Technics

KEYBOARD

SX-KN501
SX-KN701

ENGLISH

QQTG0352A

DISPLAY CHARACTERS

character	display	character	display	character	display	character	display
0		C		L		S	
1		c		l		s	
2		D		M		-	
3		d		m		:	
4		E		N		⌣	
5		e		n		⌣	
6		F		O		V	
7		f		o		v	
8		G		P		Y	
9		g		p		y	
A		H		Q			
a		h		q			
B		I		R			
b		i		r			

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 2.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SCREWS.
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Before you play

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

The Owner's Manual is comprised of the following parts.

OWNER'S MANUAL (This booklet)	Contains explanations of the operation of the keyboard.
REFERENCE GUIDE (separate booklet)	Reference guide for the contents of the **SOUND/RHYTHM** select, MIDI data, etc.

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.
3. 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

1. 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.
3. 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.

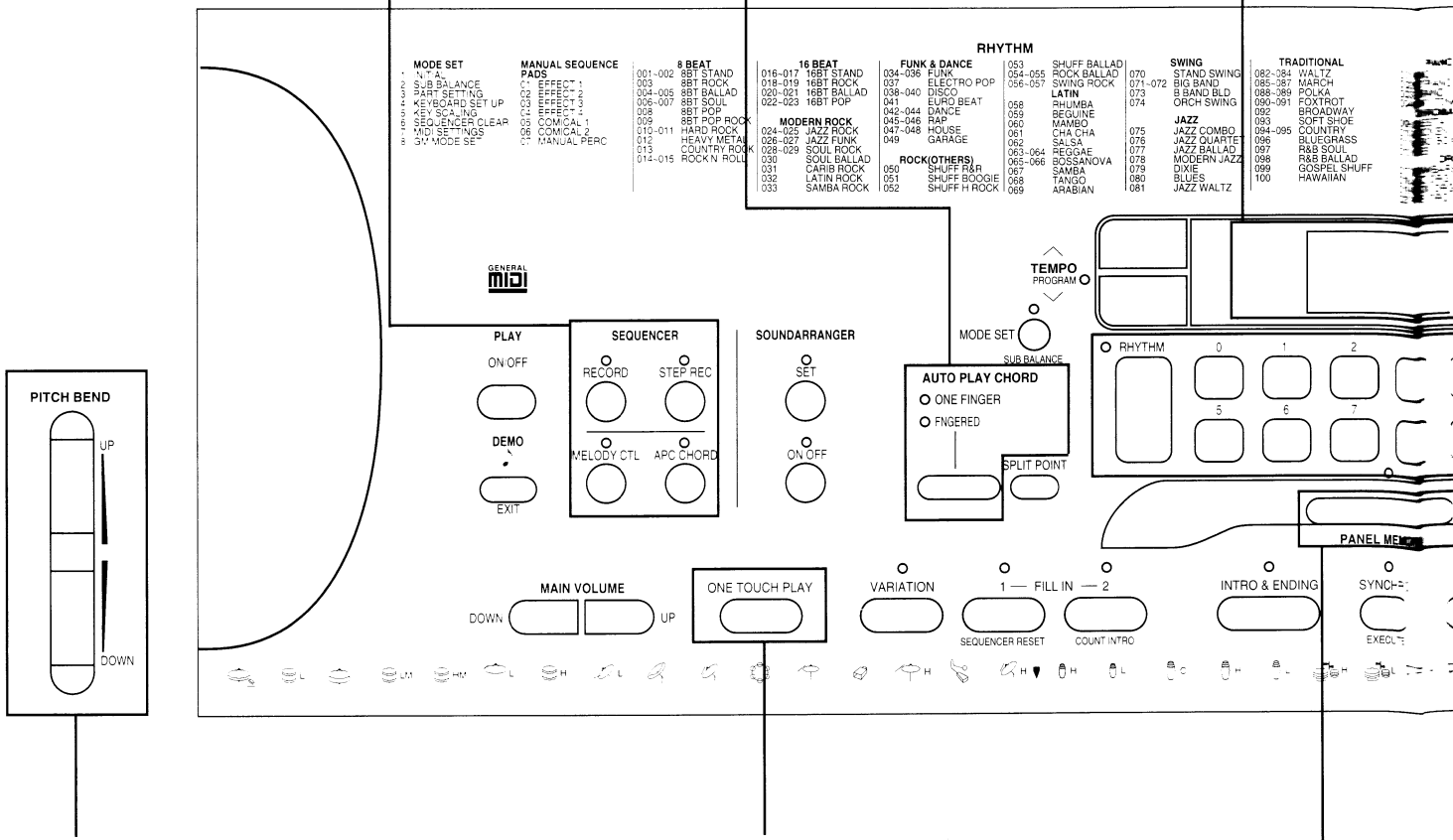
SERVICE MUST BE CARRIED OUT BY DEALER OR OTHER QUALIFIED PERSON

Controls and functions (KN501)

AUTO PLAY CHORD
Add an automatic accompaniment to your selected rhythm. (Refer to page 23.)

SEQUENCER
Record and play back your performance. (Refer to page 27.)

DISPLAY
Displays performance information, function settings and other messages.



PITCH BEND
The **PITCH BEND** wheel allows a "sliding" change in the pitch. (Refer to page 15.)

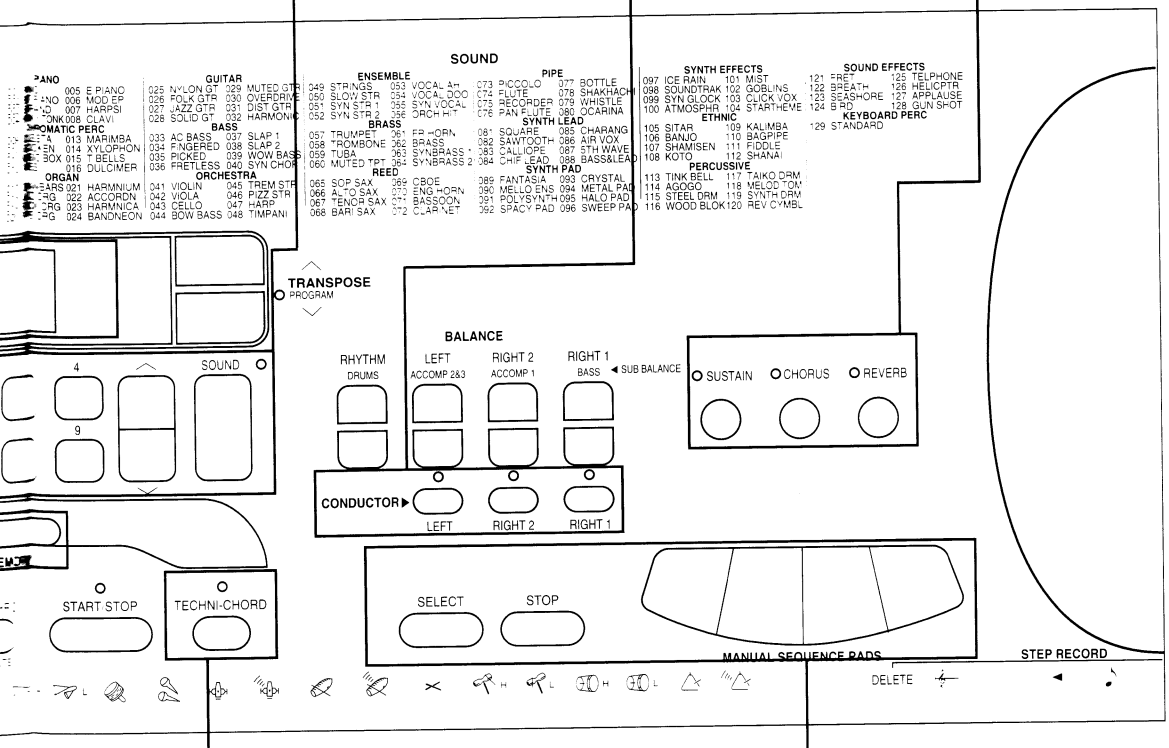
ONE TOUCH PLAY
Sounds and effects matching the selected rhythm are automatically set. (Refer to page 26.)

PANEL MEMORY
Store the panel settings, then recall them instantaneously just by pressing a button or two. (Refer to page 26.)

SOUND/RHYTHM select
Select the sounds and rhythms. (Refer to pages 10, 20.)

CONDUCTOR
Assign a different sound to each part, then assign the desired parts to sections of the keyboard. (Refer to page 11.)

EFFECTS
Adds a variety of different effects to the sounds produced. (Refer to page 13.)



TECHNI-CHORD
Block chords are automatically added to the melody. (Refer to page 16.)

MANUAL SEQUENCE PADS
Add various phrases to your performance with the pad buttons. (Refer to page 18.)

Backup memory
The various stored memories and function settings are preserved even if the **PLAY** button is turned off, as long as power is being supplied through the AC adaptor or the batteries.
- If the power supply to this instrument is discontinued (either through the AC adaptor or the batteries), the various memories and settings will be cleared after about 10 minutes.

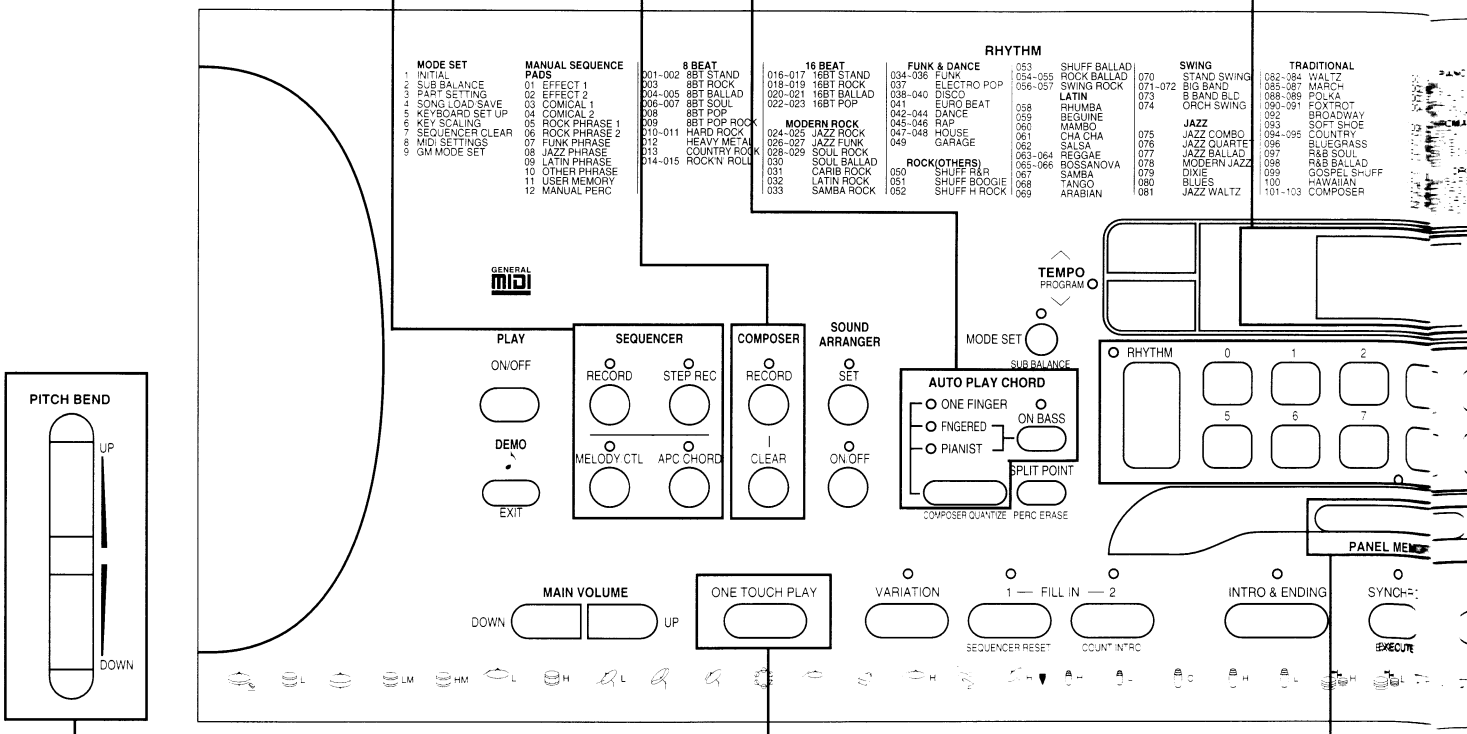
Controls and functions (KN701)

COMPOSER
Create and store original rhythm patterns.
(Refer to page 33.)

AUTO PLAY CHORD
Add an automatic accompaniment to your selected rhythm. (Refer to page 23.)

SEQUENCER
Record and play back your performance.
(Refer to page 27.)

DISPLAY
Displays performance information, function settings and other messages.



PITCH BEND
The **PITCH BEND** wheel allows a "sliding" change in the pitch. (Refer to page 15.)

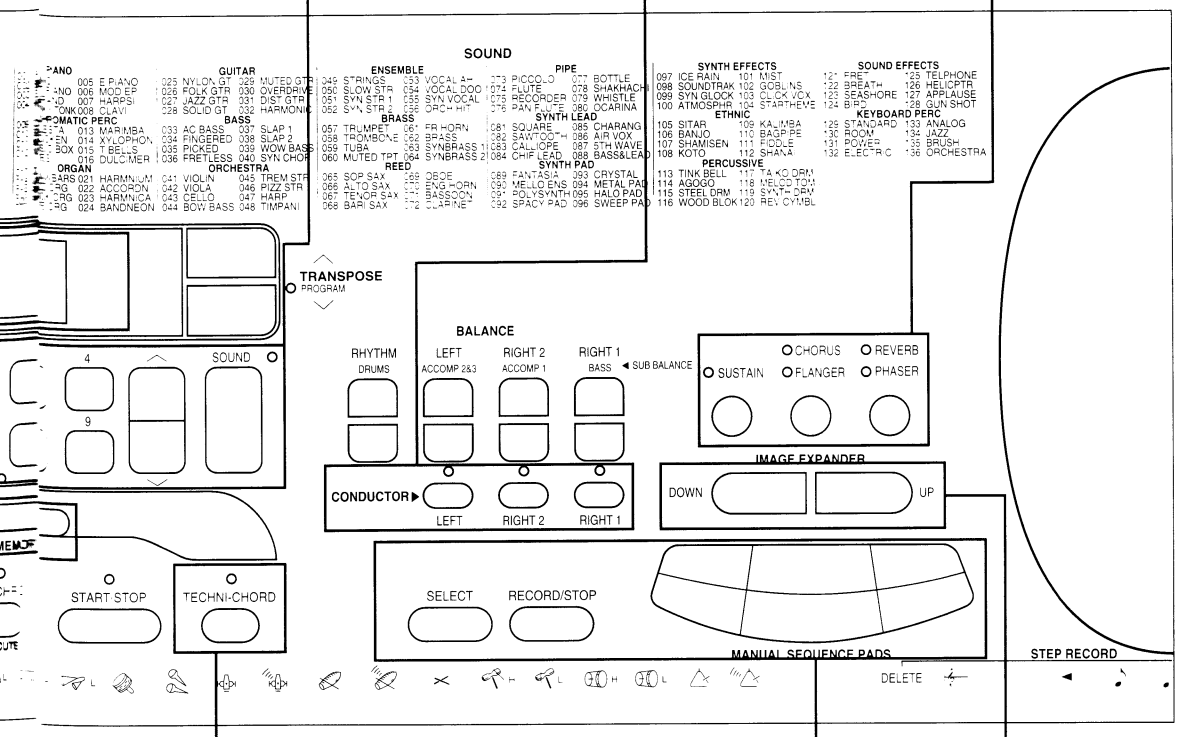
ONE TOUCH PLAY
Sounds and effects matching the selected rhythm are automatically set. (Refer to page 26.)

