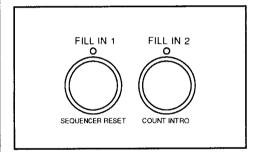
• An intro is played, after which the regular rhythm starts.



Insert a fill-in pattern.



While the preset rhythm pattern is playing, press either the FILL IN 1 or FILL IN 2 button.

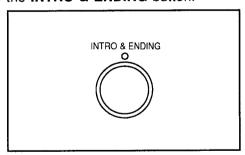


• A fill-in pattern immediately starts to play.

Insert an ending pattern.



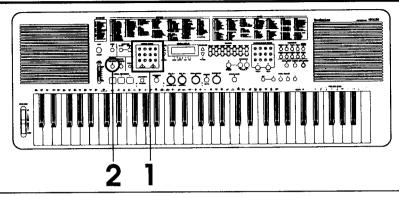
While the rhythm is playing, press the **INTRO & ENDING** button.



 You will hear an ending pattern, and then the rhythm stops.

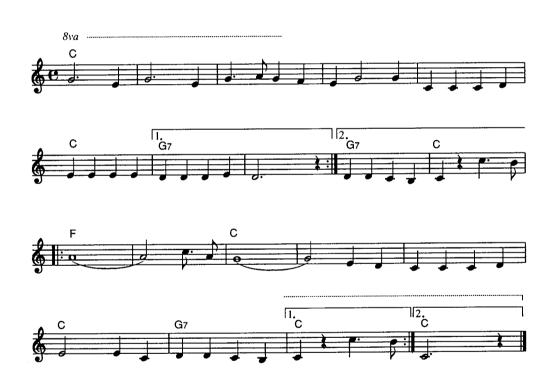
Automatic accompaniment

Use the AUTO PLAY CHORD

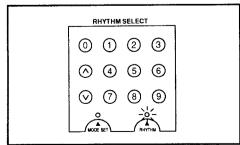


Use the AUTO PLAY CHORD with the following tune.

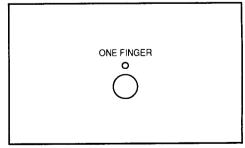
She Wore A Yellow Ribbon



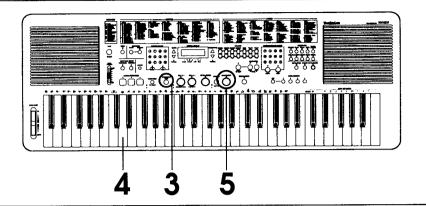
On the **RHYTHM SELECT** number pad, select **82** for the **BLUEGRASS** rhythm.



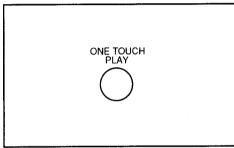
Turn on the ONE FINGER button.



 The keyboard automatically divides into left and right playing areas.



Press and hold the **ONE TOUCH**PLAY button until the panel settings change.

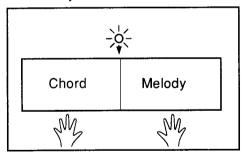


 Pressing a key on the left area of the keyboard will cause the automatic rhythm pattern to start playing (synchro start).

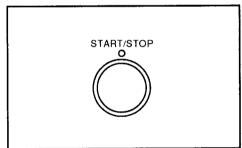
 When the C key is pressed on the left area of the keyboard, an accompaniment begins to play in the C major key.

 Playing the chord key (root note) and the white key to its left will produce a 7th chord.

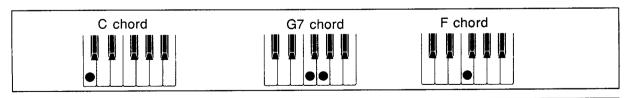
Use your left hand to play the chords and your right hand to play the melody.



At the end of your performance, press the **START/STOP** button.



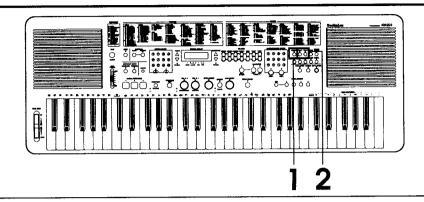
The automatic accompaniment stops.



 In this example you played chords by pressing the keys for the "root notes" (ONE FINGER chords). But you can also specify the chord by playing all the notes in the chord. (Refer to page 32.)

Record your performance

Use the **SEQUENCER** to record your performance.



Sonatina

Sound: 00 PIANO 1 (POLY 1 part)

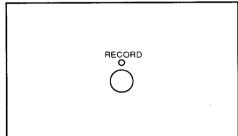


Left hand

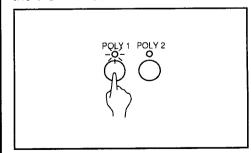




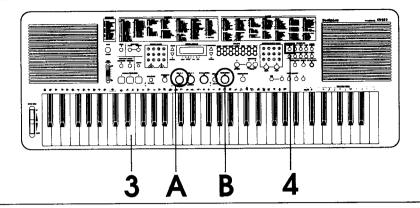




In the **SEQUENCER** section, press the **POLY 1** track button.



• The **POLY 1** indicator flashes.



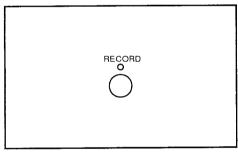
3

Play the song on the keyboard.

Recording begins.

4

When you have finished playing, press the **RECORD** button in the **SEQUENCER** section again to turn it off.

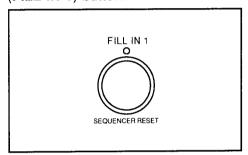


• Confirm that the indicator for the **POLY 1** button is lit.

Playing back your recorded performance

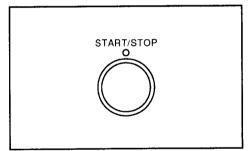
A

Press the **SEQUENCER RESET** (FILL IN 1) button.



B

Press the **START/STOP** button.



 Your performance is played back just as you recorded it.

 You can also record several parts individually and then have them played back together for an ensemble performance. (Refer to page 40.)

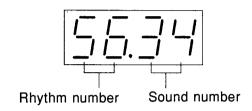
About the display

The display is used to show the status of the keyboard and to set various functions on this instrument.

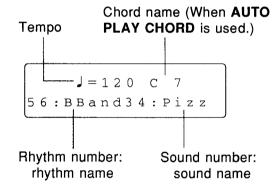
Types of display

Normal performance display

KN550



KN650



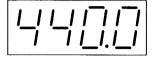
Display when selecting a sound or rhythm (KN650)

When you select a sound or rhythm, or when you change the variation, the name of the selected sound or rhythm is shown on the lower line of the display for a few seconds, after which the normal performance display returns.

Function-setting display

Example: Tuning

KN550



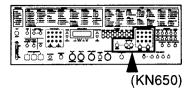
KN650



 KN650: You can adjust the contrast of the display. (Refer to page 56.)

Part I Sounds and effects

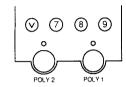
Sound Select



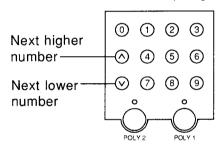
Permanently stored in the memory of this instrument are many different sounds for you to choose from.

Select a sound

 In the SOUND SELECT (KN550) or SOUND/ VARIATION SELECT (KN650) section, press either the POLY 1 button or the POLY 2 button to turn it on.



2. On the **SOUND SELECT** (KN550) or **SOUND/VARIATION SELECT** (KN650) number pad, select the sound number (2 digits).

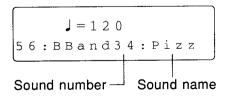


- The list of sounds and their numbers is shown at the upper right of the operation panel.
- The selected sound number is shown on the display.

KN550



KN650



 For single-digit sound numbers: for example, for sound 03, press 0 then 3. Using the (\land) and (\lor) buttons

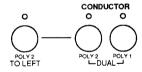
Pressing the \bigcirc button changes the number to one higher than the currently selected number. Pressing the \bigcirc button changes the number to one lower than the currently selected number.

Keep the button or the button pressed to scroll the numbers quickly.

Variation sounds (KN650)

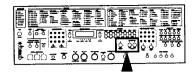
Each sound also has a variation sound that you can select by using the () and () buttons.

- When the variation sound is selected, a * appears next to the sound number on the display.
- For details concerning the variation sounds, please refer to the separate booklet.
- 3. In the **CONDUCTOR** section, turn on the **POLY** 1 or **POLY** 2 button.



- Turn on the same one that you selected in step
- 4. Play the keyboard.
- You hear the sound that you selected in step 2.
- If you select one sound for POLY 1 and another sound for POLY 2, you can change from one sound to the other simply by selecting POLY 1 or POLY 2 in the CONDUCTOR. (Refer to page 22.)
- If you select one of the KEYBOARD PERC sounds (95–99), the keys produce only percussion sounds and the normal sounds are not available. (Refer to page 31.)

Conductor



The CONDUCTOR is used to assign the POLY 1 and POLY 2 sounds to the keyboard in different ways.

CONDUCTOR settings	How sounds are assigned to the keyboard	
CONDUCTOR	All the keys play POLY 1 sounds.	
POLY2 TO LEFT POLY2 POLY1	POL	Y 1
CONDUCTOR	All the keys play POLY 2 sounds.	
POLY2 TO LEFT POLY2 FOLY1 FOLY1	POL	.Y 2
ÇPNDUCTQR	All the keys play both POLY 1 and POLY 2 sounds at the same time (dual sound). (Refer to page 24.) POLY 1 + POLY 2	
POLY2 POLY1 TO LEFT LDUAL J		
CONDUCTOR	The right keys play POLY 1 sounds and the left keys play POLY 2 sounds (split keyboard). (Refer to page 25.)	
POLY2 POLY1 TO LEFT DUAL -	POLY 2	POLY 1
- DOAL-		

Balance

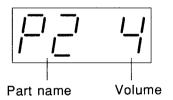
The volume balance for each part (POLY 1, POLY 2, BASS, etc.) is adjusted with the BALANCE buttons.

DRUMS ACCOMP3 ACCOMP2 ACCOMP1 BASS POLY 2 POLY 1

Press the \land button to make the sound louder and the \lor button to make it softer.

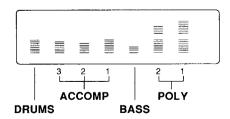
- KN550: Select one of 10 different volume levels, from 0 (no sound) to 9 (loudest) KN650: Select one of 15 different volume levels, from 0 (no sound) to 14 (loudest).
- While you are adjusting the volume, the volume levels are indicated on the display.
 KN550: The part and volume are indicated.
 KN650: The balance display is shown as a bar graph.

KN550

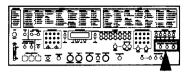


The parts are indicated as follows: DRUMS: dc, ACCOMP: B, BASS: bB, POLY: B.

KN650



Effects



You can achieve even fuller and stirring sounds by adding breadth, swell and reverberation effects.

DIGITAL EFFECT

DIGITAL EFFECT gives the sound a thickness and diffusion.

Press the DIGITAL EFFECT button to turn it on.



- DIGITAL EFFECT is applied to the selected sound.
- This effect differs depending on the selected sound.
- The on or off status of the DIGITAL EFFECT is preset for each sound. This means that once the effect has been set to on or off for a given sound, the same status will be active whenever that sound is selected.
- This effect does not work for the KEYBOARD PERC sounds (95–99).

SUSTAIN

SUSTAIN is the gradual fading out of musical tones after the key is released.

Press the SUSTAIN button to turn it on.



- Play the keyboard. When the keys are released, the sound fades out slowly.
- The sustain can also be turned on and off with the optional SZ-P1 Foot Switch (sold separately). (Refer to page 55.)
- This effect does not work for the KEYBOARD PERC sounds (95–99).

DIGITAL REVERB

DIGITAL REVERB applies a reverberation effect to the sound.

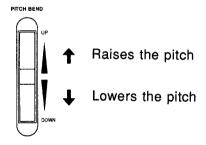
Press the **DIGITAL REVERB** button to turn it on.



- An echo effect is applied to all sounds, including the rhythm sounds.
- You can adjust the depth and type of echo. (Refer to page 56.)

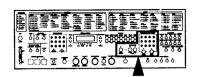
PITCH BEND

The pitch of the sound can be continuously changed with the **PITCH BEND** wheel. Using this control, you can produce the effect of bending the strings on a guitar.



- While pressing a key on the keyboard, move the wheel up and down to control the pitch.
- When you release your hand from the wheel, it returns automatically to the center position, and the pitch bend effect is turned off.
- The amount of pitch bend can be set. (Refer to page 55.)
- The PITCH BEND effect does not work for automatic accompaniment patterns.

Mixing two sounds

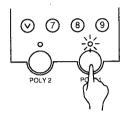


You can play two completely different sounds at the same time (dual sound).

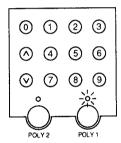
Dual sound

The sounds selected for the POLY 1 and POLY 2 parts can be mixed.

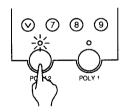
 In the SOUND SELECT (KN550) or SOUND/ VARIATION SELECT (KN650) section, press the POLY 1 button to turn it on.



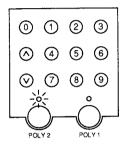
2. On the number pad, select the sound number for the **POLY 1** part.



3. In the SOUND SELECT (KN550) or SOUND/ VARIATION SELECT (KN650) section, press the POLY 2 button to turn it on.

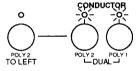


4. On the number pad, select the sound number for the **POLY 2** part.



In the CONDUCTOR section, press the POLY

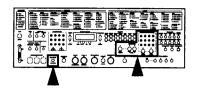
 and POLY 2 buttons at the same time to turn
 them both on.



- 6. Play the keyboard.
- A dual sound is produced.
- The volume balance for each part can be adjusted. (Refer to page 22.)

Practical applications

Split keyboard

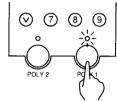


Not only can you play one sound on the entire keyboard, you can also "split" the keyboard into right and left sections and assign a different sound to each section. For example, you can play a bass sound with the left hand and play the melody in a different sound with the right hand.

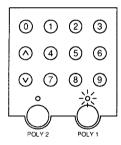
Assigning parts to the split keyboard

Assign the **POLY 1** part to the right section of the keyboard and the **POLY 2** part to the left section.

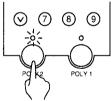
 In the SOUND SELECT (KN550) or SOUND/ VARIATION SELECT (KN650) section, press the POLY 1 button to turn it on.



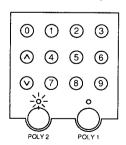
2. On the number pad, select the sound number for the right section of the keyboard.



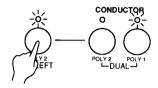
 In the SOUND SELECT (KN550) or SOUND/ VARIATION SELECT (KN650) section, press the POLY 2 button to turn it on.



4. On the number pad, select the sound number for the left section of the keyboard.



In the CONDUCTOR section, press the POLYTO LEFT button to turn it on.



- The keyboard automatically splits into left and right sections. The split point is shown by the lit indicator at G2, C3 or G3 (see below).
- 6. Play the keyboard.
- The left and right sections of the keyboard produce different sounds, just as you assigned them.
- The volume balance for the right and left sections of the keyboard can be adjusted. (Refer to page 22.)

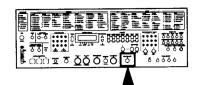
Split point

The **SPLIT POINT** button is used to choose the point where the keyboard divides into left and right sections.



Each time the **SPLIT POINT** button is pressed, the indication moves to the next split point in the following order: $G2 \rightarrow C3 \rightarrow G3$.

Techni-chord



The **TECHNI-CHORD** feature expands the sound of your performance so that a chord is formed for each single note played on the right part of a split keyboard.

Using the TECHNI-CHORD

- 1. Split the keyboard into left and right sections. (Refer to page 25.)
- 2. Press the TECHNI-CHORD button to turn it on.



- 3. Play the keyboard.
- The melody you play with your right hand is automatically played in chords which are based on the chords you play with your left hand.
- The TECHNI-CHORD function is very effective when used with the automatic accompaniment.

Example:

Left hand (chord)

Right hand (melody)



TECHNI-CHORD harmony

You can choose the desired **TECHNI-CHORD** harmony style.

 Press the TECHNI-CHORD button for a few seconds.



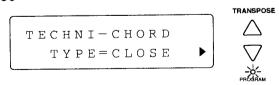
 The currently set harmony style is shown on the display. 2. Select the desired harmony style with the **TRANSPOSE** buttons.

KN550



CLOS : CLOSE OPal : OPEN1 ପ୍ରମନ୍ତ : OPEN2 ଆଧାର : DUET

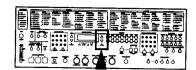
KN650



Select from four styles: CLOSE, OPEN1, OPEN2 and DUET.

 The display returns to the normal performance display a few seconds after you have completed making the setting.

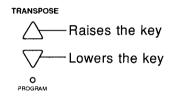
Transpose



The **TRANSPOSE** buttons are used to change the key of the entire instrument in semi-tone steps across an entire octave.

Suppose you learn to play a song in the key of C. Then, you decide to sing it. However, it is either too high or too low for your voice. You can either learn to play the song in a completely different key, or you can use the **TRANSPOSE** feature.

Adjust the key with the \triangle and ∇ buttons.

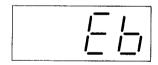


 The key can be reset to C instantly by pressing both TRANSPOSE buttons simultaneously.

KN550

- Each press of the button raises the key as follows: D[♭] [db] → D [d] → E[♭] [ξb] → E [ξ] → F [ξ] → F[‡] [ξξ]
- E [\mathcal{E}] \rightarrow F [\mathcal{E}] \rightarrow F \mathcal{E} [\mathcal{E}] \rightarrow Each press of the \bigtriangledown button lowers the key as follows: B [\mathcal{E}] \rightarrow B \mathcal{E} [\mathcal{E}] \rightarrow A [\mathcal{E}] \rightarrow A \mathcal{E} [\mathcal{E}] \rightarrow G [\mathcal{E}]

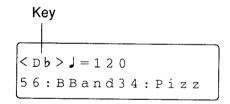
(The brackets [] show indications on the display.)



• When setting the key, the current key is shown on the display.

KN650

- Each press of the button raises the key as follows: D¹ → D → E¹ → E → F → F#



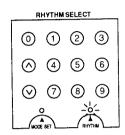
 When transposed to a key other than C, the current key is shown on the display during rhythm stop.

Part II Playing the rhythm

The rhythm section enhances the capabilities of your Keyboard with features such as automatic performance of the preset rhythm patterns and accompaniment patterns.

Rhythm Select

1. On the **RHYTHM SELECT** number pad, select the rhythm number (2 digits).



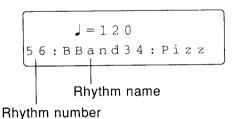
- The list of rhythms and their numbers is shown at the upper left of the operation panel.
- The selected rhythm number is shown on the display.

KN550

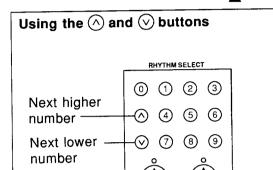


Rhythm number

KN650



- For single-digit rhythm numbers: for example, for rhythm 03, press 0 then 3.
- KN650: Number 99 is reserved for a rhythm pattern you create and store using the COM-POSER feature. (Refer to page 45.) In the initialized state, the HABANERA rhythm is stored in number 99.



Pressing the \bigcirc button changes the number to one higher than the currently selected number. Pressing the \bigcirc button changes the number to one lower than the currently selected number.

- Keep the button or the button pressed to scroll the numbers quickly.
- 2. Press the **START/STOP** button to start the rhythm.



- The selected rhythm pattern immediately begins to play.
- 3. To stop the rhythm, press the **START/STOP** button again.
- The volume of the drums can be adjusted. (Refer to page 22.)

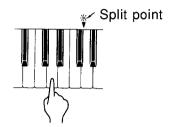
Synchronized start

With the synchronized start feature, the rhythm pattern starts when you play a key on the keyboard.

- 1. Select a rhythm.
- 2. Press the SYNCHRO button to turn it on.



3. Play a key to the left of the keyboard split point.

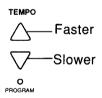


• The rhythm pattern begins to play.

 You can use the synchronized start feature even when the keyboard is not divided into left and right sections. The indicator at the split position will be lit while the SPLIT POINT button is depressed. To start the rhythm, press a key to the left of the indicated split position. The split point changes each time the SPLIT POINT button is pressed.

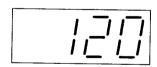
Adjust the tempo

Adjust the tempo with the \triangle and ∇ buttons.

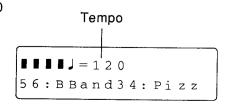


- Each press of the
 △ button increases the tempo, and each press of the
 ▽ button decreases the tempo.
- The tempo can be set within the range of J= 40-300 and is shown on the display. (KN550: The tempo is shown on the display only when it is being set.)

KN550



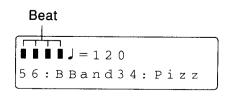
KN650



- Keep either TEMPO button pressed to change the tempo quickly.
- The tempo can be instantly reset to the standard tempo (J=120) by pressing both TEMPO buttons simultaneously.
- While the rhythm is playing, the beat is shown on the display.

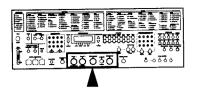


KN650



Beat

Playing the rhythm



Intro, fill-in and ending patterns fitting each different rhythm pattern are permanently recorded in your Keyboard, thus allowing a versatile rhythm performance.

Intro

Begin the rhythm performance with an intro pat-

 Press the INTRO & ENDING button to turn it on.



2. Press the **START/STOP** button to start the rhythm. START/STOP



 An intro pattern is played, after which the normal rhythm pattern begins.

COUNT INTRO

You can begin the rhythm performance with a one-measure count.

 Press the COUNT INTRO (FILL IN 2) button to turn it on.



2. Press the **START/STOP** button to start the rhythm.

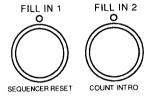


 A one-measure count is played, after which the normal rhythm pattern begins.

FILL IN

You can insert a fill-in pattern any time during the rhythm performance. Choose from two different fill-in patterns.

- 1. Select a rhythm and press the **START/STOP** button.
- 2. Press the FILL IN 1 or FILL IN 2 button.



- A fill-in pattern is heard immediately for the remainder of the measure.
- When a FILL IN button is pressed on the last beat of the measure, the fill-in pattern continues to the end of the following measure.

Ending

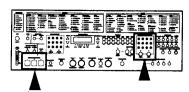
Finish the rhythm performance with an ending pattern.

- Select a rhythm and press the START/STOP button.
- 2. Press the INTRO & ENDING button.



- An ending pattern is produced, and then the rhythm performance stops.
- If you accidentally press the INTRO & ENDING
 button in the middle of the tune, you can press
 the FILL IN 1 or FILL IN 2 button. The ending
 pattern stops, and a fill-in pattern is produced,
 after which the normal rhythm performance
 continues.

Percussion performance



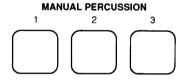
Various percussion instrument sounds have been permanently recorded in your Keyboard, so you can play a percussion performance using the keyboard keys and panel buttons.

KEYBOARD PERCUSSION

- On the SOUND SELECT (KN550) or SOUND/ VARIATION SELECT (KN650) number pad, select one of the KEYBOARD PERC sound numbers (95–99).
- The type of percussion instruments differs for each number (refer to the list on the panel).
- KN650: For each number there is also a set of variation percussion instrument sounds that you can select. For details concerning the variation sounds, please refer to the separate booklet.
- 2. Play the keyboard.
- Percussion instrument sounds are produced by the keyboard keys as indicated by the picture code above each key. (For further explanation, please refer to the separate booklet.)

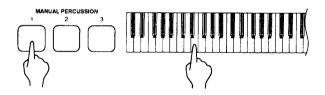
MANUAL PERCUSSION (KN650)

You can add percussions sounds to your performance at any time by tapping MANUAL PERCUSSION pad 1, 2 or 3.