PANEL MEMORY
Store the panel settings, then recall them instantaneously just by pressing a button or two. (Refer to page 26.)

SOUND/RHYTHM select
Select the sounds and rhythms. (Refer to pages 10, 20.)

CONDUCTOR
Assign a different sound to each part, then assign the desired parts to sections of the keyboard. (Refer to page 11.)

EFFECTS
Adds a variety of different effects to the sounds produced. (Refer to page 13.)



TECHNI-CHORD
Block chords are automatically added to the melody. (Refer to page 16.)

IMAGE EXPANDER
Gives a feeling of width to the sound positioning. (Refer to page 14.)

MANUAL SEQUENCE PADS
Add various phrases to your performance with the pad buttons. (Refer to page 18.)

Backup memory
The various stored memories and function settings are preserved even if the **PLAY** button is turned off, as long as power is being supplied through the AC adaptor or the batteries.
- If the power supply to this instrument is discontinued (either through the AC adaptor or the batteries), the various memories and settings will be cleared after about 10 minutes.

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/AD6B AC adaptor (12V, 2A) is required. (Note: Use of an AC adaptor other than the SY-AD6/AD6B may cause damage to your instrument.)

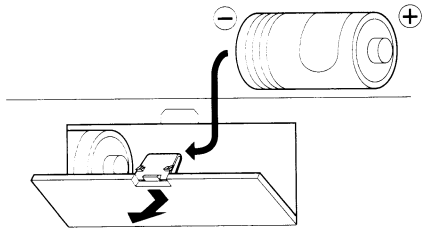
- The AC adapter and battery are sold separately.
- The output power differs depending on whether the AC adaptor or batteries are being used.

When using batteries

Use six R20/LR20 batteries.

1. Open the battery compartment cover, found on the rear of the instrument.

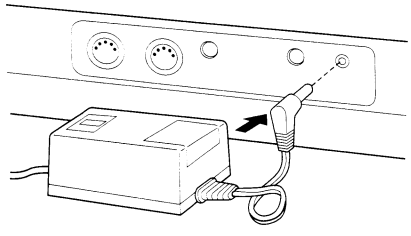
2. Insert six R20/LR20 batteries, and replace the battery compartment cover.



- To insert the batteries correctly, follow the + and- polarity indications. (Batteries installed with incorrect polarities may leak and damage this unit. If the leaking electrolyte comes into contact with skin or clothes, flush with water immediately.)
- Do not mix batteries (old and new) or types (carbon and alkaline).
- Remove the batteries from the battery compartment and store separately when the instrument is not to be used for a long time.
- Never subject batteries to excessive heat or flame; do not attempt to disassemble them; and be sure they are not short-circuited.
- Do not attempt to recharge carbon or alkaline batteries.
- When battery power is low during a performance, [bAt] is shown on the display. In this case, replace the batteries as soon as possible.

When using the AC adaptor

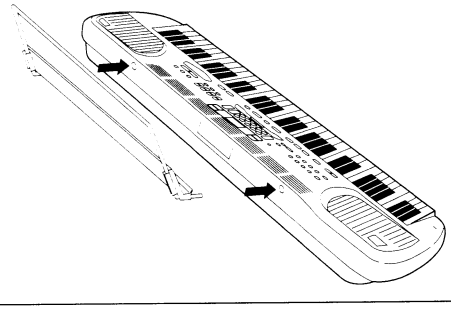
Connect the SY-AD6/AD6B AC adaptor.



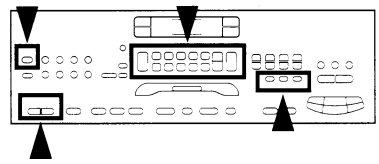
- Do not disconnect and connect the AC adaptor when the power is on.
- Even when batteries are installed, if the AC adaptor is used, the battery circuit is bypassed and the power is supplied through the AC adaptor.
- When the AC adaptor is not connected and when batteries are not installed, the various storable memories and storable function settings of this instrument will be erased in about 10 minutes.

Music stand

Affix the music stand as shown.



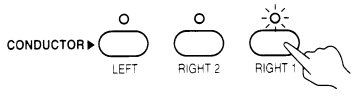
Playing



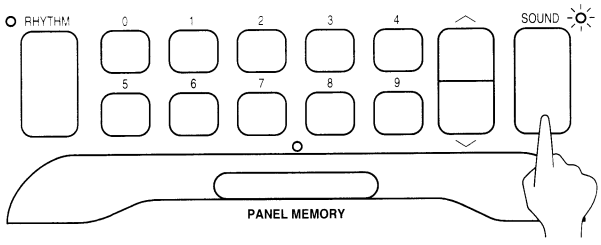
Turn on the instrument and begin playing.

1. Press the **PLAY** button to turn it on.

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

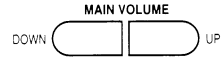


3. In the **SOUND/RHYTHM** select section, select **SOUND.**



4. On the number pad, press **0, 0, 5.**
- Touch any note on the keyboard. You will hear the **E PIANO** sound.

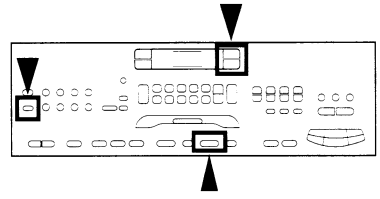
5. Set the **MAIN VOLUME** to an appropriate level with the **UP** and **DOWN** buttons.



- Set to a level from 0 (minimum sound) to 15 (loudest).
- The volume level is shown on the display while it is being set.

- 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 44.)

Listen to the demonstration



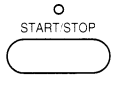
Demonstration performances to introduce the various sounds and functions are stored in this Keyboard.

DEMO

1. Press the **DEMO** button.

2. Use the **TRANSPOSE** buttons to select the number of demonstration performance.
- Select [ALL] to play a medley.

3. Press the **START/STOP** button.



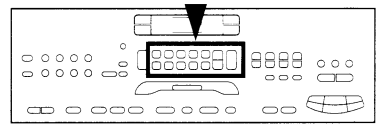
- The demonstration performance corresponding to your selection will begin.
- To end the demonstration before it has finished, press the **START/STOP** button again.
- To listen to other demonstration performances, repeat steps 2 and 3.

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

- If you press and hold the **DEMO** button for a few seconds, the medley demonstration performance will begin.
- 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.

Part I Sounds and effects

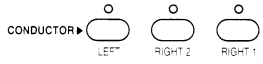
Selecting sounds



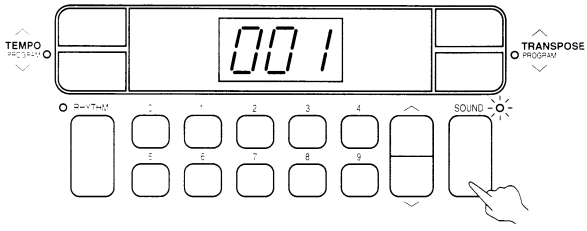
Select the sounds for the three parts you can assign to the keyboard—**RIGHT 1**, **RIGHT 2** and **LEFT**. After first selecting a part, choose the desired sound by its number.

Select a sound

1. In the **CONDUCTOR**, choose **RIGHT 1** or **RIGHT 2**.
- To select the left sound, press and hold the **LEFT** button in the **CONDUCTOR** section while making the selection.



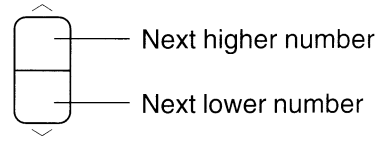
2. In the **SOUND/RHYTHM** select section, select **SOUND**.



3. On the **SOUND/RHYTHM** select number pad, press the buttons to specify the number of the desired sound (3digits).
- The list of sounds and their numbers is found on the upper right of the operation panel.
- The selected sound number is shown on the display.
- For single-digit sound numbers: for example, for sound **003**, press **0**, **0** and **3** in that order.
- For double-digit sound numbers: for example, for sound **013**, press **0**, **1** and **3** in that order.
- Do not take too long to press the number buttons. If you wait a few seconds before pressing the next button, the numbers you entered up to that point will be canceled.
- If **RIGHT 1** and **RIGHT 2** have both been turned on using the **CONDUCTOR**, the sound setting for **RIGHT 1** will have precedence.

4. Play the keyboard.
- You hear the sound that you selected.

■ ∧ or ∨ buttons



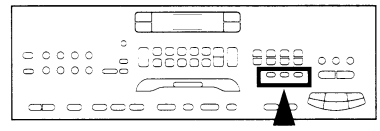
- Keep the ∧ or ∨ button pressed to scroll the numbers quickly.

■ Percussion sounds (KEYBOARD PERC)

Sound numbers more than **129** are percussion instrument sounds.

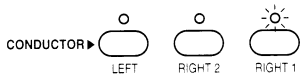
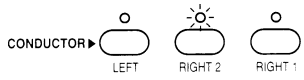
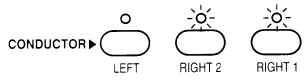
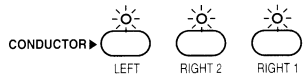
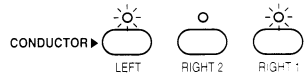
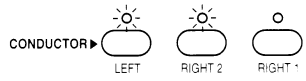
- Percussion instrument sounds are produced by the keyboard keys as indicated by the picture code above each key.
- For further information about the arrangement of percussion sounds, refer to the separate "REFERENCE GUIDE" provided.

Assigning parts to the keyboard



The **CONDUCTOR** buttons are used to assign sounds to the keyboard in many different ways. For example, you can assign two sounds to the entire keyboard so that playing one key will produce two sounds. You can even split the keyboard into right and left sections (SPLIT), and assign a different sound to each section.

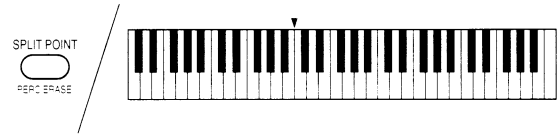
CONDUCTOR

CONDUCTOR settings	How sounds are assigned to the keyboard
	All keys produce the **RIGHT 1** sounds. **RIGHT 1**
	All keys produce the **RIGHT 2** sounds. **RIGHT 2**
	All the keys play both **RIGHT 1** and **RIGHT 2** sounds at the same time. **RIGHT 1 + RIGHT 2**
	The left keys produce the **LEFT** sound and the right keys produce the **RIGHT 1** sound and the **RIGHT 2** sound (SPLIT). **LEFT** / **RIGHT 1 + RIGHT 2**
	The left keys produce the **LEFT** sound and the right keys produce the **RIGHT 1** sound (SPLIT). **LEFT** / **RIGHT 1**
	The left keys produce the **LEFT** sound and the right keys produce the **RIGHT 2** sound (SPLIT). **LEFT** / **RIGHT 2**

- To assign both the **RIGHT 1** sound and the **RIGHT 2** sound to the whole keyboard, press both of these **CONDUCTOR** buttons at the same time. The sound number for **RIGHT 1** will appear in the display at this time.
- The volume for each part can be adjusted. (Refer to page 12.)
- The following conditions are in effect when the **AUTO PLAY CHORD** (page 23) is used.
  ONE FINGER, **FINGERED** mode: You cannot assign sounds to all the keys.
  PIANIST mode: The keyboard cannot be split (KN701).

SPLIT POINT

When the keyboard is divided into left and right sections, the split point is C3.

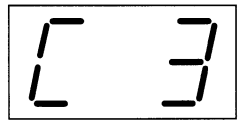


- When the **SPLIT POINT** button is pressed, the current location of the split point (C3 or the key that you have selected) will appear in the display (see below).

■ Customized split point

Use the following procedure if you wish to store a split point at a location other than C3.

1. Press and hold the **SPLIT POINT** button.
- The following display appears.



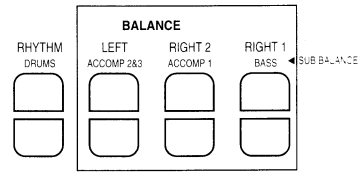
2. Press a key on the keyboard to specify the desired split point.
- A split point is set at the location of the pressed key, and the note name is shown on the display.
- A sharp is indicated on the display as [♯] and a flat as [♭].
- The key at the split point is the lowest note of the right keyboard section.

3. When the **SPLIT POINT** button is released, the display exits the setting mode.

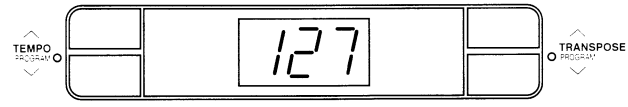
BALANCE

The volume balance for the **RIGHT 1**, **RIGHT 2** and **LEFT** sounds can be adjusted.

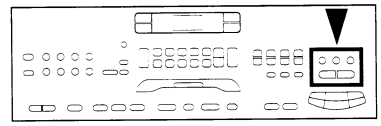
Adjust the volumes with the **RIGHT 1**, **RIGHT 2** and **LEFT** buttons in the **BALANCE** section.



- Select a volume level from **0** (minimum sound) to **127** (loudest).
- While you are adjusting the volume, the volume levels are indicated on the display (**0** to **127**).



Effects



You can achieve even fuller and stirring sounds by adding various effects.

SUSTAIN

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

1. In the **CONDUCTOR**, turn on the part to which this effect will be applied.

2. Press the **SUSTAIN** button to turn on.

- The **SUSTAIN** can be set to on or off for each part.
- When you set it **LEFT** part, tou keep **SUSTAIN** button ON/OFF with putting **LEFT** of **CONDUCTOR**.
- This effect does not work for some sounds.
- The length of the **SUSTAIN** can be adjusted. (Refer to page 43.)
- The sustain can also be turned on and off with the optional Foot Switch (sold separately). (Refer to page 45.)

CHORUS/FLANGER (KN501: CHORUS only)

The **CHORUS** effect gives a natural fullness to the sound by adding a slightly off-pitch tone to the basic sound. The **FLANGER** effect adds an undulating characteristic to the sound.

- Either the **CHORUS** or the **FLANGER** effect can be applied to the sounds.

1. Press and hold the **CHORUS/FLANGER** button for a few seconds.

- One of the indicators flashes.

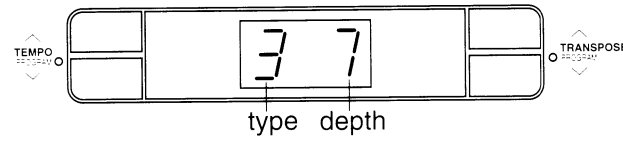
2. Use the **CHORUS/FLANGER** button to select the type of effect.
- The type selection alternates between **CHORUS** and **FLANGER** each time the button is pressed.
- Note that either the **CHORUS** effect or the **FLANGER** effect is selected for all the parts in common.
- A few seconds after the setting is changed, the indicator for the selected effect stops flashing and remains lit, and the instrument returns to the normal performance mode.

3. In the **CONDUCTOR**, turn on the button for the part to which the effect will be applied.

4. Use the **CHORUS/FLANGER** button to turn the effect on or off for the part.
- The **CHORUS/FLANGER** can be set to on or off for each part.

■ CHORUS/FLANGER type and depth

1. Press and hold the **CHORUS/FLANGER** button for a few seconds.
- The display looks similar to the following.



2. Use the **CHORUS/FLANGER** button to select the effect that you would like to change.
- The indicator for the selected effect button flashes.

3. Use the **TEMPO** buttons to select the type.
- Select from the following:

(CHORUS)	(FLANGER)
1: CHORUS 1	1: FLANGER 1
2: CHORUS 2	2: FLANGER 2
3: CHORUS 3	3: FLANGER 3

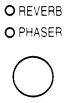
4. Use the **TRANSPOSE** buttons to adjust the depth (1 to 9).
- The higher the number, the more pronounced the effect.
- A few seconds after the setting is changed, the display returns to the previous display.
- The display will return to the standard display even if the **EXIT** button is pressed.

- The depth of these effects can be changed separately for each part. (Refer to page 43.)

REVERB/PHASER (KN501: REVERB only)

REVERB applies a reverberation effect to the sound. **PHASER** is a more distinct undulation effect than **FLANGER**.

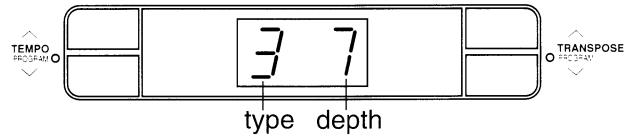
Press the **REVERB/PHASER** button to select the type.



- The setting changes in the order **REVERB**→ **PHASER**→**OFF** each time the button is pressed.
- This effect is applied to all the sounds of the keyboard.

■ REVERB/PHASER type and depth

1. Press and hold the **REVERB/PHASER** button for a few seconds.
- The display looks similar to the following.



2. Use the **REVERB/PHASER** button to select the effect that you would like to change.
- The indicator for the selected effect button flashes.

3. Use the **TEMPO** buttons to select the type.
- Select from the following:

(REVERB)		(PHASER)
1: ROOM 1	4: HALL 2	1: PHASER 1
2: ROOM 2	5: HALL 3	2: PHASER 2
3: HALL 1	6: ECHO 1	
	7: ECHO 2	

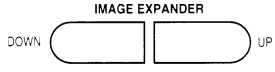
4. Use the **TRANSPOSE** buttons to adjust the depth (1 to 9).
- The higher the number, the more pronounced the effect.
- A few seconds after the setting is changed, the display returns to the previous display.
- The display will return to the standard display even if the **EXIT** button is pressed.

- The depth of these effects can be changed separately for each part. (Refer to page 43.)

IMAGE EXPANDER (KN701)

This effect gives a feeling of width to the sound positioning.

1. Press either the **UP** or **DOWN** button of **IMAGE EXPANDER**.



- "OFF" will appear on the display.

2. Press the **UP** or **DOWN** button to adjust the level of the effect.

- This effect can be set to one of the following four levels: OFF, 1, 2, 3
  OFF is the default setting. The higher the setting, the greater is the feeling of width.

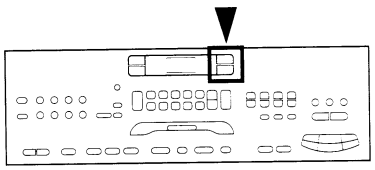
PITCH BEND

The pitch of the instrument can be continuously changed with the **PITCH BEND** wheel, at the left end of the keyboard. 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 pitch bend effect does not function for the **AUTO PLAY CHOCRD** accompaniment pattern or for the **LEFT** part sounds.
- The amount of pitch bend can be set. (Refer to page 43.)

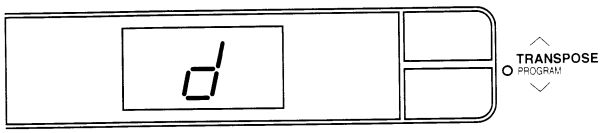
Transpose



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

Suppose you learn to play a song—in the key of C, for example—and decide you want to sing it, only to find that it's either too high or too low for your voice. Your choice is to either learn the song all over again in a different key, or to use the **TRANSPOSE** feature.

Adjust the key with the **TRANSPOSE** buttons.



- Each press of the upper button raises the key as follows (brackets [ ] indicate how the key is shown on the display): D♭ [ ] → D [ ] → E♭ [ ] → E [ ] → F [ ] → F♯ [ ].
- Each press of the lower button lowers the key as follows: B [ ] → B♭ [ ] → A [ ] → A♭ [ ] → G [ ].
- When setting the key, the current key is shown on the display.
- If the two buttons are pressed at the same time, the key returns to C.

- When the **PROGRAM** indicator is flashing, these buttons are used for setting various functions and cannot be used to change the key.

<Example: transposed to D>

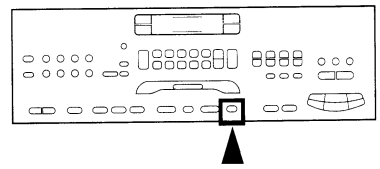
Played keys

C major

Notes that sound

D major

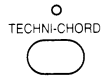
Techni-chord



The **TECHNI-CHORD** feature expands the sound of your performance so that a harmony is produced for the notes played on the right part of a split keyboard.

1. Split the keyboard into left and right sections. (Refer to page 11.)

2. Press the **TECHNI-CHORD** button to turn it on.



3. Play the keyboard.
- A harmony based on the chords you play with your left hand is added to the notes you play with your right hand.

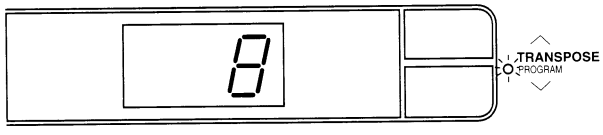
- This feature is very effective when used with the **ONE FINGER** mode or **FINGERED** mode of the **AUTO PLAY CHORD**. (The **TECHNI-CHORD** feature is not available for the **PIANIST** mode (KN701).)

Example:
Left hand (chord)
Right hand (melody)

TECHNI-CHORD harmony

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

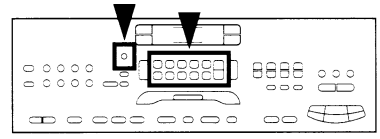
1. Press and hold the **TECHNI-CHORD** button for a few seconds.
- The display looks similar to the following.



2. Use the **TRANSPOSE** buttons to select the desired harmony style.
- Select from CLOSE [1], OPEN 1 [2], OPEN 2 [3], DUET [4], COUNTRY [5], THEATRE [6], HYMN [7], BLOCK [8], BIG BAND 1 [9], BIG BAND 2 [10], OCTAVE [11], HARD ROCK [12], FANFARE [13].
- When the OCTAVE, HARD ROCK or FANFARE style is selected, the **TECHNI-CHORD** functions even when the keyboard is not split.
- For a detailed explanation of the different harmony styles, refer to the separate "REFERENCE GUIDE" provided.

- A few seconds after the setting is changed, the display returns to the previous display.

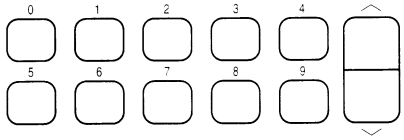
Key Scaling



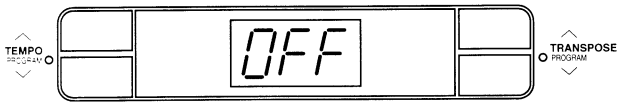
It is possible to change the temperament for this instrument. A variety of different temperaments can be applied in addition to the normal method of equal temperament.

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

2. Press the number of **KEY SCALING.**



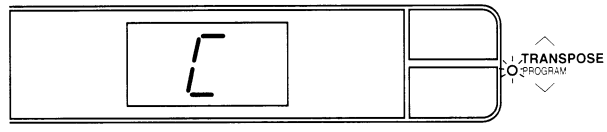
- The list of **MODE SET** functions and their numbers is found on the upper left of the operation panel.
- The display will change to the following.



3. Use the **TEMPO** buttons to select the type.

OFF [OFF]	equal temperament
Preset 1 [1]	ARABIC 1
Preset 2 [2]	ARABIC 2
Preset 3 [3]	ARABIC 3
Preset 4 [4]	ARABIC 4
Preset 5 [5]	SLENDRO
Preset 6 [6]	PELOG
USER [uSr]	User type (refer to the following)

4. Press the **TRANSPOSE** buttons to select the Piece performed key.



5. Once the setting has been made, press the **MODE SET** button.

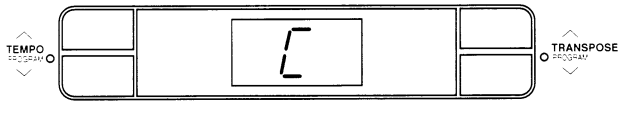
- It is possible to turn the key scaling for each part on and off. (Refer to page 43)

■ User type setting

- It is possible to set your own keyboard temperament by making fine adjustments to the pitch of each note within a one-octave range.

1. At the Key Scaling display, press the **TEMPO** buttons to select a user [uSr] type, and then press the **TRANSPOSE** buttons to select the key that is to be used as the Piece performed key.

2. Press the **EXECUTE** button.
- The display will change to the following.



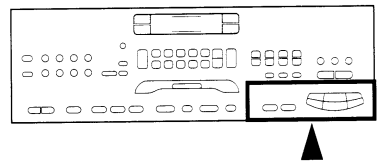
3. Use the **TEMPO** buttons to select the key for which you would like to make pitch adjustments from the 12 notes in the octave. (C [C] ~ B [b])

4. Use the **TRANSPOSE** buttons to set the amount of pitch shift (-100 ~ 0 ~ 100).
- Setting larger than 0 will make the pitch higher than the standard key.
  Setting smaller than 0 will make the pitch lower than the standard key.

5. Repeat steps 3. and 4. as necessary.

6. Once the setting has been completed, press the **MODE SET** button.

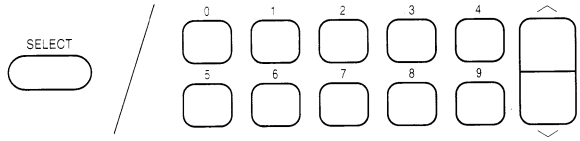
Part II Manual Sequence Pads



You can add phrases to your performance that represent percussion, guitar, piano or a variety of other effects by tapping the **MANUAL SEQUENCE PADS** buttons with your finger.

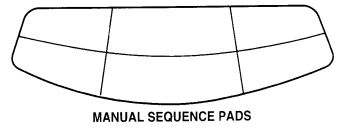
- You can also record and play back phrases that you create in this way (KN701).

1. Press the **SELECT** button, and then press a number pads to select the phrase that you would like to play.



- The list of **MANUAL SEQUENCE PADS** and their number is found on the upper left of the operation panel.
- The number of **USER MEMORY** is the bank which is used to record original phrases. (Refer to the following.)
- The last number of list is selected, the pad can then be used as a percussion instrument. (Refer to page 19.)

2. Tap the pad button of the manual sequence pad.



- Each pad button produces a different sound.
- The selected phrase is played in the specified tempo.
- To stop the phrase from playing, press the **RECORD/STOP** button.
- When using automatic accompaniment, the phrase which corresponds to the code setting at that time will be played.
- The **MANUAL SEQUENCE PADS** volume can be adjusted. (Refer to page 42)

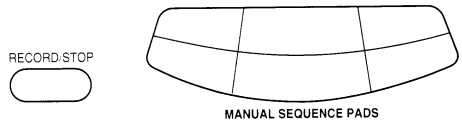
Recording a phrase (KN701)

You can record your own phrases into the memory bank (**11**).

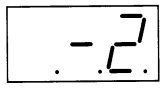
1. Select the sound for your phrase.
- Set the sound using the **RIGHT 1** part.

2. Press the **SELECT** button, and then select **11** (**USER MEMORY**) using the number pads.
- Use the **TEMPO** button to adjust the metronome speed.

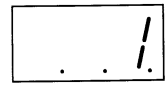
3. While pressing the **RECORD/STOP** button, press the pad for the phrase that you would like to record.



- The metronome will then start.
- The count starts two bars before recording begins.
- The display will chage to the following.



4. Play the phrase on the keyboard.



- For some sounds, the stored octave may be different from the octave that was played during recording.

5. When you have finished playing the phrase, press the **RECORD/STOP** button to turn it off.

6. Repeat steps 3. to 5. for any other pads that you would like to record.
- The following items can be recorded.
  Keyboard performances
  Sound settings and changes
  SUSTAIN, on/off
  PITCH BEND etc.
- The total memory capacity that is available for recording phrases using the **MANUAL SEQUENCE PADS** is about 600 notes. Once the memory is full, the message "FuL" will appear on the display, and further recording will not be possible.

Manual Percussion

You can add percussion sounds to your performance at any time by tapping **MANUAL SEQUENCE PADS** buttons.

- A different percussion sound has been preset in each of the pad buttons.

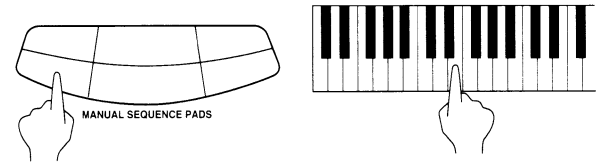
■ To assign different sounds to the pad buttons

Follow this procedure to assign a different sound to each of the pad buttons.

1. On the **SOUND** select number pad, select a **KEYBOARD PERC** KIT.

2. Press the **SELECT** button of **MANUAL SEQUENCE PADS**, and then press the number of **MANUAL PERC** on the number pad.

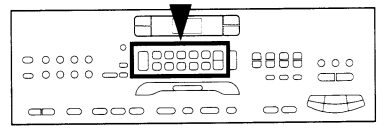
3. While pressing one of the **MANUAL SEQUENCE PADS** buttons, select the desired percussion sound by pressing the appropriate key on the keyboard for about 2 seconds.



- When you hear the percussion sound of the pressed key, it means the sound has been assigned to the selected **MANUAL SEQUENCE PADS** button.
- You can enter other percussion sounds using the other **MANUAL SEQUENCE PADS** buttons too.
- Only one drum KIT can be specified at a time, and it is common to all the pad buttons.

Part III Playing the rhythm

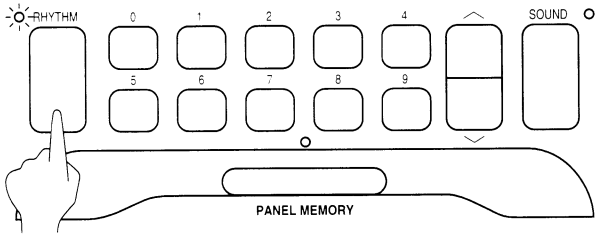
Selecting rhythms



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

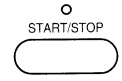
Select a rhythm

1. In the **SOUND/RHYTHM** select section, select **RHYTHM**.



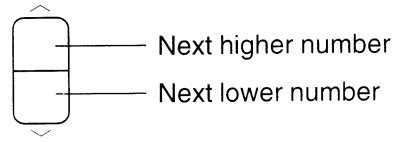
2. On the number pad, press the buttons to specify the number of the desired rhythm (**001** to **100**).
- The list of rhythms and their numbers is found on the upper left of the operation panel.
- The selected rhythm number is shown on the display.
- For single-digit rhythm numbers: for example, for rhythm **003**, press **0**, **0** and **3** in that order.
- For double-digit rhythm numbers: for example, for rhythm **013**, press **0**, **1** and **3** in that order.
- Do not take too long to press the number buttons. If you wait a few seconds before pressing the next button, the numbers you entered up to that point will be canceled.