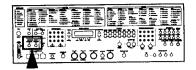
- A different percussion sound has been preset in each of the pad buttons, but you can follow the simple procedure below to assign different sounds to the pad buttons.
- The volume of the MANUAL PERCUSSION sounds is adjusted with the BALANCE buttons for the DRUMS part.
- · The three pads cannot sound simultaneously.

- To assign different sounds to the pads
- On the SOUND/VARIATION SELECT number pad, select one of the KEYBOARD PERC sound numbers (95–99).
- You can also select the variation, if desired.
- While pressing one of the MANUAL PERCUS-SION buttons, select the desired percussion sound by pressing the appropriate key on the keyboard for about 2 seconds.



- When you hear the percussion sound of the pressed key, it means the sound has been assigned to the selected MANUAL PERCUS-SION button.
- Two more percussion sounds can be assigned to the remaining two MANUAL PERCUSSION buttons in the same way.
- Note that you cannot select a different KEY-BOARD PERC sound number for each MANUAL PERCUSSION button. This means that each time you select the KEYBOARD PERC sound number in step 1, the same set of sounds is selected for all three MANUAL PERCUSSION buttons.

Auto Play Chord



Simply by playing a chord on the keyboard, the **AUTO PLAY CHORD** function automatically plays an accompaniment pattern which matches perfectly the selected rhythm. With a real accompaniment as a background, you can concentrate on playing the melody.

Playing chords

Choose from two ways of playing chords—the one-finger mode and the fingered mode—with the **ONE FINGER** and **FINGERED** buttons.

■ ONE FINGER mode

In the **ONE FINGER** mode, a major chord can be played just by pressing the key for its root note.



Minor, seventh and minor seventh chords are also easily produced.

minor chord	seventh chord	minor seventh chord
Play the root note plus a black key to the left of it.	Play the root note plus a white key to the left of it.	Play the root note plus a black key and a white key to the left of it. (Within five notes of the chord key.)
Example: Cm	Example: C7	Example: Cm7 Within 5 keys

■ FINGERED mode

In the **FINGERED** mode, you specify the chord by playing all the notes in the chord.



- The Keyboard can distinguish the following types of chords (C is used as an example): C, C7, CM7, Caug, Caug7, Cm, Cm7, Cdim, Cm7⁵, CmM7, Csus4, C7sus4, C⁵, C7⁵, Cm⁵, Cm, CM, CM7⁵, CM7⁵, CM7⁵, CM7⁵, CM7⁵
- The accompaniment pattern of the AUTO PLAY CHORD is composed of five parts: DRUMS, ACCOMP 1, ACCOMP 2, ACCOMP 3 and BASS.
- The volume of each part can be adjusted by using the corresponding BALANCE buttons. (Refer to page 22.)
- The SEQUENCER can be used to store the chord progression for the AUTO PLAY CHORD in advance.
- KN650: The name of the specified chord is shown on the display. (Note: CmM7⁵ is shown as "CmM7".)

Practical applications

How to use the AUTO PLAY CHORD

Play an automatic accompaniment by using the AUTO PLAY CHORD. First decide if you want to use the ONE FINGER or FINGERED mode for playing chords.

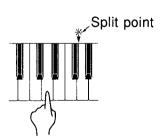
- Select a rhythm from the RHYTHM SELECT, a melody sound from the SOUND SELECT (KN550) or SOUND/VARIATION SELECT (KN650) and set the tempo and effects as desired.
- 2. Press either the **ONE FINGER** or **FINGERED** button to turn it on.

AUTO PLAY CHORD ONE FINGER FINGERED O O

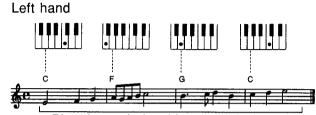
- The keyboard automatically splits into left and right sections.
- 3. Press the **START/STOP** button to turn it on.



- The automatic rhythm begins.
- · For synchronized start, refer to page 29.
- For an intro, refer to page 30.
- 4. Specify the chord on the keyboard section to the left of the split point.



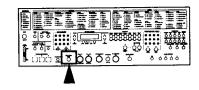
 An accompaniment pattern in the specified chord is automatically played. Play the melody with your right hand. Here is an example of how to play a **ONE FINGER** accompaniment.



Play the melody with your right hand.

- When the automatic rhythm is playing, you can specify the chord and then release the keys.
 The chord is memorized and the accompaniment continues to play in that chord until you specify another chord.
- The chord can be specified with any key to the left of the split point. The split point can be changed. (Refer to page 25.)
- 5. To stop the automatic accompaniment, press the **START/STOP** button.
- To stop the accompaniment with an ending pattern, press the INTRO & ENDING button instead.
- In the ONE FINGER mode, the sounds you selected for the left keyboard section are not produced.
- For the keyboard to "read" the chords correctly, you should release all the keys of one chord before playing the next chord.

One Touch Play



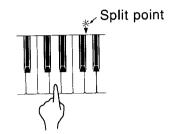
With the **ONE TOUCH PLAY** feature, the sounds and effects matching the selected rhythm are easily set in seconds and you are ready to play immediately.

- 1. Select a rhythm with the **RHYTHM SELECT** number pad.
- KN650: Do not select the 99 COMPOSER rhythm.
- 2. Press the **ONE TOUCH PLAY** button until the panel settings change.

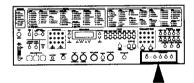


- KN650: During automatic setting, "ONE TOUCH PLAY" is shown on the display.
- The AUTO PLAY CHORD and SYNCHRO are turned on, and the sounds and effects perfect for the specified rhythm are automatically selected.

- 3. Play the keyboard.
- Playing the left section of the keyboard starts the automatic accompaniment.



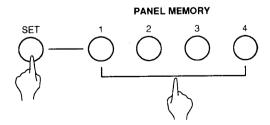
Panel Memory



The **PANEL MEMORY** buttons 1–4 allow you to set up the sounds, effects and rhythm and store them in the memory. Then, simply by pressing just one button, the stored panel settings are recalled instantly.

How to store the panel settings

- 1. Set up the desired panel settings.
- With the SET button held down, press one of the numbered buttons of the PANEL MEMORY.



 To recall the stored settings, just press the corresponding PANEL MEMORY button. You can then change the sound settings, etc. manually; however, the memory contents of the PANEL MEMORY remain unchanged until you store them again.

- Settings which can be stored are:
- Sound settings
- DIGITAL EFFECT on/off status
- SUSTAIN on/off status
- DIGITAL REVERB settings and on/off status
- BALANCE (volume for each part)
- **CONDUCTOR** settings
- Keyboard split point
- TECHNI-CHORD on/off status
- AUTO PLAY CHORD status

Practical applications

How to expand the memory contents

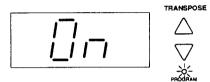
You can expand the range of panel settings that are stored in the **PANEL MEMORY**.

1. Press and hold the **SET** button for a few seconds.



- The display changes to show the currently set PANEL MEMORY range.
- 2. Use the **TRANSPOSE** buttons to change to the expanded range.

KN550



 \mathcal{QFF} indicates the normal range, and $\mathcal{Q}_{\mathcal{P}}$ indicates the expanded range.

KN650



OFF indicates the normal range, and ON indicates the expanded range.

 The display returns to the regular performance display a few seconds after you have completed making the setting.

- Additional settings stored in expanded mode
- Rhythm and tempo settings
- TRANSPOSE status
- SYNCHRO on/off status
- Sounds assigned to the MANUAL PERCUS-SION buttons (KN650)

Part III Sequencer

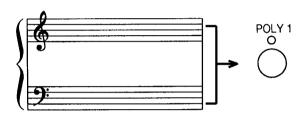
The **SEQUENCER** stores your entire performance—melody and accompaniment, sound and panel setting changes, even changes in the rhythm—for completely automatic playback whenever you desire.

How to use the Sequencer

■ Recording your performance (Refer to page 39.)

You can record your performance exactly as you play it.

Example



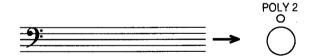
■ Multi-track recording (Refer to page 40.) You can create your own ensemble by recording your performance part-by-part.

Example

Part 1

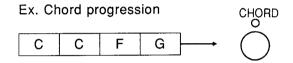


Part 2



■ Recording a chord progression
Realtime recording (Refer to page 41.)
Step recording (Refer to page 42.)

Store the chord progresssion to use with the AUTO PLAY CHORD.



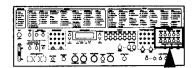
- Erasing performance data (Refer to page 44.) You can selectively erase performance data.
- Saving your performance (Refer to page 49.) Your instrument has additional SONG memories in which you can save the performance you recorded in the SEQUENCER—two performances on the KN550 and three on the KN650.

Memory capacity

Expressed in terms of notes, the total number of notes which can be recorded in all the **SE-QUENCER** tracks is about 1750 in the KN550 and 2000 in the KN650.

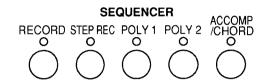
- KN550: During recording, when the remaining memory capacity becomes 20% or less, it is shown as a percentage on the display.
- KN650: During recording, the remaining memory capacity is shown as a percentage on the display.
- When the memory is full, a beep tone sounds, a message appears on the display (KN550: FULL, KN650: Memory full) and recording ends automatically.

Recording tracks



The SEQUENCER has several tracks in which you record your performance.

KN550



Track name	Recorded contents
POLY 1, POLY 2	 Your keyboard performance Sound and volume settings DIGITAL EFFECT, SUSTAIN on/off Rhythm START/STOP PITCH BEND wheel operation data
ACCOMP	 Your keyboard performance Sound and volume settings Rhythm START/STOP Selection changes in the RHYTHM SELECT, TEMPO setting SPLIT POINT, TRANSPOSE status DIGITAL EFFECT, SUSTAIN on/off DIGITAL REVERB on/off Selection changes in the PANEL MEMORY PITCH BEND wheel operation data Foot Switch operation (separately sold option)
CHORD	 Chord progression for the AUTO PLAY CHORD ONE FINGER, FINGERED on/off FILL IN 1, 2, INTRO & ENDING on Selection changes in the RHYTHM SELECT, TEMPO setting Volume settings for the BASS, ACCOMP and DRUMS parts Selection changes in the PANEL MEMORY TRANSPOSE status

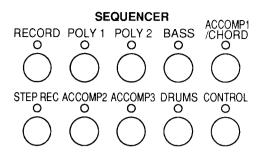
■ About the ACCOMP/CHORD track

This track functions as the CHORD track when the STEP REC button is turned on. It also functions as the recording track for the automatic accompaniment if either the ONE FINGER or FINGERED button is on when the RECORD button is turned on. When neither button is on, it works as the ACCOMP track.

About the tempo

- During SEQUENCER playback, you can adjust the tempo to a different setting from the recorded tempo without changing the pitch. This means that you can record at a slow tempo and play back at a faster tempo.
- If you wish to record the tempo, by selecting the ACCOMP track as the recording track, the beginning tempo setting and any changes in the tempo during your performance are stored. The tempo settings are recalled when this track is turned on during playback.

KN650



Track name	Recorded contents
POLY 1, POLY 2, BASS, ACCOMP 1-3	 Your keyboard performance Sound and volume settings DIGITAL EFFECT, SUSTAIN on/off Rhythm START/STOP PITCH BEND wheel operation data
CHORD	 Chord progression for the AUTO PLAY CHORD FILL IN 1, 2, INTRO & ENDING on ONE FINGER, FINGERED on/off Volume settings for the BASS, ACCOMP and DRUMS parts Selection changes in the RHYTHM SELECT, TEMPO setting Selection changes in the PANEL MEMORY TRANSPOSE status
DRUMS	 Percussion performance on the keyboard and with the MANUAL PERCUSSION pads Rhythm START/STOP, FILL IN 1, 2, INTRO & ENDING on DRUMS volume
CONTROL	Rhythm START/STOP Selection changes in the RHYTHM SELECT, TEMPO setting, FILL IN 1, 2, INTRO & ENDING on AUTO PLAY CHORD status TECHNI-CHORD on/off CONDUCTOR status SPLIT POINT, TRANSPOSE status DIGITAL EFFECT, SUSTAIN on/off DIGITAL REVERB on/off Selection changes in the PANEL MEMORY Foot Switch operation (separately sold option) Expression Pedal operation (separately sold option)

■ About the ACCOMP 1/CHORD track

This track functions as the CHORD track when the STEP REC button is turned on. It also functions as the recording track for the automatic accompaniment if either the ONE FINGER or FINGERED button is on when the RECORD button is turned on. When neither button is on, it works as the ACCOMP 1 track.