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



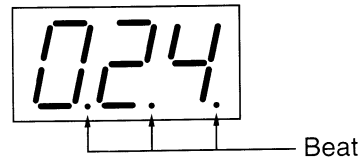
- The selected rhythm pattern immediately begins to play.
- To stop the rhythm, press the **START/STOP** button again.

■ ∧ and ∨ buttons



- Keep the ∧ or ∨ button pressed to scroll the numbers quickly.

■ Beat
- While the rhythm is playing, the beat is shown on the display.



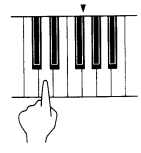
Synchronized start

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.

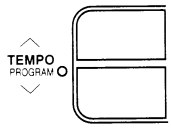
3. Play a key to the left of the keyboard split point.



- 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. To start the rhythm, press a key to the left of the specified split point.

Adjust the tempo

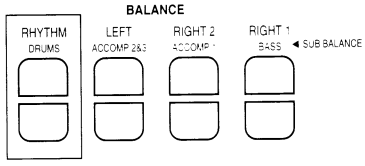
The tempo of the rhythm pattern is adjusted with the **TEMPO** buttons.



- Each press of the ∧ button increases the tempo, and each press of the ∨ button decreases the tempo.
- While the tempo is being adjusted, it is shown on the display as a numerical value. (♩= 40 to 300).
- Keep the ∧ or ∨ button pressed to scroll the numbers quickly.
- If the two buttons are pressed at the same time, the tempo returns to the standard 120 setting.
- When the **PROGRAM** indicator is flashing, these buttons are used for setting various functions and cannot be used to adjust the tempo.

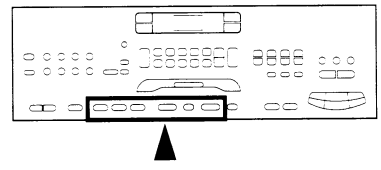
Adjust the volume

The volume of the automatic rhythm is adjusted with the **RHYTHM** buttons in the **BALANCE** section.



- Select a volume level from **0** (minimum sound) to **127** (loudest).
- While you are adjusting the volume, the volume level is indicated on the display (**0** to **127**).
- The volume of the automatic accompaniment also changes.

Playing the rhythm

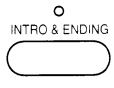


Intro, fill-in and ending patterns fitting each different rhythm pattern are permanently recorded in your Keyboard, thus allowing a versatile rhythm performance.

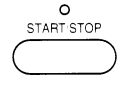
INTRO

Begin the rhythm performance with an intro pattern.

1. Press the **INTRO & ENDING** button to turn it on.



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

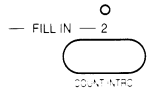


- An intro pattern is played, after which the normal rhythm pattern begins.

COUNT INTRO

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

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



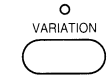
2. Press the **START/STOP** button to start the rhythm.
- A one-measure count is played, after which the normal rhythm pattern begins.

VARIATION

Each rhythm pattern also has a variation pattern. Add drama to your performance by switching to the variation pattern at climactic points in the melody.

1. Select a rhythm and press the **START/STOP** button.

2. Press the **VARIATION** button to turn it on.



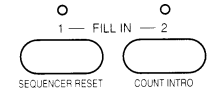
- The rhythm changes to a flashier pattern.
- Press the **VARIATION** button again to turn it off and go back to the normal rhythm pattern.

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.



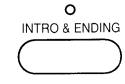
- A fill-in pattern is heard immediately for the remainder of the measure.
- When a **FILL IN** button is pressed on the last beat of the measure, the fill-in pattern continues to the end of the following measure.

ENDING

Finish the rhythm performance with an ending pattern.

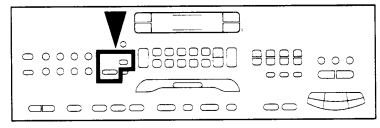
1. Select a rhythm and press the **START/STOP** button.

2. Press the **INTRO & ENDING** button to turn it on.



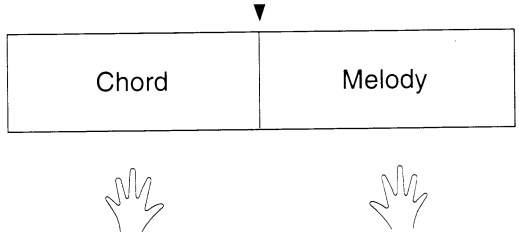
- An ending pattern is produced, and then the rhythm performance stops.
- If you accidentally press the **INTRO & ENDING** button in the middle of the tune, you can press the **FILL IN 1** or **FILL IN 2** button. The ending pattern stops, and a fill-in pattern is produced, after which the normal rhythm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

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.

How the AUTO PLAY CHORD works



When an **AUTO PLAY CHORD** mode is selected, an automatic accompaniment which matches the rhythm you have chosen is played in the chord which you specify with your left hand. The melody is played with your right hand.

- The accompaniment pattern of the **AUTO PLAY CHORD** is composed of five parts: **DRUMS, BASS, ACCOMP 1, ACCOMP 2** and **ACCOMP 3**.

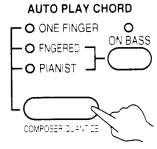
Sub balance

BALANCE buttons can be used to adjust the volumes of the **ACCOMP 1 - 3**, **BASS** and **DRUMS** parts while the **MODE SET** button is being pressed. (**SUB BALANCE** adjustment)

- When adjustment is completed, press the **MODE SET** button to turn it off.
- The volumes for **ACCOMP 2** and **ACCOMP 3** change simultaneously when **ACCOMP 2 & 3** button is used.
- You can also adjust the levels of the **ACCOMP 1–3, BASS** and **DRUMS** parts which have been set previously. (Refer to page 42.)

Playing chords

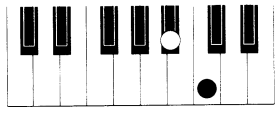
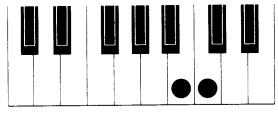
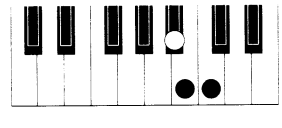
Choose from three ways of playing chords.



■ ONE FINGER mode

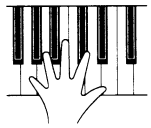
In the **ONE FINGER** mode, a major chord can be played just by pressing the key for its root note.

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

Minor	Seventh	Minor seventh
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.
Example: Cm 	Example: C7 	Example: Cm7 

■ FINGERED mode

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



- The automatic accompaniment can recognize the following types of chords for each key (C is given as an example): C, C7, CM7, Caug, Caug7, Cm, Cm7, Cdim, Cm7♭5, CmM7, Csus4, C7sus4, C♭5, C7♭5, Cm♭5, C6, Cm6, CM7♭5, CM7♯5, CmM7♭5, etc.

■ PIANIST mode (KN701)

In the **PIANIST** mode, the entire keyboard can be used to specify chords (**FINGERED** mode) for the automatic accompaniment; a **RIGHT** part is assigned to all the keys, and the keyboard does not split. In addition to the chords in the **FINGERED** mode, the automatic accompaniment also recognizes 9th and 13th chords.

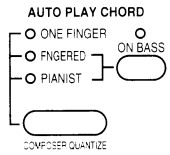
■ ON BASS (KN701)

If the **ON BASS** button is on while the **FINGERED** or **PIANIST** mode is selected, the **BASS** part is produced in the key of the lowest note of the played chord, thus making it possible to play chords such as D on C.

How to use the AUTO PLAY CHORD

1. Select the desired rhythm and sound(s), and set the tempo.

2. Select an **AUTO PLAY CHORD** mode (**ONE FINGER, FINGERED** or **PIANIST**).



- If the **ONE FINGER** or **FINGERED** mode was selected, the keyboard automatically splits into right and left sections.

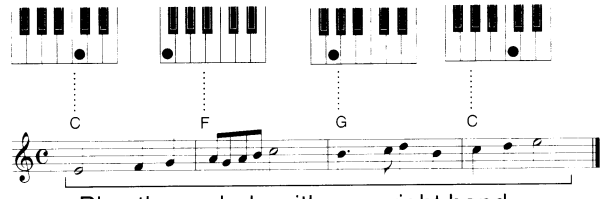
3. Press the **START/STOP** button to turn it on.

- For synchronized start (Refer to page 20.)

4. Specify the chord on the keyboard section to the left of the split point.
- The split point is usually at the third C key from the left (C3), but you can specify a different split point. (Refer to page 12.)
- 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.

Left hand



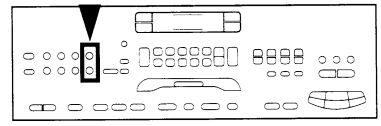
Play the melody with your right hand.

- When you use **INTRO**, **FILL IN** and **ENDING**, the automatic accompaniment is also used in these patterns.
- 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.

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 selectes for the left keyboard section are not produced.
- In the initialized condition, when the rhythm is off, if the **ONE FINGER** mode or **FINGERED** mode is on and a chord is specified, the specified root note ([r.bS] part) and chord notes ([Chd] part) are produced.
- The volume of the automatic accompaniment can be adjusted. (Refer to page 23, 42.)

Sound Arranger

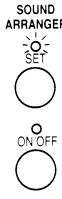


The **SOUND ARRANGER** feature lets you select other sounds for the **AUTO PLAY CHORD** parts of each rhythm.

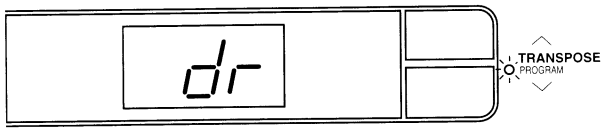
Setting the sounds

1. Press the **RHYTHM** button, and then use the number pads to select the rhythm for which you would like to change the sound.
- Do not select a **COMPOSER** rhythm.

2. In the **SOUND ARRANGER**, press the **SET** button to turn it on.



3. Use the **TRANSPOSE** buttons to select the part for which you would like to change the sound.



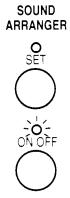
4. Use the number pads to select the desired sound.
- The number of the sound currently assigned to the part is shown on the display.
- Set the **DRUMS** part to one of the **KEYBOARD PERC** settings. **KEYBOARD PERC** settings cannot be selected for parts other than the **DRUMS** part.

5. Repeat steps 3. and 4. for the other parts as desired.

6. When you have finished selecting the sounds, press the **SET** button to turn it off.

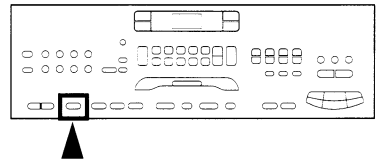
Playing back the sounds

1. In the **SOUND ARRANGER**, press the **ON/OFF** button to turn it on.



2. Start the rhythm (automatic accompaniment).
- When the **ON/OFF** button is off, the factory-preset sounds are produced.

One Touch Play



ONE TOUCH PLAY sets up your Keyboard with a suitable registration for your chosen rhythm style so that you can make a great sound straight away, even if you are playing the Keyboard for the first time.

1. Select a rhythm.
- Do not select a **COMPOSER** rhythm.

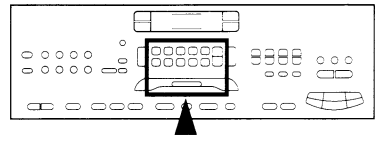
2. Press and hold the **ONE TOUCH PLAY** button for a few seconds until the [OtP] indication on the display turns off.

- The **AUTO PLAY CHORD** and the **SYNCHRO** button turn on, and the sounds, effects and tempo perfect for the specified rhythm are automatically selected.

3. Play the keyboard.
- When a key on the left section of the keyboard is pressed, the automatic accompaniment begins to play.

- Press the **INTRO & ENDING** button before you play for a professional-sounding introduction.
- Use the **ONE TOUCH PLAY** settings as a starting point for your own settings. Alter the sounds, volume and tempo to your own taste and store the new settings in the **PANEL MEMORY** for future use. (Refer to the following.)

Panel Memory

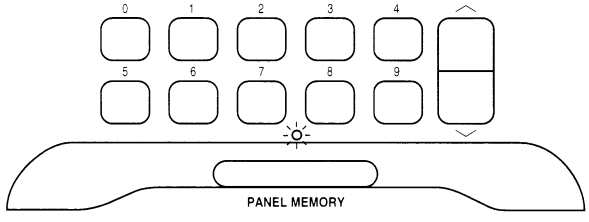


PANEL MEMORY stores the panel set-up of your Keyboard, allowing you to make complex changes in seconds. Store up to 10 different panel set-ups.

How to store the panel settings

1. Set up the desired panel settings (sounds, volumes, etc.)

2. While pressing the **PANEL MEMORY** button, press a number button (**0** - **9**) for the setting to be recorded.

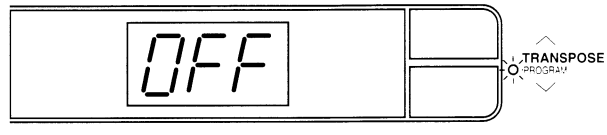


The panel settings will be recorded under the number button which was pressed.
- Memorized settings can be retrieved at any time by pressing the **PANEL MEMORY** button and then pressing the desired number key.

■ PANEL MEMORY mode

You can define which panel settings are stored when the **PANEL MEMORY** is used.

1. Press and hold the **PANEL MEMORY** button for a few seconds.
- The display changes to the following.



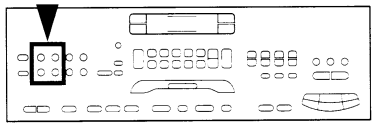
2. Use the **TRANSPOSE** buttons to select the mode.

[OFF]: Only the sound, effects and volume balance settings are stored.
[On]: All the settings are stored, including rhythm (except for the **SOUND ARRANGER ON/OFF** button status), **TRANSPOSE** and tempo.

- After a few seconds, the display exits the setting mode.

Part IV Sequencer

Outline of the Sequencer



A sequencer records your performance in a similar way to a tape recorder. You may want to record your entire performance in one go, or to build up a complex arrangement with several different parts playing together, like an orchestral score.

SEQUENCER features

■ **You can change the tempo without changing the pitch**
When you record your performance at a slow tempo and play it back at a faster tempo, the pitch stays the same.

■ **Consistent sound**
Your performance is reproduced by a sound module as it reads digital data. So, unlike a recorded tape, the sound never deteriorates no matter how many times you play back your performance.

Recording methods

■ **REALTIME RECORD** (page 29)
Use the **REALTIME RECORD** function to record your performance.

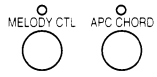
■ **STEP RECORD** (page 30)
Use the **STEP RECORD** function to store the chord progression for the automatic accompaniment or the panel changes one-by-one.

Memory capacity
Expressed in terms of notes, the total number of notes which can be stored in all the **SEQUENCER** tracks is about 2,800.

- When the remaining memory capacity becomes 20% or less, it is shown as a percentage on the display.
- When the memory is full, [FuL] appears on the display, no more data can be stored in the **SEQUENCER**.
- 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.
- Only one song can be stored in the **SEQUENCER** at a time. However, your instrument has 3 SONG memories in which you can save your **SEQUENCER** performances. (KN701; Refer to page 39.)

Sequencer tracks

The following summary explains what is stored in each **SEQUENCER** track.