■ About the tempo

- During SEQUENCER playback, you can adjust the tempo to a different setting from the recorded tempo without changing the pitch. This means that you can record at a slow tempo and play back at a faster tempo.
- If you wish to record the tempo, by selecting the CONTROL track as the recording track, the beginning tempo setting and any changes in the tempo during your performance are stored. The tempo settings are recalled when this track is turned on during playback.

Recording your performance

Here is an outline of the steps you follow to record your performance in the SEQUENCER.

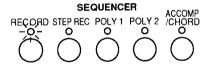
Recording procedure

- 1. Set the sound, effects, volume, etc., for the track you want to record.
- 2. In the **SEQUENCER** section, press the **RECORD** button to turn it on.

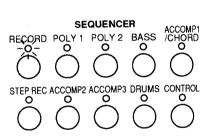


- · The track indicators flash rapidly.
- Press the track button for the track you are going to record.

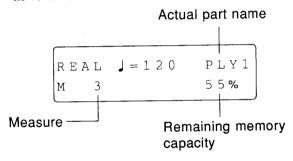
KN550



KN650



- The indicator for the selected track flashes slowly, and the indicators for the other tracks go out.
- If both POLY 1 and either POLY 2 or POLY 2
 TO LEFT are on in the CONDUCTOR, you can record the POLY 1 and POLY 2 tracks simultaneously by pressing both track buttons.
- 4. Play the keyboard.
- · Recording starts.
- Another way to begin recording is to press the START/STOP button to start the rhythm.
- You can record at a slow speed and play back at a higher speed. The pitch does not change.
- KN650: During recording, the display appears as follows:



5. When you have finished recording the track, press the **RECORD** button to turn it off.

Playback procedure

- Confirm that the indicator for the track you recorded is lit.
- If the indicator is not lit, press the track button to turn it on.
- 2. Press the **SEQUENCER RESET** (FILL IN 1) button.



 The SEQUENCER returns to the beginning of the song and the beginning panel settings are recalled. 3. Press the START/STOP button to turn it on.



- The recorded performance is played back automatically.
- You can change the playback tempo with the TEMPO buttons.
- If the START/STOP button is pressed during playback, the performance stops. Pressing the START/STOP button again will cause the performance to continue from the point it was stopped. To return to the beginning of the performance, press the START/STOP button to stop the playback, and then press the SE-QUENCER RESET button.

Multi-track recording

When recording several tracks, you can record one track while listening to the track or tracks already recorded.

■ Record the following example in the **SEQUEN- CER** with the multi-track recording method.



Multi-track recording procedure

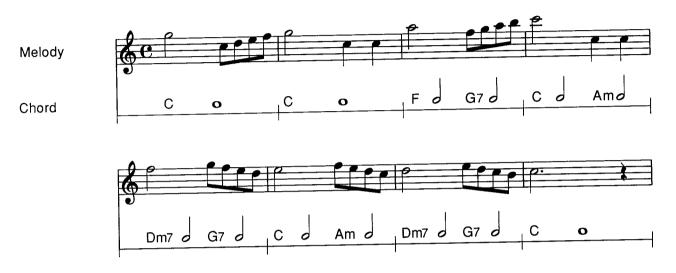
- Record the POLY 1 track.
- 1. In the **SEQUENCER** section, press the **RECORD** button to turn it on.
- 2. Press the POLY 1 track button.
- Set the sound, effects, volume, etc., for POLY
- 4. Play the POLY 1 part on the keyboard.
- When you have completed recording the POLY 1 part, press the RECORD button to turn it off.
- Record the POLY 2 track.
- 1. In the **SEQUENCER** section, press the **RECORD** button to turn it on.
- 2. Press the POLY 2 track button.
- Set the sound, effects, volume, etc., for POLY2.
- 4. Press the START/STOP button to turn it on.
- 5. Play the **POLY 2** part on the keyboard in time with the **POLY 1** part.
- 6. When the POLY 2 part ends, press the RECORD button to turn it off.

- To play back your performance, refer to page 39.
- In the same way, you can record the ACCOMP, BASS (KN650) and DRUMS (KN650) tracks.
 - If the recording procedure is followed for a track which is already recorded, the previously stored performance is erased and the new performance is recorded.
 - You can erase the SEQUENCER contents.
 When you wish to redo a performance or begin a new performance, first erase the recorded contents. (Refer to page 44.)
 - By using the SONG SAVE/LOAD function, you can keep the contents of the performances in the memory. (Refer to page 49.)
 - The SEQUENCER contents are preserved even if the PLAY button is turned off, as long as power is being supplied through the AC adaptor or the batteries.

Recording the chord progression

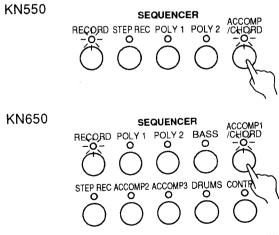
Store the chord progression in the **CHORD** track. When the **AUTO PLAY CHORD** is used during playback, the chords change automatically. Use either the realtime recording method or the step record method.

■ Try storing the following chord progression.



Realtime recording

- Select the rhythm and set the tempo. Turn on the ONE FINGER or FINGERED button.
- 2. In the **SEQUENCER** section, press the **RECORD** button to turn it on.
- 3. Press the ACCOMP/CHORD track button.

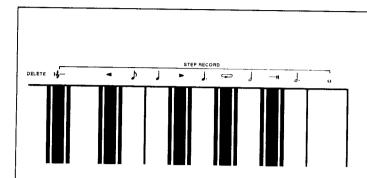


 The ACCOMP/CHORD track indicator flashes slowly.

- 4. Press the **START/STOP** button and play the chord performance.
- The automatic accompaniment begins and chord recording starts.
- Chords can be played on any section of the keyboard.
- When you have completed recording the chord performance, press the **RECORD** button to turn it off.
- In step 3, if you press both the ACCOMP/ CHORD track button and a POLY track button, you can record the POLY part at the same time. In this case, play the melody on the right section of the keyboard, and specify the chords on the left section.
- For playing back the recorded chord progression, refer to page 43.

Step recording

While playing the chord keys with your left hand, use the STEP RECORD keys on the right end of the keyboard to specify the length of the chord.



Reset key

Press to begin recording from the **⊦&**beginning.

Correction keys

- Press once to move back one chord.
- Press once to move forward one chord.

Erase the stored chord. DELETE

Repeat key

Press to complete storage and specify automatic repeat playback of the stored progression.

End key

Press after the whole chord progression has been stored. The chord progression will not be repeated during playback.

Note value keys

- Press to store a whole note.
- Press to store a dotted half-note.
- Press to store a half-note.
- Press to store a dotted quarter-note.
- Press to store a quarter-note.
- Press to store an eighth-note.

■ Example of storing a chord progression

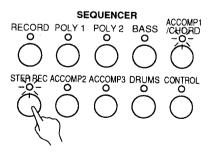
С	С	F	G7	С	Am
0	o				

1. Press the STEP REC button to turn it on.

KN550

SEQUENCER

KN650

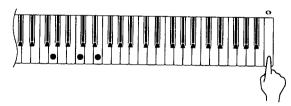


The CHORD track indicator flashes.

2. Store the chords.

<Measure 1, measure 2>

While playing the C chord with your left hand, press the • key one time with your right hand.



- A C major chord of length is stored.
- A "beep" tone indicates that the chord has been successfully stored.

Store the second measure in the same way.

<Measure 3>

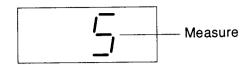
- ① While playing an F chord, press the J key one time.
- ② While playing a G7 chord, press the ↓ key one time.

<Measure 4>

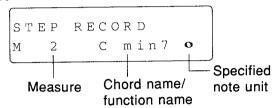
- ① While playing a C chord, press the J key one time
- ② While playing an Am chord, press the J key one time.
- 3. When you have completed storing the chord progression, press the End key —+ .
- The STEP REC indicator turns off.
- During playback, playback of the recorded chord progression stops at this point. For automatic repeat playback of the chord progression, press the Repeat key instead of the End key
- You can specify a rest by pressing a note value key without pressing the chord keys.
- The tempo setting and changes in the rhythm selection can also be stored. The rhythm and the tempo can be changed during recording.

 During step recording, the display similar to the following appears:

KN550



KN650



The beat is also indicated by the measure number. For example, M2 indicates the first beat of measure 2, M2_2 indicates the second beat of measure 2, etc.

- During recording, if a FILL IN button or the INTRO & ENDING button is pressed, the specified command is stored at that timing. (An intro can be stored only at the beginning. When an intro is stored, the measure number is incremented by the corresponding number of measures.)
- If you wish to store a chord with an intro or ending pattern, while playing the chord press the INTRO & ENDING button.

Correcting chords

During the recording procedure, if you wish to correct a chord or command, use the ► and < correction keys to advance or go back to the location of the desired change, press the **DELETE** key to erase the chord or command, and then store the new chord or command in that place.

- If you wish to erase the entire chord progression, hold down the **DELETE** key and press the End key
- KN550: The stored commands are indicated as follows.
- ► INTRO command: The INTRO & ENDING indicator flashes slowly.
- ► COUNT INTRO command: The COUNT INTRO (FILL IN 2) indicator flashes slowly.

► ENDING command: The INTRO & ENDING indicator flashes rapidly.

- ► FILL IN command: The FILL IN 1 or 2 indicator flashes rapidly.
- ► End/Repeat command: { (End) or r (Repeat) appears on the display.
- Rests are indicated as follows.
 KN550: Indicated by _ on the display.
 KN650:

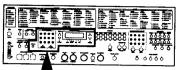
this is the state of the state

 $\cancel{\xi} \times 10 \dots 10$ -beat rest

For rests such as $\xi \times 10$, the rest is erased in increments of ξ .

Playing back the chord progression

- 1. Confirm that the CHORD track indicator is on.
- 2. Press the **SEQUENCER RESET** (FILL IN 1) button.
- 3. Press the START/STOP button to turn it on.
- The AUTO PLAY CHORD begins to play according to the stored chord progression.

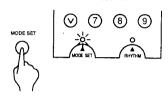


Erasing the recorded performance

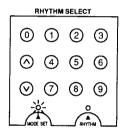
You can erase the contents of selected tracks, for example, when you have made an error in your performance and you wish to record the track again.

Sequencer clear

1. Press the MODE SET button.

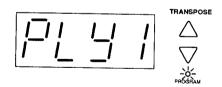


- The MODE SET indicator flashes.
- 2. On the **RHYTHM SELECT** number pad, select **01**.



- The specified number is shown on the display for a fixed period of time.
- 3. Specify the track with the **TRANSPOSE** buttons.

KN550



SLL : All parts SUBS: POLY2

PLS 1: POLY1 REC : ACCOMP/EHED: CHORD

KN650



Select from ALL, POLY1, POLY2, BASS, ACCOMP1/CHORD, ACCOMP2, ACCOMP3, DRUMS and CONTROL.

4. Press the **EXECUTE** (**SYNCHRO**) button.



- On the display, S_ω, ξ (KN550) or "Are you sure?" (KN650) appears. If you wish to cancel the procedure, press the MODE SET button.
- If you wish to continue and erase the contents of the selected track, press the EXECUTE button again.
- The contents of the specified track are erased, &nø (KN550) or "Completed!" (KN650) is shown on the display, and the instrument returns to the normal performance mode.
- Repeat this procedure to erase other tracks as desired.

Part IV Composer (KN650)

Rhythm number 99 COMPOSER of the RHYTHM SELECT is reserved for a rhythm you create and store yourself with the COMPOSER feature.

■ Parts of the COMPOSER

Your rhythm pattern is made up of five parts. The parts and the maximum number of notes which can sound simultaneously are as follows:

ACCOMP1	4 notes
ACCOMP2	4 notes
ACCOMP3	4 notes
BASS	1 note
DRUMS	6 notes

Rhythm components which can be stored

The following components of the rhythm pattern can be created and stored, giving you complete creative control.