Track name		Used for	Recorded contents
MELODY/CTL	RIGHT 1 RIGHT 2 LEFT	Recording the performance (REALTIME)	• Your keyboard performance • Sound and volume settings • **SUSTAIN** on/off • **PITCH BEND** wheel operation
	CONTROL	Recording changes in the panel button status (REALTIME)	• Rhythm changes, volume settings • **CHORUS/FLANGER, REVERB/PHASER** on/off • **AUTO PLAY CHORD** status • **FILL IN 1, 2, INTRO & ENDING** on • **TEMPO** setting • Rhythm **START/STOP** • **PANEL MEMORY** selection changes • **TRANSPOSE** status • **CONDUCTOR** changes • **MANUAL SEQUENCE PADS** (not including MANUAL PERC)
APC/CHORD		Recording chords for the **AUTO PLAY CHORD** (REALTIME)	• **AUTO PLAY CHORD** status • Sound and volume settings • **FILL IN 1, 2, INTRO & ENDING** on • Rhythm **START/STOP**
APC/**CHORD**		Recording chord progression for the **AUTO PLAY CHORD** (STEP)	• Chord progression • Rhythm settings and selection changes • **FILL IN I, 2, INTRO & ENDING** on • **TEMPO** setting • **PANEL MEMORY** selection changes • **TRANSPOSE** status

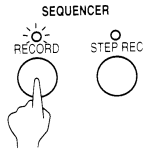
Realtime Record

With REALTIME RECORD, your performance is recorded with the timing exactly as you played it on the keyboard. This mode lets you store a tune with all the subtle nuances just as you play them.

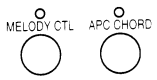
Recording procedure

1. Set the sounds, effects, volumes, etc. for the tracks you are going to record.

2. In the **SEQUENCER** section, press the **RECORD** button to turn it on.



3. Use the track buttons to specify the track for the part you are going to record. (For details about the recording tracks, refer to page 28.)



- The indicator for the selected track button flashes slowly.
- When it is REALTIME RECORD, **APC/CHORD** button goes as **APC** button.
- You can select two tracks to record at one time.
- When you select a track, the current panel settings are stored.

4. Use the **TEMPO** buttons to adjust the recording tempo.

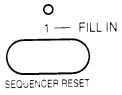
5. Play the keyboard.
- Recording begins as soon as you start the rhythm (**START/STOP**) or play the keyboard.
- If you wish to adjust the volume of each part during recording, press any balance button to recall the balance display.
- You can erase the recorded contents, for example, when you made a mistake in your performance while recording. (Refer to page 32.)

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

Playback

1. Turn on the track buttons for the parts you wish to play back.
- Tracks whose indicators are not lit will not be played back.

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.

- The recorded performance is played back automatically.

Multi-track recording

When recording the tracks, you can record **MELODY/CTL** track while listening to the track **APC/CHORD** already recorded.

1. Follow the procedure to record the **APC/CHORD** track.
- When you turn off the **RECORD** button in the **SEQUENCER**, confirm that the indicator for the track you recorded is lit.

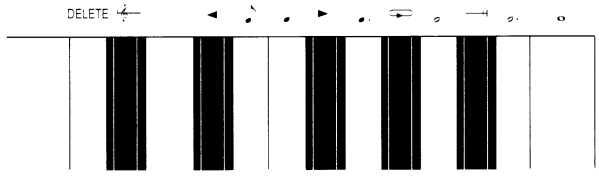
2. Follow the procedure to record the **MELODY/CTL** track in time with the track you recorded in step 1.
- When the **START/STOP** button is turned on, the track recorded in step 1 is played back. You can record the **MELODY/CTL** track in time with this.

Store a chord progression

You can use the step recording method to store a chord progression for the **AUTO PLAY CHORD** or changes in the panel settings. During playback, the chords and settings then change automatically.

Store a chord progression

Store a chord progression for the **AUTO PLAY CHORD**.
- The chord length is specified with the **STEP RECORD** keys on the keyboard.



Note value keys
- Whole note
- Dotted half-note
- Half-note
- Dotted quarter-note
- Quarter-note
- Eighth-note

Reset key

Press to begin storing from the beginning.

Correction keys
- ◄ Move back one chord.
- ► Move forward one chord.

Repeat key

Press to end the chord-storing procedure and to specify automatic repeat playback of the stored progression.

End key

Press after the whole chord progression has been stored.

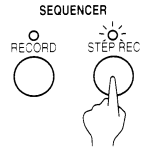
DELETE key

DELETE Press to erase data.
- To erase all the data from the current track, while pressing the **DELETE** key, press the End key (⊣).

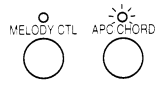
■ Example of storing a chord progression

Measure 1	Measure 2	Measure 3		Measure 4	
C	C	F	G7	C	Am
𝅝	𝅝	𝅗𝅥	𝅗𝅥	𝅗𝅥	𝅗𝅥

1. In the **SEQUENCER** section, press the **STEP REC** button to turn it on.

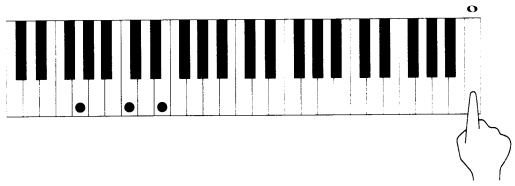


- The **APC/CHORD** indicator flashes.
- At this time, **APC/CHORD** button goes as **CHORD** button.



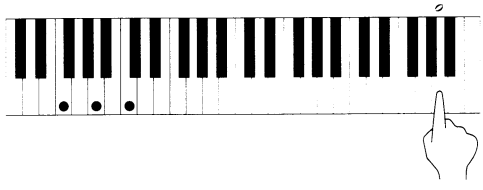
2. Store the chords.

<Measure 1, measure 2>
While playing a C chord with your left hand, press the 𝅝 key one time with your right hand.

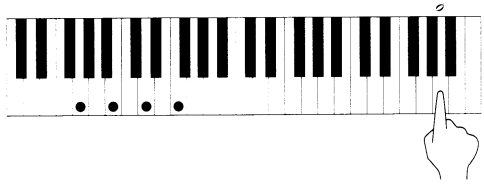


- A "beep" tone indicates that one C major chord of whole-note length is stored.
- The current measure number is shown on the display. This changes automatically, in accordance with the specified note value, to the next unrecorded position.

<Measure 3>
(1) While playing an F chord, press the 𝅗𝅥 key one time.



(2) While playing an G7 chord, press the 𝅗𝅥 key one time.



<Measure 4>
(1) While playing a C chord, press the 𝅗𝅥 key one time.

(2) While playing an Am chord, press the 𝅗𝅥 key one time.

- You can press the **INTRO & ENDING** button or a **FILL IN** button on the panel to store the desired pattern at the current position. (An intro can be stored only at the beginning.) To specify a chord for the **INTRO** or **ENDING** pattern, while pressing the chord keys, press the **INTRO & ENDING** button. To specify a chord for the **FILL IN**, store the chord after pressing the **FILL IN 1** or **FILL IN 2** button. For details about the kind of data that can be stored in the **CHORD** part, refer to page 28.
- Store a rest by pressing a note value key without specifying a chord.
- Chords can also be specified in the **ONE FINGER** mode.

3. At the end of the chord progression, press the End key (⟞).
- The Keyboard exits the recording mode.
- You can press the **INTRO & ENDING** button instead of the End key (⟞) for an automatic ending pattern at the end of the performance during playback.
- 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 (⟞).

- When you play back the track for the **CHORD** part, the chords of the automatic accompaniment change in accordance with the stored chord progression.

■ Correct the recorded chord progression

1. In the **SEQUENCER** section, press the **STEP REC** button to turn it on.

2. Use the ◀ and ▶ Correction keys to find the chord you wish to edit.
- The current measure number is shown on the display, and the stored chord sounds.
- If a panel button command is stored in the current measure (for example, a **FILL IN**), the corresponding button indicator flashes.
- To go to the end of the chord progression, while pressing the Reset key (⟞), press the ◀ key.

<continued on next page>

3. Press the **DELETE** key.
- The data stored at the current position is erased.
- If you erase chord data and do not store a new chord, the following data shifts forward to replace the deleted data (the performance becomes shorter). Conversely, if you do not erase the chord data before entering a new chord, the new data is inserted, and the previously stored data is shifted back by the note value of the new chord (the performance becomes longer).
- To erase all the stored data, while pressing the **DELETE** key, press the End key (—H).

4. Store the new chord and other panel commands.

5. When you have finished correcting the chord progression, press the **STEP REC** button to turn it off.

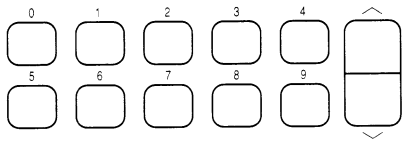
Erasing the recorded performance

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

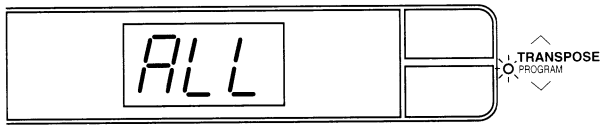
Sequencer clear

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

2. Press the number of **SEQUENCER CLEAR** on the number pad.



- The list of **MODE SET** functions and their numbers is found on the upper left of the operation panel.
- The display looks similar to the following.



3. Use the **TRANSPOSE** buttons to specify the track you wish to erase.
- Select from the following: all tracks [ALL], **MELODY/CTL** [MEL], **APC/CHORD** [APC].

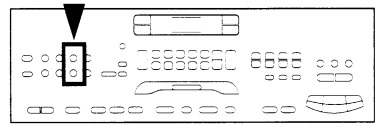
4. Press the **EXECUTE** (**SYNCHRO**) button.

- [SrE] is shown on the display.
- If you wish to cancel the erase procedure, press the **EXIT** button at this time.

5. Press the **EXECUTE** button again.
- The recorded data is erased from the specified track(s), and after [End] is shown on the display, the instrument returns to the normal performance mode.

Part V Composer (KN701)

Outline of the Composer



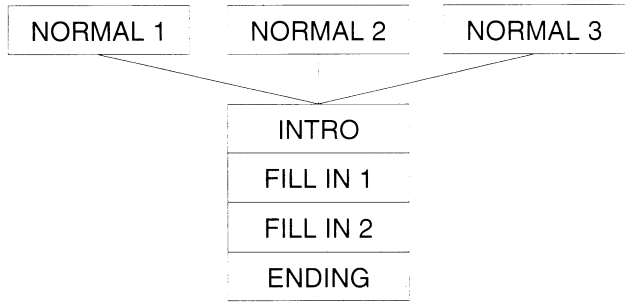
The **COMPOSER** enables you to create your own accompaniment patterns or to edit preset accompaniment patterns. Your original pattern is then stored in a memory and can be used just like the preset rhythms.

■ **Example of a rhythm pattern**

Components of a rhythm pattern

You can store up to 3 basic rhythm patterns (NORMAL 1, 2 and 3). You can also create a **INTRO** pattern, an **FILL IN 1** pattern, a **FILL IN 2** pattern and an **ENDING** pattern.

- Each rhythm component is comprised of five parts: **DRUMS**, **BASS** and **ACCOMP 1**, **2** and **3**.



Two ways to record in the COMPOSER

There are two ways to create and record a rhythm.

■ **Edit a preset rhythm**
Select a preset rhythm, change parts of it, and then store it as a new rhythm.

■ **Create a completely new rhythm**
Clear the memories and compose a completely new rhythm from scratch.

Memory capacity
Expressed in terms of notes, the total number of notes which can be stored in all the **COMPOSER** memories is about 2700. During recording, when the remaining memory capacity becomes about 20% or less, it is shown as a percentage on the display.

- When the memory is full, [FuL] appears on the display, no more data can be stored in the **COMPOSER**.
- The **COMPOSER** 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.
- By using the SONG memories, you can save up to four sets of **COMPOSER** rhythms. (Refer to page 39.)

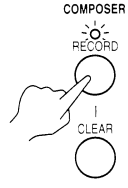
Setting up to create a rhythm pattern

First decide whether you are going to "Edit a preset rhythm pattern" or "Create a completely new rhythm". Below are the instructions for preparing to edit a preset rhythm pattern. And following that are instructions for creating a completely new rhythm pattern.

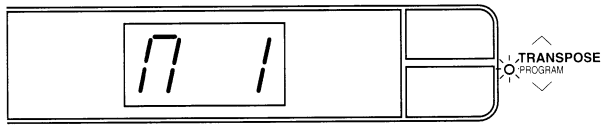
Edit a preset rhythm pattern

1. Use the **SOUND/RHYTHM** select section to select a rhythm to use as the base of your new rhythm.
- Select the rhythm which is most like the rhythm you are going to create.

2. Press the **RECORD** button of the **COMPOSER** to turn it on.



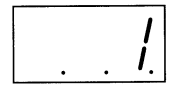
3. Use the **TRANSPOSE** buttons to select the rhythm component you are going to modify.



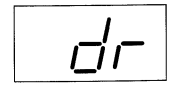
- Select from NORMAL (the basic rhythm pattern) 1 [M 1], 2 [M 2], 3 [M 3], INTRO [int], FILL IN 1 [F 1], 2 [F 2], ENDING [End].
- Create INTRO, FILL IN and ENDING patterns after setting the **COMPOSER** mode to EXPAND. (Refer to page 37.)

4. Press the **EXECUTE** (**SYNCHRO**) button.
- [CPY] (Copy) is shown on the display, and after a few seconds, the display changes to the following.

5. Press the **TRANSPOSE** buttons.
The rhythm you selected in step 1 and the metronome sound start, and recording begins.



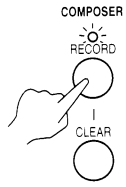
6. Use the **TRANSPOSE** buttons to select the rhythm part you want to record (**BASS**, **ACCOMP 1**, **ACCOMP 2**, **ACCOMP 3** or **DRUMS**).



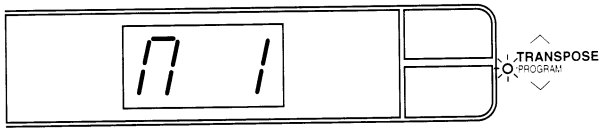
(Continue from "Record your rhythm pattern" on page 36.)

Create a completely new rhythm

1. Press the **RECORD** button of the **COMPOSER** to turn it on.



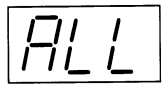
2. Use the **TRANSPOSE** buttons to select the rhythm component you are going to create.



- Select from NORMAL (the basic rhythm pattern) 1 [M 1], 2 [M 2], 3 [M 3], INTRO [int], FILL IN 1 [F 1], 2 [F 2], ENDING [End].
- Create INTRO, FILL IN and ENDING patterns after setting the **COMPOSER** mode to EXPAND. (Refer to page 37.)

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

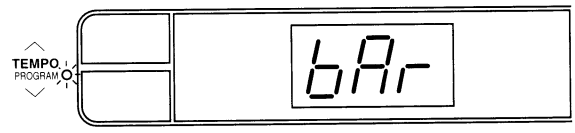
- [CPY] is shown on the display, and after a few seconds, the display changes to the following.



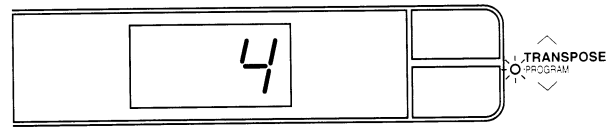
4. Press the **EXECUTE** button.
- [cLr] is shown on the display.

5. Press the **EXECUTE** button.
- [End] is shown on the display and each **COMPOSER PART** of the rhythm component you specified in step 2 is erased.
- If you wish to cancel the clear procedure, press the **EXIT** button at this time.

6. Use the **TEMPO** buttons to select [bAr] (bar = measure) on the display.

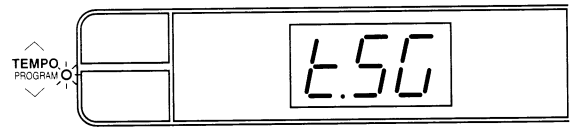


- After about 2 seconds, the display changes.

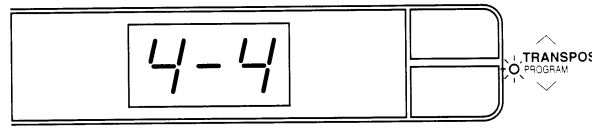


7. Use the **TRANSPOSE** buttons to specify the number of measures in your repeating rhythm pattern (1 to 8).

8. Use the **TEMPO** buttons to select [t.SG] on the display.



- After about 2 seconds, the display changes.



9. Use the **TRANSPOSE** buttons to specify the time signature.
- Select from 1/4 [1-4] to 8/4 [8-4].

10. Press the **EXIT** button or **TEMPO** buttons to return to the [ALL] display.

11. Press the **TRANSPOSE** buttons.
The metronome sound start, and recording begins.

12. Use the **TRANSPOSE** buttons to select the rhythm part you want to record (**BASS**, **ACCOMP 1**, **ACCOMP 2**, **ACCOMP 3** or **DRUMS**).

(Continue from "Record your rhythm pattern" on the next page.)

Record your rhythm pattern

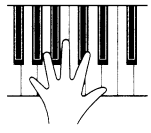
Store each part of the rhythm pattern as you perform it on the keyboard.

Recording procedure

1. Adjust the tempo.
- The tempo can be freely adjusted when you play back the rhythm pattern, so record at the tempo which is easiest for you to play.

2. Select the sound.
- For the **DRUMS** part, select sounds from the **KEYBOARD PERC** sounds. For the **BASS** and **ACCOMP** parts, select from **SOUND** numbers **001** to **128**.

3. Record the part.



- The specified number of measures are repeatedly played back, during which time any newly played notes are added to those already recorded. The current measure number is shown on the display.
- Use the keyboard percussion keys to play the **DRUMS** part.
- Record the performance in C major for correct chord progressions during playback of the **BASS** and **ACCOMP** parts.
- **SUSTAIN** and **PITCH BEND** effects are also recorded for the **BASS** and **ACCOMP** parts.

4. When you have completed recording one part, select the next part to record with the **TRANSPOSE** buttons.

5. Repeat steps 1 through 4 to record all the parts of the rhythm.

6. When you have finished recording the rhythm, press the **RECORD** button of **COMPOSER** to turn it off.

■ Maximum simultaneous tones

The maximum number of notes which can sound simultaneously for each part is 8. Even if you record more notes at one timing, only 8 are produced when the pattern is played back.

Recording functions

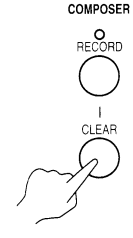
The following functions are available while recording.

■ PERCUSSION ERASE

When the **DRUMS** part is selected, the **DRUMS** part can be cleared instrument by instrument. Hold down the **PERC ERASE** button and specify the instrument sound to be deleted by pressing the corresponding instrument key on the keyboard, after which only the specified instrument will be erased for as long as this button is kept pressed.

■ PART CLEAR

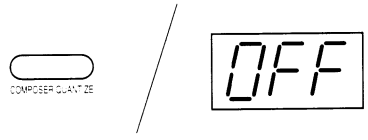
While recording, you can press the **COMPOSER CLEAR** button to erase all recorded contents of the currently selected part.



■ **QUANTIZE**

Set the desired quantize level (minimum note length) to smooth out any unevenness in the timing of your performance.

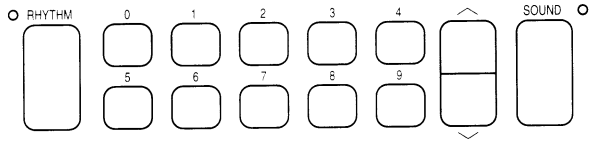
1. Press **COMPOSER QUANTIZE** button.
- The display looks similar to the following.



2. Use the **COMPOSER QUANTIZE** buttons to select the desired quantize level.
- Select from 𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯[32•3], 𝅘𝅥𝅯𝅘𝅥𝅯[32], 𝅘𝅥𝅯𝅘𝅥𝅯[16•3], [OFF], 𝅘𝅥𝅯[16], 𝅘𝅥𝅮𝅘𝅥𝅮𝅘𝅥𝅮[8•3], 𝅘𝅥𝅮[8], ♩[4]. (A 3 [•3] denotes a triplet-type note.)
- A few seconds after me setting is changed, the display returns to the measure-indication display.

Playback

1. In the **SOUND/RHYTHM** select section, select **RHYTHM**.



2. Select the **COMPOSER** number you wish to play back (**101** to **103**).
- Select **101** for the pattern stored in M1 and **102**, **103** for the pattern stored in M2, M3.

3. Press the **START/STOP** button.
- The **DRUMS** part of the recorded rhythm begins to play .
- The **BASS** and **ACCOMP** parts are played back with the **AUTO PLAY CHORD**.
- The **VARIATION** button does not work for **COMPOSER** rhythm patterns.

Notes
- When you store a rhythm pattern in a **COMPOSER** memory (**101** to **103**), it replaces the preset rhythm in that memory with the new rhythm. However , you can recall the original preset rhythm at any time by initializing your Keyboard. (Refer to page 55.)
- The **COMPOSER** 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.

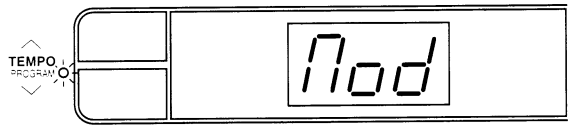
Creating your own intro, fill-in and ending patterns

You can create and play back your original intro, fill-in and ending patterns.

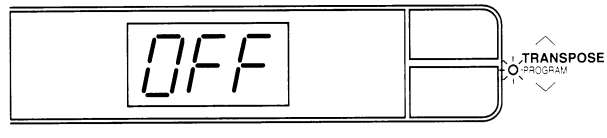
Composer mode

1. Press the **RECORD** button of the **COMPOSER** to turn it on.

2. Use the **TEMPO** buttons to select mode [Mod].



- After a few seconds, the display changes to the following.



3. Use the **TRANSPOSE** buttons to select the mode.

<continued on next page>

■ **NORMAL mode [OFF]**
During playback of your basic rhythm pattern (NORMAL), when a **FILL IN** button or the **INTRO & ENDING** button is pressed, the corresponding pattern for the preset rhythm that you first selected is played back.

■ **EXPAND mode [On]**
During playback of your basic rhythm pattern (NORMAL), when a **FILL IN** button or the **INTRO & ENDING** button is pressed, the corresponding pattern that you created is played back.

Recording

After setting the **COMPOSER** mode to EXPAND [On], use the following procedure.

1. Press the **EXIT** button or **TEMPO** buttons to return to the display to select the rhythm component.

2. Use the **TRANSPOSE** buttons to select the rhythm component you are going to create.
- Select from INTRO [int], FILL IN 1 [F 1], FILL IN 2 [F 2], ENDING [End].

3. Change the recording settings as desired. (Refer to page 35.)

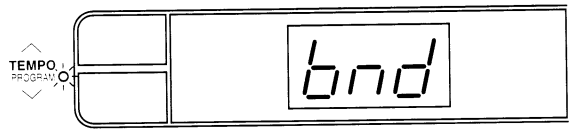
4. Follow the procedure to record the rhythm. (Refer to page 36.)
- Repeat the above procedure for each pattern as desired.
- Only one **FILL IN 1**, **FILL IN 2**, **INTRO** and **ENDING** pattern can be created. The fill-in patterns, etc. are used for all three basic rhythms ([M 1], [M 2] and [M 3]).

Bend Range

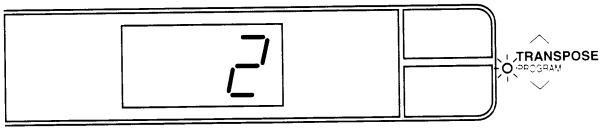
Adjust the amount of pitch change applied to the **ACCOMP** parts and the **BASS** part when the **PITCH BEND** wheel is operated during **COMPOSER** recording.

1. Press the **RECORD** button of the **COMPOSER** to turn it on.

2. Use the **TEMPO** buttons to select [bnd].



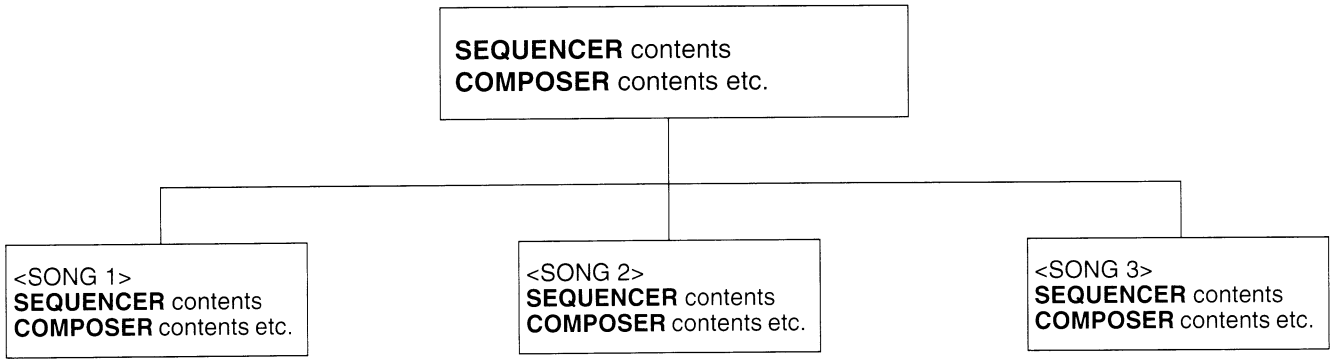
- After a few seconds, the display changes to the following.



3. Use the **TRANSPOSE** buttons to specify the range (0 to 12).
- Increments are in semitones.

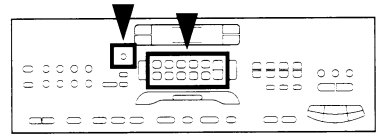
Part VI Song memory (KN701)

Only one performance can be stored in the **SEQUENCER** and **COMPOSER**. However, by using the **SONG LOAD/ SAVE** feature, four performances can be saved in the SONG memories.



- Use the SAVE function to store the recorded performance or stored contents, etc. in a SONG memory. You can then use the LOAD function to recall the stored performance.
- The current panel settings are also saved in the SONG memories.
- The contents of the SONG memories are preserved even if the **PLAY** button is turned off, as long as power is being supplied through the AC adaptor or the batteries.

Saving the recorded contents



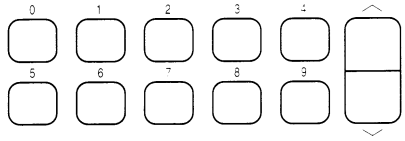
Save up to 3 sets of performance data and panel settings.

SAVE

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

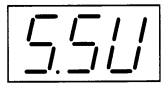
- [–] is shown on the display.

2. Use the **SOUND/RHYTHM** select number pad to select the number 4.



- On the display, the function number is shown briefly, after which the display changes to the function-setting display for the specified function.

3. Use the **TRANSPOSE** button to select song save [S.SV].



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

- Numbers from 1 to 3 are shown on the display. Use the **TRANSPOSE** buttons to select the number to save under.
- If you wish to cancel the procedure, press the **EXIT** (**DEMO**) button.

5. Press the **EXECUTE** button, [YES] appears on the display. Then press the **EXECUTE** button again.
- The SAVE operation begins.
- The data has been saved when [End] is shown on the display. This instrument returns to the normal performance mode.

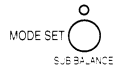
- Note that when the SAVE procedure is performed, any previously saved contents of the selected SONG memory are erased.

Loading the recorded contents

The contents of the saved SONG memories can be recalled any time.

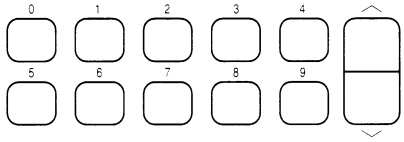
LOAD

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



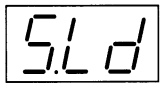
- [–] is shown on the display.

2. Use the **SOUND/RHYTHM** select number pad to select the number 4.



- On the display, the function number is shown briefly, after which the display changes to the function-setting display for the specified function.

3. Use the **TRANSPOSE** button to select song load [S.Ld].



4. Press the **EXECUTE** (**SYNCHRO**) button, and then use the **TRANSPOSE** buttons to select the number to be loaded.

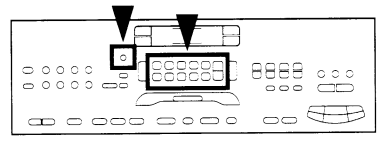
5. Press the **EXECUTE** (**SYNCHRO**) button.

- The LOAD operation begins.
- The data has been recalled when [End] is shown on the display. This instrument returns to the normal performance mode.
- If you have selected a SONG memory for which no contents have been saved, [n.SG] (no song) is shown on the display.

6. Press the **START/STOP** button to turn it on.
- The recalled performance begins to play.

Part VII Setting the functions

Outline of the Mode Set



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

Functions that can be set

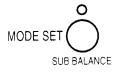
■ **SUB BALANCE** (page 42)
This is used to adjust the levels for each of the five separate parts (**DRUMS, ACCOMP 1 – 3**, and **BASS**) which make up the rhythm part.

■ **PART SETTING** (page 42)
Adjust the volume and effect settings for each part.

■ **KEYBOARD SET UP** (page 44)
Set the instrument pitch, keyboard touch response, left part setting during an AUTO PLAY CHORD performance and the function to be assigned to an optional foot switch.

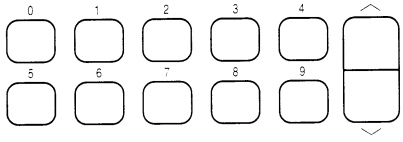
Procedure

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



- [–] is shown on the display.

2. Use the **SOUND/RHYTHM** select number pad to select the number of the function you wish to set.



- The list of **MODE SET** functions and their numbers is found on the upper left of the operation panel. On the display, the function number is shown briefly, after which the display changes to the function-setting display for the specified function.

3. Adjust the setting (see the following section).
- When adjusting the settings, you can press the **EXIT** (**DEMO**) button to return to the function-number display [–], select a different function number and continue setting the functions.

4. Repeat steps 2 and 3 for the other functions if desired.

5. Once you have finished setting the functions, press the **MODE SET** button to exit the setting mode.
- The instrument returns to the normal performance mode.

Adjusting the settings

Adjust the setting after selecting the function.

SUB BALANCE

This is used to adjust the levels for each of the five separate parts which make up the rhythm part.

1. Select **2: SUB BALANCE.** (Refer to page 41.)

2. Select the desired part using the **TEMPO** buttons.
- Select **ACCOMP 1** [AC1], **ACCOMP 2** [AC2], **ACCOMP 3** [AC3], **BASS** [bAS] or **DRUMS** [dr]).