- NORMAL (the basic rhythm pattern)
- INTRO
- FILL IN 1
- FILL IN 2
- ENDING

■ Two ways to record in the COMPOSER

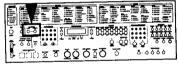
- A. Compose a completely new rhythm pattern from scratch, including fill-ins, an intro and an ending.
- B. Copy a preset rhythm, change parts of it, and store it as a new rhythm pattern. You can also use this procedure to change any single component (for example, only the fill-in pattern) of a preset rhythm pattern.

■ Preserve the recorded pattern.

By using the SONG memories, you can save three of your original rhythm patterns. (Refer to page 49.)

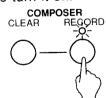
Creating and storing a rhythm pattern

Specify the number of measures, record each part separately.



Preparation

- 1. Select a prerecorded rhythm pattern.
- If you are going to create a completely new rhythm pattern, select a rhythm pattern with the same time signature as the one you are creating.
- In the COMPOSER section, press the RE-CORD button to turn it on.



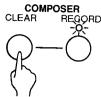
- The display changes to the confirmation display.
- 3. Press either TRANSPOSE button.



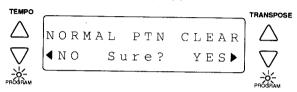
- The rhythm number you specified in step 1 is copied to the 99 COMPOSER memory (any previously recorded pattern is erased).
- If you decide that you do not wish to copy the selected rhythm to the 99 COMPOSER memory, press the RECORD button instead of a TRANSPOSE button.
- Use the **TEMPO** buttons to select the rhythm component you wish to create.



 Select from NORMAL (the basic rhythm pattern), INTRO, FILL 1, FILL 2 and ENDING. 5. If all the parts of the rhythm component are to be created from scratch, press the **CLEAR** button.



The confirmation display appears.

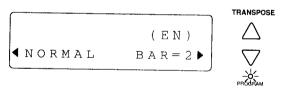


- Press either TRANSPOSE button to clear the parts.
- The ACCOMP 1-3, BASS, and DRUMS part memories are cleared.
- If you do not wish to clear the parts, press either TEMPO button to cancel the clear procedure.

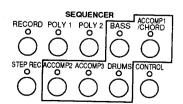
Setting the number of measures in the pattern

If you pressed the **CLEAR** button, you may set the number of measures in the rhythm pattern (except for FILL IN).

Use the **TRANSPOSE** buttons to specify the number of measures in your rhythm pattern (1–8).



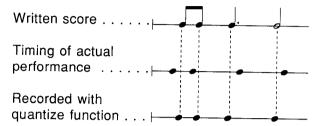
- If (EN) is shown on the display, you can set the number of measures. However, if (DIS) is shown, you cannot set the number of measures. In this case, if you attempt to set the number of measures, "Change Impossible!!" appears on the display.
- 6. Use the **SEQUENCER** track buttons to select the part you wish to record.



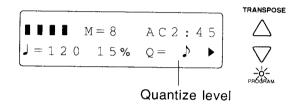
Select one from BASS, ACCOMP 1-3 and DRUMS. See also the following section on "Recording each part."

■ Quantize

When you play the keyboard, your timing may not be exact, and that is the way it will be recorded and played back. However, when you record with the quantize function on, any unevenness in the timing of your performance is smoothed out. For example, if you record the following music with the quantize level set to $Q = \$:



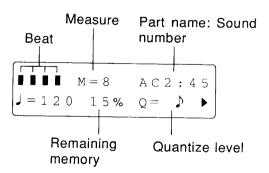
Use the **TRANSPOSE** buttons to set the desired quantize level.



- Select from \$\mathbb{1}_3\$, \$\mat
- The quantize level can be changed during recording.

■ Display during recording

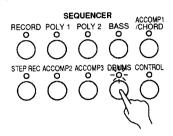
During **COMPOSER** recording, the display looks similar to the following:



Recording each part

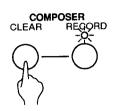
<DRUMS part>

1. Press the DRUMS track button.



- The DRUMS indicator flashes.
- If you cleared the COMPOSER memory in step 5 in the section above on "Preparation," the metronome starts. If you did not clear the COM-POSER memory, the rhythm starts.
- 2. Adjust the tempo.
- You can increase the tempo when the rhythm pattern is played back, so while you are recording, set the tempo to the level at which you can play easily.
- On the SOUND/VARIATION SELECT number pad, select a percussion type (95–99).
- You can also select the variation, if desired.
- 4. Play the drums pattern on the keyboard.
- The measures are repeatedly played back, during which time any newly played notes are added to those already recorded. This allows you to create your pattern by adding a few notes at a time.
- The percussion instruments correspond to the illustrations above the keyboard. (Refer to page 31.)

■ To clear the recorded contents Press the CLEAR button.



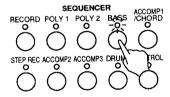
- The memory for the DRUMS part is cleared.
- To erase the instruments
 While holding down the PERC ERASE (SPLIT POINT) button, press the keyboard key for the percussion instrument sound you wish to erase.



 The specified percussion instrument only will be erased for as long as the PERC ERASE button is kept pressed.

<BASS part>

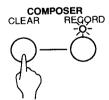
1. Press the BASS track button.



- The BASS indicator flashes.
- On the SOUND/VARIATION SELECT number pad, select the desired sound for the BASS part (00-94).
- 3. Play the **BASS** part in time with the **DRUMS** part.
- Record the performance in C major for correct chord progressions during playback.
- Only one BASS note can be played or can sound at a time.

■ To clear the recorded contents

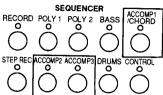
Press the CLEAR button.



The memory for the BASS part is cleared.

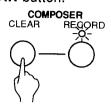
<ACCOMP parts>

 Press an ACCOMP track button (ACCOMP 1, 2 or 3).



- The indicator for the selected ACCOMP part flashes.
- 2. On the **SOUND/VARIATION SELECT** number pad, select the desired sound for the **ACCOMP** part (00–94).
- 3. Play the **ACCOMP** part in time with the other previously recorded parts.
- Record the performance in C major for correct chord progressions during playback.
- If desired, record the other ACCOMP parts in the same manner.

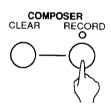
■ To clear the recorded contents Press the CLEAR button.



- The memory for the selected ACCOMP part is cleared.
- Expressed in terms of notes, the total memory capacity of the COMPOSER is approximately 1500 notes.
- The remaining memory is shown as a percentage (%) on the display.
- When the memory is full, "Memory full" is shown on the display and no more data can be recorded.

To end recording

When you have completed storing all the parts, press the **RECORD** button to turn it off.



- The instrument returns to the normal performance mode.
- If you wish to create patterns for other rhythm components (INTRO and FILL IN, for example), repeat the procedure beginning from "Preparation" above. In this case, select 99 COM-POSER in step 1, and select the desired rhythm component in step 4.

Playing back your stored rhythm pattern

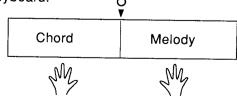
Your newly created rhythm pattern can be played back just like the preset rhythms.

- 1. On the **RHYTHM SELECT** number pad, select 99.
- 2. Press the START/STOP button.



The DRUMS part begins to play back.

- Press either the ONE FINGER or FINGERED button of the AUTO PLAY CHORD to turn it on.
- 4. Specify the chord on the left section of the keyboard.

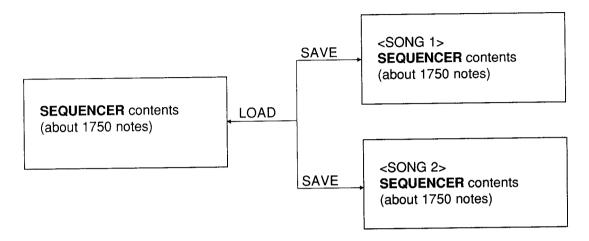


 The BASS and ACCOMP parts are played back in the specified chords.

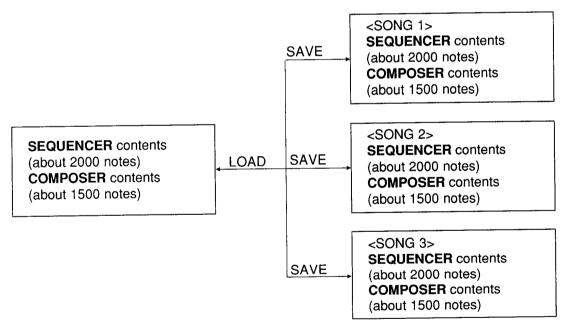
Part V Song memory

Only one performance can be stored in the **SEQUENCER** and **COMPOSER** (KN650). However, by using the SONG SAVE/LOAD feautre, two (KN550) or three (KN650) performances can be saved in the SONG memories.

■ KN550



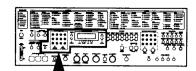
■ KN650



For example, record a performance in the SE-QUENCER, then use the SONG SAVE function to save the performance in one of the SONG memories. Record a new performance in the SE-QUENCER and save this performance in another SONG memory. Use the SONG LOAD function to recall a song from a SONG memory and play it back at any time.

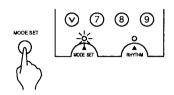
- KN650: When saving a performance in a SONG memory, the COMPOSER contents at that time are also saved.
- The contents of the SONG memories are retained as long as power is supplied through either the AC adaptor or the batteries.

Saving the recorded contents

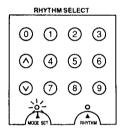


SONG SAVE

- 1. Record a performance in the **SEQUENCER** and **COMPOSER** (KN650).
- 2. Press the MODE SET button.

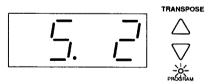


3. On the **RHYTHM SELECT** number pad, select **03**.



- The specified number is shown on the display for a fixed period of time.
- 4. Specify the number of the SONG memory with the **TRANSPOSE** buttons.

KN550



Select 1 or 2.

KN650



Select 1, 2 or 3.

5. Press the **EXECUTE** (SYNCHRO) button.

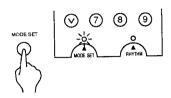


- On the display, Sur E (KN550) or "Are you sure?" (KN650) appears. If you wish to cancel the procedure, press the MODE SET button.
- 6. If you wish to continue and save the song, press the **EXECUTE** button again.
- The SEQUENCER and COMPOSER (KN650) contents are saved in the specified SONG memory number, End (KN550) or "Completed!" (KN650) is shown on the display, and the instrument returns to the normal performance mode.
 - When the SONG SAVE procedure is performed, any previously saved contents of the selected SONG memory are erased.

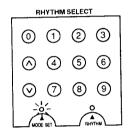
Loading the recorded contents

SONG LOAD

1. Press the MODE SET button.

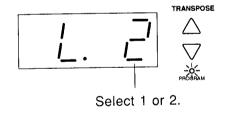


2. On the **RHYTHM SELECT** number pad, select **02**.

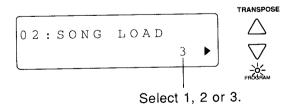


- The specified number is shown on the display for a fixed period of time.
- 3. Specify the number of the SONG memory with the **TRANSPOSE** buttons.

KN550



KN650



4. Press the EXECUTE (SYNCHRO) button.



- The contents of the specified SONG memory number are loaded to the **SEQUENCER**, End (KN550) or "Completed!" (KN650) is shown on the display, and the instrument returns to the normal performance mode.
- If you have selected a SONG memory for which no contents have been saved, no 50 (KN550) or "Error!! Song Not Found" (KN650) is shown on the display.
- 5. Press the START/STOP button to turn it on.



- The recalled performance begins to play.
- KN650: To play back the COMPOSER rhythm, select 99 COMPOSER on the RHYTHM SELECT number pad.
- When the SONG LOAD procedure is performed, any previously recorded contents of the SEQUENCER and COMPOSER (KN650) are replaced by the contents of the SONG memory.

Part VI Setting the functions

Various functions related to the operation of this instrument can be adjusted and regulated to match your particular needs.

Summary of functions which can be set

■ 00 INITIAL

The settings of this instrument can be initialized.