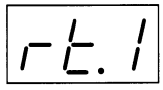
3. Adjust the sound volume using the **TRANSPOSE** buttons. (0 ~ 127)

4. Once adjustment is finished, press the **MODE SET** button to exit the setting mode.

PART SETTING

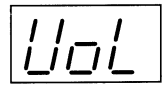
Adjust various settings for each part.

1. Select **3: PART SETTING**. (Refer to page 41.)
- The display looks similar to the following.



2. Use the **TEMPO** buttons to select the part.
- Select from **RIGHT 1** [rt. 1], **RIGHT 2** [rt. 2], **LEFT** [LFt], PART 4 [P4] to PART 16 [P16], CHORD [Chd], ROOT BASS [r. bS], **ACCOMP1** [AC1], **ACCOMP2** [AC2], **ACCOMP3** [AC3], **BASS** [bAS], **DRUMS** [dr], **MANUAL SEQUENCE PADS** [MSP].
- For parts for which **KEYBOARD PERC** sounds are selected, only the VOLUME setting can be adjusted.
- PART 16 is reserved for the **DRUMS** part.
- The settings you can adjust may differ depending on selected part and sound.
- For information concerning CHORD and ROOT BASS, refer to page 24.
- PART 4 to 16 are used for MIDI functions.

3. Press the **EXECUTE** button.
The display will change to the following.



4. Use the **TEMPO** buttons to select the desired item.

5. Use the **TRANSPOSE** buttons to adjust each attribute.

6. Press the **EXEXIT** button to return to the display for selecting the part.

7. Repeat steps 2 to 6 for the other parts, as desired.

- The following items can be set.

■ VOLUME
When a VOLUME has been selected, [VOL] is shown on the display, and then the display changes to the setting display. Use the **TRANSPOSE** buttons to adjust the volume of the selected part (0 to 127).
- Among the **MANUAL SEQUENCE PADS**, the **MANUAL PERC** bank volume is the same as PART16.

■ SUSTAIN LENGTH
When a SUSTAIN LENGTH has been selected, [SuS] is shown on the display, and then the display changes to the setting display. Use the **TRANSPOSE** buttons to adjust the sustain length when the **SUSTAIN** button is on (1 to 8).

■ PAN POT
When a PAN POT has been selected, [PAn] is shown on the display, and then the display changes to the setting display. Use the **TRANSPOSE** buttons to adjust the stereo balance (0 to 127).
- At 64, the sound is at the center.
- At 0 to 63, the sound is to the left of center. At 65 to 127, the sound is to the right of center.
- For some sounds, the stereo balance may be slightly different at the same number.

■ REVERB
When a REVERB has been selected, [rEV] is shown on the display, and then the display changes to the setting display. Use the **TRANSPOSE** buttons to adjust the reverberation of the selected part (0 to 127).

■ CHORUS
When a CHORUS has been selected, [CHo] is shown on the display, and then the display changes to the setting display. Use the CHORUS buttons to adjust the pitch difference for the extra CHORUS part (0 to 127).

■ KEYSHIFT
When a KEYSHIFT has been selected, [SFt] is shown on the display, and then the display changes to the setting display. Use the **TRANSPOSE** buttons to specify the relation of the pitch of the played key to the pitch of the sound (–12 to 12).
- A value of 1 means a difference of one semitone. A value of 12 is one octave.
- Settings from –12 to –1 lower the pitch, and settings from 1 to 12 raise the pitch.

■ TUNE
When a TUNE has been selected, [tun] is shown on the display, and then the display changes to the setting display. Use the **TRANSPOSE** buttons to fine-tune the pitch of the part (–128 to 127).
- Settings from –128 to –1 lower the pitch, and settings from 1 to 127 raise the pitch.

■ BEND RANGE
When a BEND RANGE has been selected, [bnd] is shown on the display, and then the display changes to the setting display. Use the **TRANSPOSE** buttons to set the amount of pitch change when the **PITCH BEND** wheel is used (0 to 12).
- Increments are in semitones. A value of 12 is one octave.

■ GLIDE
When a GLIDE has been selected, [GLd] is shown on the display, and then the display changes to the setting display. Use the **TRANSPOSE** buttons to turn the glide function of the Foot Switch (separately sold option) to [On] or [OFF] for the part.

■ SUSTAIN PEDAL
When a SUSTAIN PEDAL has been selected, [PdL] is shown on the display, and then the display changes to the setting display. Use the **TRANSPOSE** buttons to turn the sustain function control of the Foot Switch (sold separately) to [On] or [OFF] for each part.
- Different functions can be assigned to the Foot Switch. (Refer to page 45.)

■ KEY SCALING
When a KEY SCALING has been selected, [SCL] is shown on the display, and then display changes to the setting display. Use the **TRANSPOSE** buttons to turn the key scaling [On] or [OFF] for each part .

KEYBOARD SET UP

This instrument is provided with a wide variety of functions that you can set according to your preferences.

1. Select **KEYBOARD SET UP**.

2. Use the **TEMPO** buttons to select the function.
- Select from **TUNING** [tun], **TOUCH SENSITIVITY** [tCH], **LEFT HOLD SETTING** [hLd] or **FOOT SW SETTING** [Fot].

3. Use the **TRANSPOSE** buttons to adjust each attribute.

4. Repeat step 2 and 3 for the other functions, as desired.

- The following items can be set.

■ TUNING

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

- When **TUNING** is selected, [tun] will appear in the display.
- Use the **TRANSPOSE** buttons to adjust the pitch (427.3 to 453.0 Hz).
  [27.3] to [53.0] will appear in the display.
- The decimal can be set to 0, 3 or 6.

■ TOUCH SENSITIVITY

Adjust the amount of keyboard touch response.

- When **TOUCH SENSITIVITY** is selected, [tCH] will appear in the display.
- Use the **TRANSPOSE** buttons to adjust the degree of touch sensitivity (0 to 9).
- The larger the number, the greater the degree of touch sensitivity.
- When set to 0, the volume is the same no matter how hard or softly the keyboard is played.

■ LEFT HOLD SETTING

Specify how the left section of the keyboard sounds during an **AUTO PLAY CHORD** performance.

- When **LEFT HOLD SETTING** is selected, [hLd] will appear in the display.

- Use the **TRANSPOSE** buttons to set the mode to [On] or [OFF].

<continued on next page>

[OFF]

	ONE FINGER	FINGERED	PIANIST (KN701)
When rhythm is off	The chord note specified by the pressed key is heard (CHORD part).	The **LEFT** part sound and chord note specified by the pressed keys are heard.	The **LEFT** part notes and the chord note are not heard (the **RIGHT** part sound is heard for the entire keyboard).
When rhythm is on	The **LEFT** part notes and the chord note are not heard.	The **LEFT** part sound of the pressed keys is heard.	

- The **LEFT** part can be heard only when the **LEFT** button in the **CONDUCTOR** section is on.
- When you select the **ONE FINGER** mode, the **LEFT** button in the **CONDUCTOR** section turns off automatically.

[ON]

	ONE FINGER	FINGERED	PIANIST (KN701)
When rhythm is on/off	The specified chord note is produced in the **LEFT** part sound.	The **LEFT** part sound of the pressed keys is heard.	The **LEFT** part notes and the chord note are not heard (the **RIGHT** part sound is heard for the entire keyboard).

- The **LEFT** part can be heard only when the **LEFT** button in the **CONDUCTOR** section is on.

■ FOOT SWITCH SETTING

If a Foot Switch (separately sold option) is connected, you can assign a function to it and then control the function with your foot.

- When **FOOT SW SETTING** is selected, [Fot] will appear in the display.
- Use the **TRANSPOSE** buttons to specify the desired function to assign to the foot switch.
- Select one of the following: **PANEL MEMORY** increment* [P.Ic]; **START/STOP** on/off [Str]; **VARIATION** on/off [VAr]; **FILL IN 1, 2** on/off [FI.1], [FI.2]; **INTRO & ENDING** on/off [End]; **SUSTAIN** on/off [SuS] (factory-preset); glide** on/off [GLd], **TECHNI-CHORD** on/off [tcd].
  * When the Foot Switch is pressed, the **PANEL MEMORY** number changes to the next higher number.
  ** 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).

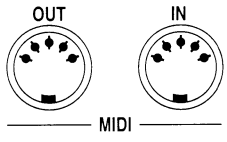
Part VIII MIDI

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.

MIDI terminals

(On the rear panel)



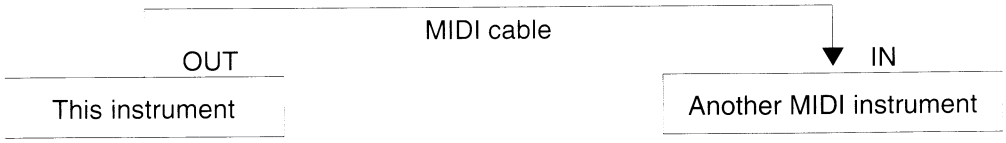
IN: The terminal by which this instrument receives data from other equipment.

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

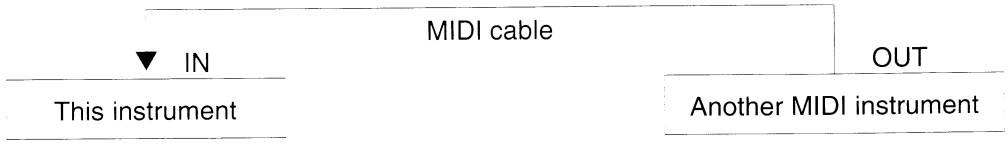
- For these connections, use a commercially available MIDI cable.

Connection examples

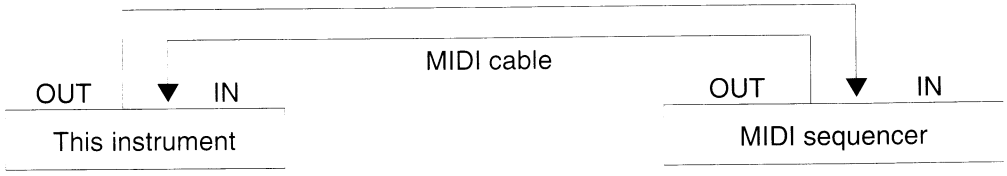
■ To generate sound from a connected instrument by playing this instrument



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

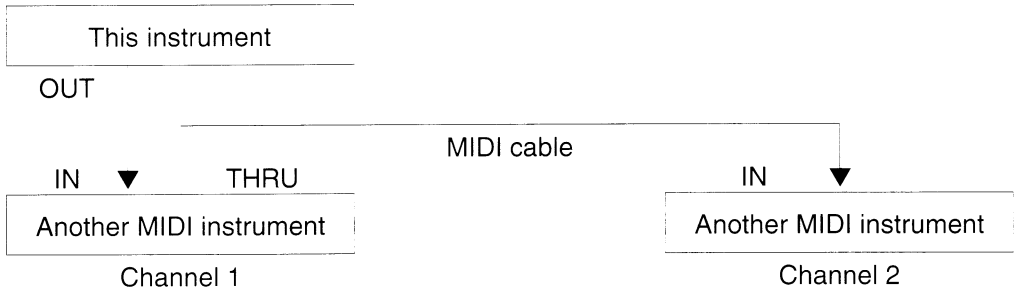


■ To connect with a MIDI sequencer or a personal computer



MIDI channels

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 "basic channels" (numbered 1 to 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. This characteristic also makes it possible to link multiple sound generators and to control each by matching specific channels.



The following kinds of data can be transmitted/received.

■ NOTE data

This is the most basic kind of MIDI data which is exchanged, and is used to specify which keys are played and how hard they are played.

NOTE NUMBER:	Number specifying which key is played.
NOTE ON:	Specifies that a key is played.
NOTE OFF:	Specifies that a key is released.
VELOCITY:	Specifies how hard a key is struck.

- MIDI notes are assigned numbers from 0 to 127, with middle C as 60. Note pitches are in semitone increments, with the higher numbers assigned to the higher pitches.

■ PROGRAM CHANGE

This is sound change data. When a different sound is selected on the transmitting instrument, the sound on the receiving instrument also changes.

■ CONTROL CHANGE

These are volume, sustain, effect, etc. data used to enhance performance expression. Each function is distinguished by its control number, and the function which can be changed by the control differs depending on the instrument.

■ EXCLUSIVE data

This is sound data, etc. particular to a specific instrument model. This data can also be transmitted and received by the DUMP function.

- For details, refer to the separate "REFERENCE GUIDE" provided.

GENERAL MIDI

GENERAL MIDI (GM) is the standard which enables MIDI data exchange between different models or equipment of different manufacture. PROGRAM CHANGE numbers and their corresponding sounds, percussion instrument sounds, note numbers, etc. are data-compatible between equipment using this standard. Song data created on the equipment of one manufacturer can be played back on the equipment of a different manufacturer, as long as both conform to the GENERAL MIDI standard. This instrument conforms to this standard and can be used as a GENERAL MIDI sound generator.

Equipment which conforms to GENERAL MIDI standards is indicated by the following logo.

GENERAL MIDI

Outline of MIDI functions

Select the various settings which are used for MIDI operation of the instrument.
- The abbreviated function name as shown on the display is indicated in brackets [ ].

■ : **BASIC CHANNEL** [b.ch] (page 49)
Assign a MIDI channel to each part.

■ : **OCTAVE SHIFT** [oct] (page 50)
Set the octave shift value for key notes transmitted from this instrument.

■ : **LOCAL CONTROL** [L.ct] (page 50)
Specify whether this instrument's sound generator is enabled when MIDI data is transmitted.

■ : **REALTIME COMMAND** [Srt] (page 50)
Enable or disable the exchange of REALTIME data.

■ : **CLOCK** [CL] (page 50)
Set the CLOCK mode.

■ : **NOTE ONLY** [nt.o] (page 51)
Of the performance data, specify whether or not only note data is exchanged.

■ : **TRANSPOSE OUTPUT** [trA] (page 51)
Specify whether the note number of the transposed note or the note number of the played key is transmitted/received when **TRANSPOSE** is on.

■ : **PROGRAM CHANGE MODE** [P.ch.] (page 51)
Settings related to the PROGRAM CHANGE number of each sound.

■ : **SONG SELECT** [S.SL] (KN701) (page 51)
Specify whether song number data can be exchanged.

■ : **MIDI SETUP LOAD** [M.Ld] (KN701) (page 51)
Specify whether MIDI settings stored in a song are automatically recalled when the song data is loaded.

■ : **PROGRAM CHANGE TO PANEL MEMORY** [P.P.M] (page 52)
Specify whether or not changes in the **PANEL MEMORY** number selection are exchanged as PROGRAM CHANGE data for the **RIGHT 1** part.

■ : **RIGHT 1 INPUT** [r.in] (page 52)
Specify how note data is handled when it is received.

■ : **APC INPUT** [A.in] (page 52)
Specify whether input data for the automatic accompaniment parts is received.

■ : **TECHNI-CHORD OUTPUT** [tEC] (page 52)
Specify whether keyboard notes generated by the **TECHNI-CHORD** function are transmitted.

■ : **DRUM PATTERN OUTPUT** [dr.o] (page 53)
Specify whether data from the **DRUMS** part is transmitted.

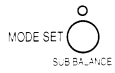
■ : **APC OUTPUT** [Ac.o] (page 53)
Specify whether data for the automatic accompaniment is transmitted.

■ : **BULK DUMP** [dMP] (page 53)
Settings related to SYSTEM EXCLUSIVE data exchange.

■ : **PRESETS** [PSt] (page 54)
Establish the optimum settings depending on how this instrument is connected to other equipment.