- 01 SEQUENCER CLEAR (Refer to page 44.)
- 02 SONG LOAD (Refer to page 51.)
- 03 SONG SAVE (Refer to page 50.)
- 04 FOOT SWITCH SETTING

Assign the desired function to the Foot Switch (sold separately).

■ 05 TUNING

Fine-tune the pitch of this instrument to match that of other instruments when playing in ensemble.

■ 06 PITCH BEND RANGE

Set the amount of pitch change when the **PITCH BEND** wheel is used.

■ 07 TOUCH ON/OFF

Set the touch response to on or off.

■ 08 REVERB TYPE & DEPTH

Select the type of **DIGITAL REVERB** and adjust the depth of the echo.

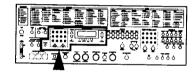
■ 09-11 MIDI settings

(Refer to the chapter on MIDI, beginning on page 58.)

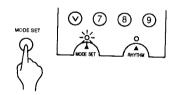
■ 12 LCD CONTRAST (KN650)

Adjust the amount of contrast on the **MUSI- CAL DISPLAY**.

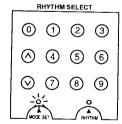
Selecting the function



1. Press the **MODE SET** button.



- The MODE SET indicator flashes.
- On the RHYTHM SELECT number pad, select the number of the function you wish to set (two digits).

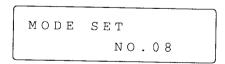


 On the display, the function number is shown for a fixed period of time, and after a time the display changes to the function-setting display for the specified function.

KN550



KN650



- The list of functions and their numbers is shown at the left end of the operation panel.
- KN650: The and buttons can also be used to select the number.
- 3. Make the settings.
- Continue to the next page for detailed information about the settings.

Adjusting the settings

Adjust the settings after selecting the function (refer to page 52).

INITIAL

Reset the various settings and memories of this instrument to their factory-preset status.

- 1. Select 00 INITIAL.
- Use the TRANSPOSE buttons to select the desired type of initialization.

KN550



KN650



Select one of the following types of initialization. The brackets [] show the KN550 display.

ALL [SLL]: All settings and memories (including SONG memories) are initialized.

COMPOSER (KN650): The **COMPOSER** memory is initialized.

SEQUENCER [589]: The **SEQUENCER** memory is initialized.

MIDI [(i, i, j, i, j)]: The MIDI settings are initialized.

3. Press the **EXECUTE** (SYNCHRO) button.



- On the display, 5u-E (KN550) or "Are you sure?" (KN650) appears. If you wish to cancel the procedure, press the MODE SET button.
- 4. If you wish to continue and initialize the settings and memories, press the **EXECUTE** button again.
- After the specified memory is initialized, Ερά (KN550) or "Completed!" (KN650) is shown on the display, and the instrument returns to the normal performance mode.

FOOT SWITCH SETTING

Assign a function to be turned on/off by the Foot Switch (separately sold option).

- 1. Select 04 FOOT SWITCH SETTING.
- Assign the desired function to the Foot Switch with the TRANSPOSE buttons.

KN550



KN650



 Functions to be assigned: [] indicates the KN550 display.

SUSTAIN [505]
GLIDE[66 18]*
TECHNI-CHORD [8688]
START/STOP [5888]
FILL IN 1 [801 1]
FILL IN 2 [801 2]
ENDING [808]
P. MEM INCR [80102]**

- * GLIDE: When the Foot Switch is depressed, the sound of the entire instrument slides down by approximately one semitone, and when the Foot Switch is released, the pitch slides back to the normal pitch. (This effect does not work for some of the sounds, such as the piano sounds.)
- ** P. MEM INCR: The **PANEL MEMORY** number changes to the next number.
- 3. When you have finished making the setting, press the **MODE SET** button.
- The instrument returns to the normal performance mode.

TUNING

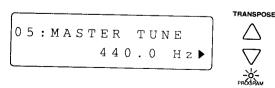
Use this setting to fine-tune the pitch of this instrument when playing along with other instruments or with a recorded performance.

- 1. Select 05 TUNING.
- 2. Use the **TRANSPOSE** buttons to adjust the setting.

KN550



KN650



- The pitch is adjustable within a range of 427.3–453.0 Hz. The decimal can be set to 0, 3 or 6.
- Press both TRANSPOSE buttons simultaneously to instantly return the pitch to the standard 440.0 Hz.
- 3. When you have finished making the setting, press the **MODE SET** button.
- The instrument returns to the normal performance mode.

PITCH BEND RANGE

Set the pitch range of the PITCH BEND wheel.

- 1. Select 06 PITCH BEND RANGE.
- 2. Use the TRANSPOSE buttons to adjust the setting.

KN550



KN650



 Specify a range from 1–12. Increments are in semitones. The higher the number, the greater the change in pitch when the PITCH BEND wheel is operated.

- 3. When you have finished making the setting, press the MODE SET button.
- The instrument returns to the normal performance mode.

TOUCH ON/OFF

Set the touch response function of the keyboard to on or off.

- 1. Select 07 TOUCH ON/OFF.
- 2. Use the TRANSPOSE buttons to turn the function on or off.

3. When you have finished making the setting, press the MODE SET button.

The instrument returns to the normal performance mode.

KN550



KN650

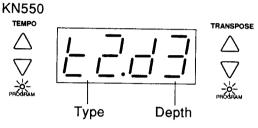


- ON: Playing the keyboard harder produces a louder sound, just as in an acoustic piano.
- to how hard or softly the keyboard is played.
- OFF: The volume does not change in response

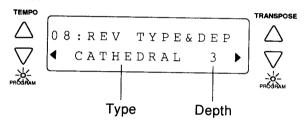
REVERB TYPE & DEPTH

Select the type of **DIGITAL REVERB** and adjust the depth of the echo.

- 1. Select 08 REVERB TYPE & DEPTH.
- 2. Use the **TEMPO** buttons to select the type, and the **TRANSPOSE** buttons to adjust the depth.







Type

- KN550: Select from 1-8.
- KN650: Select from eight types of reverb: ROOM 1, 2, HALL 1, 2, 3, CATHEDRAL, ECHO 1, 2.

Depth

- Specify a depth from 1–8. The higher the number, the more pronounced the effect.
- 3. When you have finished making the setting, press the **MODE SET** button.
- The instrument returns to the normal performance mode.

Quick setting

If the **DIGITAL REVERB** button is pressed and held down, the display changes to this display, allowing you to make the setting immediately.

 The display returns to the normal performance display a few seconds after you have completed making the setting.

LCD CONTRAST (KN650)

Adjust the brightness of the LCD display so that it is easy to read.

- 1. Select 12 LCD CONTRAST.
- 2. Use the **TRANSPOSE** buttons to adjust the setting.

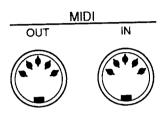


- Select a setting from 1–8. The higher the number, the darker the characters appear.
- 3. When you have finished making the setting, press the **MODE SET** button.
- The instrument returns to the normal performance mode.

What is MIDI?

MIDI (Musical Instrument Digital Interface) is the international standard for digital communication of electronic musical instrument data. This means that any equipment which has a MIDI terminal—such as electronic musical instruments and personal computers—can easily exchange digital data with other MIDI equipment without resorting to complicated conversions or connections.

About the MIDI terminals



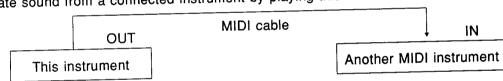
IN: The terminal by which this instrument receives data from other equipment.

OUT: The terminal that transmits data from this instrument to other equipment.

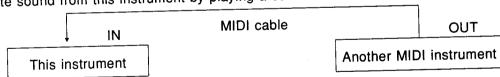
 For these connections, use a commercially available MIDI cable. Contact your Technics dealer for more information.

Connection examples

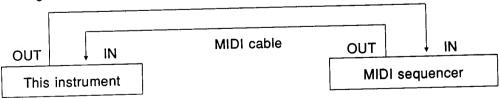
■ To generate sound from a connected instrument by playing this instrument



■ To generate sound from this instrument by playing a connected instrument



■ To record your performance in a connected MIDI sequencer, or to generate sound from this instrument by operating a connected MIDI sequencer



Outline of MIDI functions which can be set

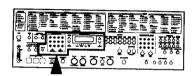
- 09 MIDI BASIC CH
 - · MIDI channels and local control
- 10 MIDI OTHERS
 - REAL-TIME
 - CLOCK
 - TRANSPOSE transmit mode
 - NOTE-ONLY
 - POLY1 receive mode
 - ACCOMP receive mode

- AUTO PLAY CHORD transmit mode
- TECHNI-CHORD transmit mode ^¾
- · DRUMS transmit on/off
- DRUMS transmit type
- PANEL MEMORY program change
- PROGRAM CHANGE

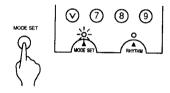
■ 11 MIDI SYSTEM EXCLUSIVE

MIDI EXCLUSIVE message

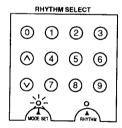
Selecting the function



1. Press the MODE SET button.



- The MODE SET indicator flashes.
- 2. On the **RHYTHM SELECT** number pad, select the number of the MIDI function you wish to set (two digits).

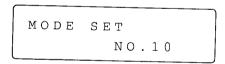


 On the display, the function number is shown for a fixed period of time, and after a time the display changes to the function-setting display for the specified function.

KN550



KN650



- The list of functions and their numbers is shown at the left end of the operation panel.
- 3. Make the settings.
- Continue to the next page for detailed information about the settings.

Adjusting the settings

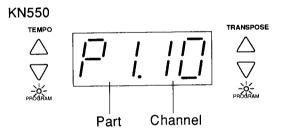
Adjust the MIDI settings after selecting the function (refer to page 58).

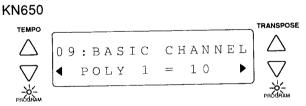
MIDI BASIC CH

Many different kinds of performance data are sent using just one MIDI cable. This is possible because MIDI signals are sent and received through 16 different MIDI channels (numbered 1–16). In order for the exchange of data to take place, the channels on the transmission side must match the channels on the receiving side. Channel numbers have already been assigned to parts (default settings) but you can reassign channel numbers as desired.

■ Setting procedure

- 1. Select 09 MIDI BASIC CH.
- Use the TEMPO buttons to select the part and the TRANSPOSE buttons to select the channel for that part.





- Select from OFF, 1–16 for the channel number.
 The same channel number cannot be assigned to more than one part. If you attempt to do so, the number indication will flash.
- To assign other parts to channels, repeat this procedure.

Default channel settings for each part

Part	KN550 display	KN650 display	Channel
POLY 1	PI	POLY 1	1
POLY 2	65	POLY 2	4
BASS	58	BASS	3
ACCOMP 1	8:	ACMP 1	5
ACCOMP 2	82	ACMP 2	9
ACCOMP 3	83	ACMP 3	10
DRUMS	de	DRUMS	15
CONTROL	٤٤	CTRL	16

■ Local control

While in the MIDI BASIC CH setting mode, you can specify, for each part, whether this instrument's sound generator is enabled or not.

Use the **TECHNI-CHORD** button to set local control to ON or OFF.



ON (indicator is lit):

The performance of the specified part from this instrument is transmitted as MIDI data and also sounds from this instrument.

OFF (indicator is not lit):

The performance of the specified part from this instrument is transmitted as MIDI data but does not sound from this instrument.

- 3. When you have finished making the settings, press the **MODE SET** button.
- The instrument returns to the normal performance mode.

MIDI OTHERS

The following MIDI functions can be set.

[] indicates KN550 display. * indicates the default setting.

			* indicates the default setting.				
	Function	Description	Setting				
/	REAL-TIME [Stat]	Enable or disable the transmission/reception of rhythm and sequencer start/stop data.	EN [&]*: Rhythm start/stop and sequencer start/stop data is transmitted/received. DIS [& /5]: Rhythm start/stop and sequencer start/stop data is not transmitted/received.				
V	CLOCK	Select whether this instrument's clock or that of the connected instrument is used to control the rhythm and sequencer performance.	MIDI [fild i]: The clock of the connected equipment is used to control the performance. This instrument's clock is disabled. (When set to this mode, "" is shown on the tempo display.) INT [int]*: This instrument's internal clock is used to control the performance. The clock of the connected equipment is disabled.				
V	TRANSPOSE	Select whether or not transposed notes are transmitted as MIDI data.	ON [@n]: \(When the TRANSPOSE function is active, the note number of the transposed note is transmitted. OFF [@FF]*: The note number of the played key is transmitted.				
✓	NOTE-ONLY [notE]	Select whether note data only or all performance data is transmitted/received.	ON [@n]: Of the performance data, only note on/off and all- note-off data is transmitted/received. OFF [@FF]*: All performance data used in this instrument is received.				
	POLY1-IN [8 m]	Set the mode for MIDI key note input when perform- ance data is received.	Performance data for the POLY 1 part only is received. The CONDUCTOR determines which sound is produced. DIR [d r]*: Performance data for all parts is received on matching channels; this instrument's CONDUCTOR is inoperative. (This instrument is used as a sound generator when each part is played independently on the connected instrument.)				
V	ACMP1-IN (ACCOMP in) [8 m]	Select whether or not data received for the ACCOMP (KN550), ACCOMP 1 (KN650) part is used to produce an accompaniment pattern.	APC [RPC]: The key note data received for the ACCOMP (1) part is used for the AUTO PLAY CHORD to produce an accompaniment pattern. DIR [d in]*: The received key note data is not used for the AUTO PLAY CHORD.				

Γ	Function	Description	Setting
- 1	APC-OUT [Rout]	Select whether or not data generated by the AUTO PLAY CHORD is transmitted.	Key note data for the ACCOMP and BASS parts of the AUTO PLAY CHORD is transmitted as performance data. CHORD [ched]*: Chords are transmitted just as they are played on the keyboard. The derived AUTO PLAY CHORD accompaniment is not transmitted.
	TEC-CD-OUT	Select whether or not the notes created by the TECH-NI-CHORD function are transmitted as MIDI data.	ON [@n]: When the TECHNI-CHORD button is on, key notes created by the TECHNI-CHORD function are also transmitted. OFF [@FF]*: Only key note data of the pressed keys is transmitted.
	DRUMS-OUT	Select whether or not the notes for the DRUMS part are transmitted (during the AUTO PLAY CHORD performance).	ON [@n]: \(\text{\text{\$\sigma}}\) Key note data for the DRUMS part is transmitted. OFF [@FF]*: Key note data is not transmitted.
\	DRUMS-TYP	Specify how key note data is handled when DRUMS messages are transmitted.	NORM [nor]*: DRUMS sounds are transmitted corresponding to this instrument's key note numbers. TECH [¿¿¿ː]: This instrument's DRUMS sounds correspond to the same key note numbers for connected Technics models set to this type.
/	P.MEM.PCG (PANEL MEMORY program change) [PERG]	Select whether or not panel changes effected by operation of the PANEL MEMORY buttons are transmitted/received as data for the POLY 1 program change.	Data is transmitted/received. DIS [& 15]*: Data is not transmitted/received.
, √	PROG-CHG [800]	Select the mode for transmitting/receiving sound change data. • For the PROGRAM CHANGE numbers, refer to the separate booklet.	l learne annual to the

■ Setting procedure

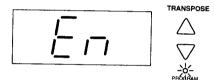
- 1. Select 10 MIDI OTHERS.
- 2. Use the **TEMPO** buttons to select the function and the **TRANSPOSE** buttons to select the setting for that function.

KN550 (Example: REAL-TIME setting)

Selecting the function



Setting the function



 KN550: When the TEMPO button is released, the display soon returns to the function-setting display.

KN650 (Example: REAL-TIME setting)



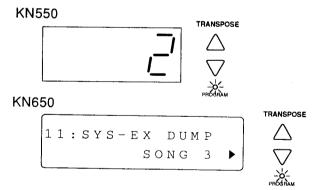
- 3. Repeat the setting procedure for as many functions as necessary or desired.
- 4. When you have finished making the settings, press the **MODE SET** button.
- The instrument returns to the normal performance mode.

MIDI SYSTEM EXCLUSIVE

MIDI data for each SONG can be transmitted to or received from another keyboard of the same model.

■ Transmitting

- 1. Select 11 MIDI SYSTEM EXCLUSIVE.
- 2. Use the **TRANSPOSE** buttons to select the SONG memory number whose data will be transmitted.



- If you select 0, this keyboard's currently active data is transmitted.
- 3. Press the EXECUTE (SYNCHRO) button.
- Data transmission begins.
- During data transmission, "SYSTEM EXCLU-SIVE SENDING" is shown on the KN650 display. When data has been successfully transmitted, End (KN550) or "Completed!" (KN650) is shown on the display.
- When you have finished transmitting the data, press the MODE SET button.
- The instrument returns to the normal performance mode.

■ Receiving

- 1. Select 11 MIDI SYSTEM EXCLUSIVE.
- Use the TRANSPOSE buttons to select the SONG memory number whose data will be received.
- 3. On the transmitting instrument, follow the procedure for transmitting data.
- During data reception, "SYSTEM EXCLUSIVE RECVING" is shown on the KN650 display. When data has been successful received, Engli (KN550) or "Completed!" (KN650) is shown on the display.
- 4. When you have finished receiving the data, press the **MODE SET** button.
- The instrument returns to the normal performance mode.

- If transmission/reception is unsuccessful, an error message appears. (Refer to page 67.)
- During the MIDI SYSTEM EXCLUSIVE procedure, no sound is produced from this keyboard.

Keyboard [SX-KN550/SX-KN650]

MIDI Implementation Chart

(Transmitted)

Fun	ction	POLY 1	POLY 2	ACCOMP 1	ACCOMP 2	ACCOMP 3	BASS	DRUMS	CONTROL	Remarks
asic	Default	1–16	1–16	1–16	1–16	1–16	1–16	1–16	1–16	memorized
hannal	Changed	1–16	1–16	1–16	1–16	1–16	1–16	1–16	1–16	
	Default	3	3	3	3	3	3	3	3	OMNI OFF, POLY MODE
lode	Messages	×	×	×	×	×	×	×	×	
	Altered	_				_				
lote		0-119	0-119	0-119	0–119	0-119	0–119	36-71** (KN550 36-80** (KN650		Changes depending on the position of the transpose control and octave shift.
lumber	True voice	_	_						_	octave shift.
/-leelty	Note ON	0	0	0	0	0	0	0	-	
elocity/	Note OFF	× (9nH:v=0)	× (9nH:v=0)	× (9nH:v=0)						
After	Key's	×	×	×	×	×	×	×	×	
Touch	Ch's	×	×	×	×	×	×	×	×	
Pitch Bend	ier	0	0	0	0	0	0	×	×	
	0, 32	0	0	0	0	0	0	0	×	bank select (TECH only)
	1	0***	0***	0***	0***	O***	0***	×	×	modulation
	7	0	0	0	0	0	0	0	×	volume
_	11	×	×	×	×	×	×	×	0	expression pedal
Control Change	64	0	0	0	0	0	0	×	×	sustain
J	80	×	×	0	×	×	×	×	×	auto play chord
	82	×	×	×	×	×	×	0	×	intro, fill in, ending
	93	0	0	0	0	0	0	×	×	chorus (DIGITAL EFFECT)
Prog		0	0	0	0	0	0	0	×	
Change	True #		_	_	-	_				
System ex	clusive		- L			0				
	Song Pos					×				
System	Song Sel					×				
common	Tune					×				
System	Clock					0		_		
Real Time	Commands					⊙×*				start/stop, continue
	Local ON/OFF	×	×	×	×	×	×	×	_	
Aux Messages	All notes OFF	×	×	×	×	×	×	×		
message:	Active Sense					0				
	Reset	-				×				
Notes		**When	the program	m change r	node is set	a for each o to TECH, r back and di	iote numbe	ers for DHU	MS anter.	be set.

Mode 1:

OMNI ON, POLY

Mode 2:

OMNI ON, MONO

O: Yes X: No

Mode 3:

OMNI OFF, POLY

Mode 4:

OMNI OFF, MONO

Keyboard

MIDI Implementation Chart

[SX-KN550/SX-KN650]

(Recognized)

Fu	ınction	POLY 1	POLY 2	ACCOMP 1	ACCOMP 2	ACCOMP 3	BASS	DRUMS	CONTROL	Remarks
Basic	Default	1–16	1–16	1-16	1–16	1-16	1–16	1–16	1–16	memorized
Channei	Changed	1–16	116	1-16	1–16	1–16	1-16	1–16	1–16	
	Default	3	3	3	3	3	3	3	3	OMNI OFF, POLY MODI
Mode	Messages	×	×	×	×	×	×	×	×	
	Altered	_		_	<u> </u>	_		_		
Note		0-127	0–127	0-127	0–127	0–127	0-127	36-71 (KN550) 36-80 (KN650)	_	Changes depending or the position of the
Number	True voice	0-127	0–127	0-127	0–127	0–127	0-127	36-71 (KN550) 36-80 (KN650)	_	transpose control, octa shift, and sound.
/elocity	Note ON	0	0	0	0	0	0	0		
	Note OFF	×	×	×	×	×	×	×	_	
After	Key's	×	×	×	×	×	×	×	×	
ouch	Ch's	×	×	×	×	×	×	×	×	
Pitch Ben	der	0	0	0	0	0	0	×	×	
	0, 32	0	0	0	0	0	0	0	×	bank select
	1	0	0	0	0	0	0	×	×	(TECH only) modulation
	7	0	0	0	0	0	0	0	×	volume
ontrol	11	×	×	×	×	×	×	×	0	expression pedal
hange	64	0	0	0	0	0	0	×	×	sustain
	80	×	×	0	×	×	×	×	×	auto play chord
	82	×	×	×	×	×	×	0	×	intro, fill in, ending
	93	0	0	0	0	0	0	×	×	chorus (DIGITAL EFFECT)
rog		0	0	0	0	0	0	0	×	
hange	True #	0-99 0-3**	0–99	0-94	0–94	0-94	0-94	0–99	-	
ystem ex	clusive				0					
ystem	Song Pos				×					
ommon	Song Sel									
	Tune				×					
ystem	Clock				0					
eal Time	Commands					*				start/stop, continue
	Local ON/OFF	×	×	×	×	×	×	×		
ux essages	All notes OFF	0	0	0	0	0	0	0		
•	Active Sense				0					
	Reset				×					
otes		* ○ × **Panel me	Whe	ether or not am change	the data fo	or each of th	nese items	is received	can be se	t.

Mode 1:

OMNI ON, POLY

Mode 2:

OMNI ON, MONO

○: Yes

Mode 3:

OMNI OFF, POLY

Mode 4:

OMNI OFF, MONO

×: No

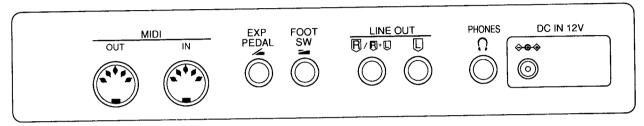
Options and connections

This page shows the optional accessories that are available for your Technics Keyboard. These can make your instrument more versatile and fun to play than it already is.

Also indicated are the many possible connections to the rear accessory panel.

Connections

(on the rear panel)



(KN650)

PHONES (use headphones with over 16 Ω impedance) For silent practice, headphones may be used. When headphones are connected, the speaker system is automatically switched off, and sound is heard only through the headphones.

LINE OUT (output level 1 Vrms, 600 Ω) By connecting an external high-power amplifier, the sound can be reproduced at a high volume. To output monaural sound, connect the external equipment to the **R/R+L** terminal. (Do not connect the **L** terminal.)

FOOT SW

The optional SZ-P1 Foot Switch (sold separately) can be connected to this terminal to control various functions. (Refer to page 54.)

EXP PEDAL (KN650)

The optional SZ-E2 Expression Pedal (sold separately) can be connected to this terminal to control the volume.

MIDI

These terminals are for connection to another MIDI instrument. (Refer to page 57.)

Separately sold options



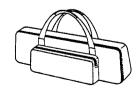
SZ-P1 Foot Switch



SZ-E2Expression
Pedal (KN650)



SZ-S61 Stand



SZ-B7Carrying Bag

Cautions for safest use of this unit

Installation location

- 1. A well-ventilated place.
 - Take care not to use this unit in a place where it will not receive sufficient ventilation, and not to permit the ventilation holes to be covered by curtains, or any similar materials.
- 2. Place away from direct sunlight and excessive heat from heating equipment.
- A place where humidity, vibration and dust are minimized.

Metal items inside the unit may result in electric shock or damage.

Do not permit metal articles to get inside the unit.

Be especially careful with regard to this point if children are near this unit. They should be warned never to try to put anything inside.

If, nevertheless, some such article does get inside, contact the store where the unit was purchased.

If water gets into the unit

Contact the store where the unit was purchased.

As a precaution, it is suggested that flower vases and other containers which hold liquids not be placed on the top of this unit.

If operation seems abnormal

Immediately turn off the power, and contact the store where it was purchased.

Discontinue using the unit at once. Failure to do so may result in additional damage or some other unexpected damage or accident.

 Because the power amp is located inside the unit, it is normal for the cabinet to become warm.

Don't touch the inside parts of this unit.

Some places inside this unit have high voltage potential. Never try to remove the top or back panels of this unit, or to touch inside parts by hand or with tools.

Contact someone who is qualified in order to inspect the inside, or to replace a fuse, if such becomes necessary. Never attempt to do these things yourself.

Maintenance

The following suggestions will assist you in keeping the unit in top condition.

- Be sure to switch the instrument off after use, and do not switch the unit on and off in quick succession, as this places an undue load on the electronic components.
- To keep the luster of the surface and buttons, simply use a clean, damp cloth; polish with a soft, dry cloth.
 Polish may be used but do not use thinners or petro-chemical-based polishes.
- A wax-based polish may be used on the cabinet, although you will find that rubbing with a soft cloth will suffice.

When using the AC adaptor

Power source

- Be sure the line voltage selector is in accordance with local voltage in your area before connecting the plug to the socket.
- 2. DC power cannot be used.
- Unplug the power cord if the unit will not be used for a long time.

Handling the power cord

- 1. Never touch the power cord, or its plug, with wet hands.
- 2. Don't pull the power cord.

A word about the power cord

If the power cord is scarred, is partially cut or broken, or has a bad contact, it may cause a fire or serious electrical shock if used. NEVER use a damaged power cord for any appliance. Moreover, the power cord should never be forcibly bent.

SERVICE MUST BE CARRIED OUT BY DEALER OR OTHER QUALIFIED PERSON

About the error display

The following error messages inform you of a problem in operation or status.

	Error display (KN550)	Error display (KN650)	Reason
SEQUENCER	Er.59	Error !! Seq data error	Recording data error. Playing back is not possible.
SEQUI	FLILL	Error !! * Memory full *	The memory is full. No more data can be stored in the SEQUENCER .
3 (KN650)		Change * Impossible!! *	You attempted to change the time signature without performing the clear procedure.
COMPOSER (KN650)		Error !! * Memory full *	The memory is full. No more data can be stored in the COMPOSER .
SONG	<u></u> . <u></u> . <u></u>	Error !! Song Not Found	During SONG LOAD, you attempted to load a SONG memory for which no contents are stored.
EXCLUSIVE	E. E.	Transmit Error !!	Data transmit procedure failure.
	<u> </u>	Receive Error !!	Data receive procedure failure.
MIDI SYSTEM	E. 15	Error !! ID Code Mismatch	You attempted to receive data from a different model.
BATTERIES	5AFE	WARNING !! Low Batteries	The batteries are almost consumed.

Symptoms which appear to be signs of trouble

The following changes in performance may occur in the Technics Keyboard but do not indicate trouble.

	Phenomenon	Remedy				
		•				
cts	The buttons, keys, etc. malfunction.	 Turn off the PLAY button once, then turn it on again. If this procedure is not successful, turn off the PLAY button once. Then, while pressing the three lower number buttons on the RHYTHM SELECT number pad (0, 1 and 2) at the same time, turn the PLAY button on again. (Note that, in this case, all programmable settings, functions and memories return to their factory-preset status.) If you cannot turn off the PLAY button, disconnect the AC adaptor or remove the batteries once. 				
Sounds and effects	No sound is produced when the keys are pressed.	 The MAIN VOLUME is at the minimum setting. Adjust the volume with the MAIN VOLUME control. The volumes for the selected parts are set to the minimum levels. Use the BALANCE buttons to set the volumes of the relevant parts to appropriate levels. (Refer to page 22.) The local control for a part performed on the keyboard is set to OFF. Set the local control to ON. (Refer to page 59.) 				
	When using batteries, the volume level becomes low or the sound is distorted.	• The batteries are low. When the "Low Batteries" message appears, replace the batteries as soon as possible.				
	Only percussive instrument sounds are produced when the keyboard is played.	A KEYBOARD PERC sound (numbers 95–99) has been selected. On the SOUND SELECT number pad, select a different sound number.				
Rhythm	The rhythm does not start.	 The DRUMS volume is set to the minimum level. Use the BALANCE buttons to set the DRUMS volume to an appropriate level. KN650: On the RHYTHM SELECT number pad, 99 COMPOSER was selected although a rhythm pattern has not been stored. Select a different rhythm or store a rhythm pattern in the COMPOSER (refer to page 45). The MIDI CLOCK is set to MIDI. Set the MIDI CLOCK to INT. (Refer to page 60.) 				
′ сновр	No sound is produced for the automatic accompaniment.	KN650: On the RHYTHM SELECT number pad, 99 COMPOSER was selected although a rhythm pattern has not been stored. Select a different rhythm or store a rhythm pattern in the COMPOSER (refer to page 45).				
AUTO PLAY CHORD	No sound is produced for the automatic accompaniment, or only the sounds of some parts are produced.	An ACCOMP part does not sound if its corresponding volume is set to the minimum level. Use the respective BALANCE buttons to set the ACCOMP 1, 2 and 3 volumes to appropriate levels.				

	Phenomenon	Remedy
	Storage is not possible.	 The remaining memory capacity of the SEQUENCER is 0. Follow the SEQUENCER CLEAR procedure to erase the memory. (Refer to page 44.)
SEQUENCER	Multi-track storage is not possible.	• The playback track has been selected, but the START/STOP button has not been pressed. A flashing track indicator shows the track which is ready for recording, and a lit track indicator shows a track which is ready for playback. To record one track while listening to another (playback) track, press the START/STOP button to begin playback. (Refer to page 40.)
(05	Storage is not possible.	• The remaining memory capacity of the COMPOSER is 0.
SNX)	Setting the number of measures is not possible.	If you wish to change the measure data, first follow the procedure to clear the memory. (Refer to page 46.)
(KNESO)	The playback timing of the rhythm pattern is different from the timing with which it was recorded.	The quantize function was on when the pattern was recorded and the timing was automatically corrected. Set the quantize level to a smaller note unit or to OFF when recording. (Refer to page 46.)
	Noise from this instrument can be heard in a nearby radio or TV set.	This sometimes occurs when electrical equipment such as a radio or TV is used near the instrument. Try moving such electrical equipment further away from the instru- ment.
3	Radio or TV noise can be heard in this instrument.	 The sound may be coming from a nearby broadcast station or amateur radio station. If the sound is bother- some, consult your dealer or servicenter.
	The cabinet becomes warm during use.	 This instrument has a built-in amplifier section that heats the cabinet to some degree. This is not an in- dication of trouble.

■ The maximum number of notes which can sound simultaneously for each part is as shown below.

	During performance	During MIDI reception	
POLY 1	8	16	The maximum number of notes
POLY 2	8	16	which can sound
ACCOMP 1	4	8	simultaneously for
ACCOMP 2	4	8	all parts combined is 32.
ACCOMP 3	4	8] 13 02.
BASS	1	8	
DRUMS	6	8	

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DIGITAL REVERB	P.MEM.PCG
	POLY1-IN
E	PROG-CHG
E	REAL-TIME
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Specifications

		SX-KN550	SX-KN650			
KEYBOARD		61 KEYS (WITH INITIAL TOUCH)				
so	UND GENERATOR	P	CM			
MAXIMUM NUMBER OF NOTES PRODUCED SIMULTANEOUSLY		32 NOTES				
SOUNDS	SOUND SELECT	100 SOUNDS	200 SOUNDS			
son	EFFECT	DIGITAL EFF	DIGITAL EFFECT, SUSTAIN			
ВНҮТНМ	RHYTHM SELECT	100 PA	TTERNS			
	CONTROLS	START/STOP, SYNCHRO, INTRO & END	ING, FILL IN 1, 2, COUNT INTRO, TEMPO			
	MANUAL PERCUSSION	_	○ (1–3)			
ш	KEYBOARD PERCUSSION	36 KEYS	45 KEYS			
DIG	ITAL REVERB		0			
ΑU	TO PLAY CHORD	ONE FINGER, FINGER	RED, ONE TOUCH PLAY			
TEC	CHNI-CHORD	(0			
PA	NEL MEMORY	SET	⁻ , 1–4			
ICER	TRACK	3 TRACKS (POLY 1, POLY 2, ACCOMP/CHORD)	8 TRACKS (POLY 1, POLY 2, BASS, ACCOMP 1/CHORD, ACCOMP 2, ACCOMP 3, DRUMS, CONTROL)			
EQUENCER	STORAGE CAPACITY	APPROX. 1750 NOTES	APPROX. 2000 NOTES			
SE	INPUT MODES	REALTIME, STEP (CHORD)				
COMPOSER		<u>—</u>	PATTERNS: NORMAL, INTRO, FILL IN 1, FILL IN 2, ENDING 5 TRACKS (BASS, ACCOMP 1, ACCOMP 2, ACCOMP 3, DRUMS) STORAGE CAPACITY: APPROX. 1500 NOTES INPUT MODE: REALTIME EDIT FUNCTIONS: CLEAR, QUANTIZE, PERCUSSION ERASE			
102	NG MEMORY	2	3			
DIS	PLAY	LED (4 DIGITS)	LCD (16 CHARACTERS × 2 LINES)			
	NTROLS		POSE, CONDUCTOR, SPLIT POINT			
DEN	MO		\sim			
MODE SET		INITIAL, SEQUENCER CLEAR, SONG LOAD, SONG SAVE, FOOT SWITCH SETTING, TUNING, PITCH BEND RANGE, TOUCH ON/OFF, REVERB TYPE & DEPTH, MIDI BASIC CH, MIDI OTHERS, MIDI SYSTEM EXCLUSIVE	INITIAL, SEQUENCER CLEAR, SONG LOAD, SONG SAVE, FOOT SWITCH SETTING, TUNING, PITCH BEND RANGE, TOUCH ON/OFF, REVERB TYPE & DEPTH, MIDI BASIC CH, MIDI OTHERS, MIDI SYSTEM EXCLUSIVE, LCD CONTRAST			
TER	RMINALS	DC IN 12V, HEADPHONE, LINE OUT, MIDI (IN, OUT), FOOT SWITCH	DC IN 12V, HEADPHONE, LINE OUT, MIDI (IN, OUT), FOOT SWITCH, EXPRESSION PEDAL			
OUT	TPUT .	3 W × 2 (WITH BATTERIES), 8 W	× 2 (WITH SY-AD6 AC ADAPTOR)			
SPE	AKERS	12 cm × 2	12 cm × 2, 6.5 cm × 2			
POWER REQUIREMENT		BATTERIES: DC 9V (USING R20/LR20 ["D" SIZE, UM-1] BATTERIES × 6) AC: WITH SY-AD6 AC ADAPTOR AC 120/220/230/240 V 50/60Hz AC 120 V 60Hz (NORTH AMERICA AND MEXICO)				
DIM	ENSIONS (W×H×D)	96.0 cm × 13.5 cm × 36.2 cm	(37-25/32" × 5-5/16" × 14-1/4")			
NET	WEIGHT	6.8 kg (15.0 lbs)	7.1 kg (15.7 lbs)			
400	ESSORIES		AC ADAPTOR (SY-AD6), MUSIC STAND			

Design and specifications are subject to change without notice.



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