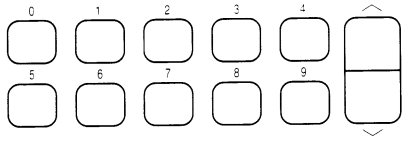
Procedure

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



- [–] is shown on the display.

2. Use the **SOUND/RHYTHM** select number pads to select **MIDI SETTINGS**.



- The list of **MODE SET** functions and their numbers is found on the upper left of the operation panel.

3. Use the **TEMPO** buttons to select the function that you would like to set.

4. Adjust the setting (see the following section).
- A flashing indicator shows which buttons are used for adjusting the specified function.
- When adjusting the settings, you can press the **EXIT** button to return to the function select display [–], select a different function and continue setting the functions. (**BASIC CHANNEL**, **OCTAVE SHIFT**, **LOCAL CONTROL**, **BULK DUMP**, **PRESETS**)
- After a short period of time, the function selection display will appear again, so that you can then select a further function.

5. Repeat steps 3 and 4 for the other functions if desired.

6. Once you have finished setting the functions, press the **MODE SET** button to exit the setting mode.
- The instrument returns to the normal performance mode.

Setting the functions

Adjust the setting after selecting the function.

BASIC CHANNEL

Assign a MIDI channel number to each part.

1. Use the **TEMPO** buttons to select **BASIC CHANNEL**. (Refer to page 49.)

2. Press the **EXECUTE** button.

3. Use the **TEMPO** buttons to select a part.
- Select from **RIGHT 1** [rt.1], **RIGHT 2** [rt.2], **LEFT** [LFt], PART 4 to 16 [P4 to P16], CONTROL [CtL], **ACCOMP 1** to **3** [AC1 to AC3], **BASS** [bAS], **DRUMS** [dr], **CHORD** [Chd].

4. Use the **TRANSPOSE** buttons to select a basic channel for the part (OFF, ch1 to ch16).
- A part which has been set to [OFF] cannot be used to transmit or receive MIDI data.

5. Repeat steps 3 and 4 for each part as desired.

■ **Default channel settings**

Part	Channel	Part	Channel
RIGHT 1	1	PART 14	14
RIGHT 2	2	PART 15	15
LEFT	3	PART 16	
PART 4	4	(DRUMS)	16
PART 5	5	CONTROL	OFF
PART 6	6	AUTO PLAY CHORD	
PART 7	7		
PART 8	8	ACCOMP 1	OFF
PART 9	9	ACCOMP 2	OFF
PART 10	10	ACCOMP 3	OFF
PART 11	11	BASS	OFF
PART 12	12	DRUMS	OFF
PART 13	13	CHORD	OFF

OCTAVE SHIFT

Set the octave shift value for key notes transmitted from this instrument.

1. Use the **TEMPO** buttons to select **OCTAVE SHIFT**. (Refer to page 49.)

2. Press the **EXECUTE** button.

3. Use the **TEMPO** buttons to select a part.
- Select from **RIGHT 1** [rt.1] **RIGHT 2** [rt.2], **LEFT** [LFt], PART 4 to 16 [P4 to P16], **ACCOMP 1** to **3** [AC1 to AC3], **BASS** [bAS], **DRUMS** [dr], **CHORD** [Chd].

4. Use the **TRANSPOSE** buttons to set the OCTAVE SHIFT value (-3 to 3).
- Increments are in octaves.
- The transmitted and received octave shifts are linked. For example, if the transmitted octave shift is set to 1, the received octave shift is automatically set to 1.

5. Repeat steps 3 and 4 for each part as desired.

LOCAL CONTROL

Specify whether this instrument's sound generator is enabled when MIDI data is transmitted.

1. Use the **TEMPO** buttons to select **LOCAL CONTROL**. (Refer to page 49.)

2. Press the **EXECUTE** button.

3. Use the **TEMPO** buttons to select a part.
- Select from **RIGHT 1** [rt.1], **RIGHT 2** [rt.2], **LEFT** [LFt], PART 4 to 16 [P4 to P16], **ACCOMP 1** to **3** [AC1 to AC3], **BASS** [bAS], **DRUMS** [dr], **CHORD** [Chd].

4. Use the **TRANSPOSE** buttons to enable or disable this instrument's sound generator.

[On]: The performance from this instrument is transmitted as MIDI data and also sounds from this instrument.
[OFF]: The performance from this instrument is transmitted as MIDI data but does not sound from this instrument.

REALTIME COMMAND

Enable or disable the exchange of **START/STOP** data.

1. Use the **TEMPO** buttons to select **REALTIME COMMAND**. (Refer to page 49.)

2. Use the **TRANSPOSE** buttons to change the REALTIME COMMAND setting.

[On]: Rhythm and **SEQUENCER** start/stop, continue, and song position pointer data can be transmitted/received.
[OFF]: This data cannot be transmitted/received.

CLOCK

Select the CLOCK mode.

1. Use the **TEMPO** buttons to select **CLOCK**. (Refer to page 49.)

2. Use the **TRANSPOSE** buttons to change the CLOCK setting.

INTERNAL [int]: This instrument's internal CLOCK is used to control the performance. The CLOCK of the connected equipment is disabled.

MIDI [Mid]: The CLOCK of the connected equipment is used to control the performance. This instrument's CLOCK is disabled.
- When MIDI is selected, the tempo is displayed as [– – –] and the rhythm and **SEQUENCER** are disabled until the CLOCK signal is received from the connected instrument.

NOTE ONLY

Of the performance data, specify whether or not only note data is exchanged.

1. Use the **TEMPO** buttons to select **NOTE ONLY**. (Refer to page 49.)

2. Use the **TRANSPOSE** buttons to change the setting.

[On]: Only note on/off data is exchanged.
[OFF]: Other data is also exchanged.

TRANSPOSE OUTPUT

Specify whether the note number of the transposed note is transmitted when **TRANSPOSE** is on, or if the note number of the played key is transmitted.

1. Use the **TEMPO** buttons to select **TRANSPOSE OUTPUT**. (Refer to page 49.)

2. Use the **TRANSPOSE** buttons to change the setting.

[On]: The note number of the transposed note is transmitted.
[OFF]: The note number of the played key is transmitted.

PROGRAM CHANGE MODE

Set the PROGRAM CHANGE mode.

1. Use the **TEMPO** buttons to select **PROGRAM CHANGE MODE**. (Refer to page 49.)

2. Use the **TRANSPOSE** buttons to select the mode.

NORMAL [nor]: The PROGRAM CHANGE numbers correspond to the sound numbers as shown on the panel list.

TECHNICS [tEC]: PROGRAM CHANGE numbers are standardized among all Technics models which are set to this mode. The PROGRAM CHANGE number assigned to a given sound on one model is assigned to the same sound on all models which are set to the same mode.
GM [GM]: PROGRAM CHANGE numbers follow the GM standard.

- The PROGRAM CHANGE numbers for each mode can be found in the separate "REFERENCE GUIDE" provided.

SONG SELECT (KN701)

Specify whether song number data can be exchanged.

1. Use the **TEMPO** buttons to select **SONG SELECT**. (Refer to page 49.)

2. Use the **TRANSPOSE** buttons change the setting.

[On]: Song number data is exchanged.
[OFF]: Song number data is not exchanged.

MIDI SETUP LOAD (KN701)

Specify whether MIDI settings stored in a song are automatically recalled when the song data is loaded.

1. Use the **TEMPO** buttons to select **MIDI SETUP LOAD**. (Refer to page 49.)

2. Use the **TRANSPOSE** buttons to change the setting.

[On]: MIDI settings are recalled.
[OFF]: MIDI settings are not recalled.

PROGRAM CHANGE TO PANEL MEMORY

Specify whether or not changes in the **PANEL MEMORY** number selection are exchanged as PROGRAM CHANGE data for the **RIGHT 1** part.

- The PROGRAM CHANGE numbers for **PANEL MEMORY** numbers **0** to **9**.

1. Use the **TEMPO** buttons to select **PROGRAM CHANGE TO PANEL MEMORY**. (Refer to page 49.)
2. Use the **TRANSPOSE** buttons to change the setting.

[On]: Changes in the **PANEL MEMORY** number selection are exchanged as PROGRAM CHANGE data for the **RIGHT 1** part.
[OFF]: Changes in the **PANEL MEMORY** number selection are not exchanged as PROGRAM CHANGE data for the **RIGHT 1** part.

RIGHT 1 INPUT

Specify how note data is handled when it is received.

1. Use the **TEMPO** buttons to select **RIGHT 1 INPUT**. (Refer to page 49.)
2. Use the **TRANSPOSE** buttons to select the mode.

[cnd]: The NOTE data received on the MIDI channel for the **RIGHT 1** part is assigned to the parts by the **CONDUCTOR**, as when the keyboard is played.
[dir]: The NOTE data received on the MIDI channel for the **RIGHT 1** part is assigned to the **RIGHT 1** part.

APC INPUT

Specify whether input data for the automatic accompaniment parts is received.

1. Use the **TEMPO** buttons to select **APC INPUT**. (Refer to page 49.)
2. Use the **TRANSPOSE** buttons to select the mode.

[On]: Input data for the **ACCOMP 1**, **2**, **3**, **BASS** and **DRUMS** parts is received.
[OFF]: This data is not received.

- MIDI channels should be assigned to the automatic accompaniment parts before exchanging data. (Refer to page 49.)

TECHNI-CHORD OUTPUT

Specify whether keyboard notes generated by the **TECHNI-CHORD** function are transmitted.

1. Use the **TEMPO** buttons to select **TECHNI-CHORD OUTPUT**. (Refer to page 49.)
2. Use the **TRANSPOSE** buttons to change the setting.

[On]: Keyboard notes generated by the **TECHNI-CHORD** function are also transmitted.
[OFF]: Only key note data of the pressed keys is transmitted.

DRUM PATTERN OUTPUT

Specify whether data from the **DRUMS** part is transmitted.

1. Use the **TEMPO** buttons to select **DRUM PATTERN OUTPUT**. (Refer to page 49.)

2. Use the **TRANSPOSE** buttons to change the setting.

[On]: Data from the **DRUMS** part is transmitted.
[OFF]: Data from the **DRUMS** part is not transmitted.

APC OUTPUT

Specify whether data for the **ACCOMP 1, 2, 3, BASS** and **CHORD** parts is transmitted.

1. Use the **TEMPO** buttons to select **APC OUTPUT**. (Refer to page 49.)

2. Use the **TRANSPOSE** buttons to change the setting.

[On]: Data from the **ACCOMP 1, 2, 3, BASS** and **CHORD** parts is transmitted.
[OFF]: Data from these parts is not transmitted.
- MIDI channels should be assigned to the automatic accompaniment parts before exchanging data. (Refer to page 49.)

BULK DUMP

This instrument's internal data such as panel settings, performance data, etc. can be transmitted to and received from another same model unit or other MIDI equipment as SYSTEM EXCLUSIVE data.
- Sound is not generated from this instrument during this procedure.

■ Transmitting

1. Follow the procedure necessary to prepare the receiving instrument for data reception.

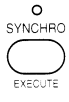
2. Use the **TEMPO** buttons to select **BULK DUMP**. (Refer to page 49.)

3. Press the **EXECUTE** button.

4. Use the **TRANSPOSE** buttons to specify the type of data to transmit.

   [ALL]: All data
   [CMP]: **COMPOSER** data (KN701)
   [SEql: **SEQUENCER** data
   [PnL]: Panel settings and **PANEL MEMORY** data

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



- [YES] is shown on the display.
- If you wish to cancel the procedure, press the **EXIT** button instead.

6. Press the **EXECUTE** button again.
- Transmission begins.
- If transmission is unsuccessful, [E.tr] is shown on the display. In this case, repeat the procedure from the beginning.
- When transmission is completed, [End] is shown on the display.

■ Receiving

After accessing this display on this instrument, follow the transmission procedure on the transmission side.
- If reception is unsuccessful, [E.rc] is shown on the display. In this case, repeat the procedure from the beginning.
- When reception is completed, [End] is shown on the display.

PRESETS

Establish the optimum settings depending on how this instrument is connected to other equipment, and on whether this instrument is used as the master or the slave.

1. Use the **TEMPO** buttons to select **PRESETS**. (Refer to page 49.)

2. Press the **EXECUTE** button.

3. Use the **TRANSPOSE** buttons to select the number for the connection setup (1 to 33).
- Detailed information about the MIDI PRESETS can be found in the separate "REFERENCE GUIDE" provided.

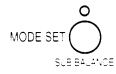
4. Press the **EXECUTE** (**SYNCHRO**) button.

- [End] is shown on the display and the PRESETS settings are completed.

GM MODE SET

Specify whether this instrument is compatible with GENERAL MIDI standard instruments.

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



2. Use the number buttons to select **GM MODE SET**.
- The list of **MODE SET** functions and their numbers is found on the upper left of the operation panel.
- The nummber will appear on the display for a short time, and then the display will return to the setting display.

3. Use the **TRANSPOSE** buttons to switch the setting on or off.

[On]: This instrument is compatible with GENERAL MIDI standard instruments.
[OFF]: This instrument is not compatible with GENERAL MIDI standard instruments.
- This setting is automatically set to [OFF] When the power is turned on.
- If [On] is selected, the status of this instrument changes to the GENERAL MIDI status, and the sounds and operations which can be selected are limited. In addition, the arrangement of percussion sounds on the keyboard changes. (Refer to the separate "REFERENCE GUIDE" provided.)
- If GENERAL MIDI on/off data is received from connected MIDI equipment, the received data has priority.

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

- [YES] is shown on the display.
- If you wish to cancel the procedure, press the **EXIT** button.

5. Press the **EXECUTE** button again.
- The data has been saved when [End] is shown on the display. This instrument returns to the normal performance mode.

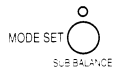
- Changing this setting will cause all **SEQUENCER** data to be erased.
- This setting is automatically set to OFF when the power is turned on. If the setting is set to ON and the instrument is then turned off, all **SEQUENCER** data will be erased.

Initialize

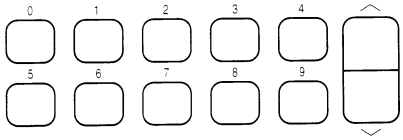
This instrument has many settable functions and storable memories. However, you can return the settings and memories to the factory-preset status.

INITIAL

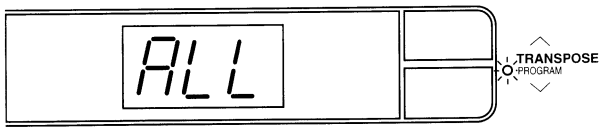
1. Press the **MODE SET** button.



2. On the **SOUND/RHYTHM** select number pad, select **1**.



- The display changes to the following.



3. Use the **TRANSPOSE** buttons to specify which settings are reset.
- Select from All [ALL], **SEQUENCER** [SEq], **COMPOSER** [CMP], **SOUND MEMORY** [Snd], **PANEL MEMORY** [PnL], **MANUAL SEQUENCE PADS** [MSP] **MIDI** [Mid].

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

- [YES] is shown on the display.
- Press the **EXIT** button if you wish to cancel the procedure.

5. Press the **EXECUTE** button again.
- When [End] appears on the display, initialization is completed.

- You can also reset all the instrument settings with the following procedure: Turn off the **PLAY** button once. Then, while pressing the **0**, **1** and **2** buttons on the **SOUND/RHYTHM** select number pad at the same time, turn the **PLAY** button on.

■ Backup memory

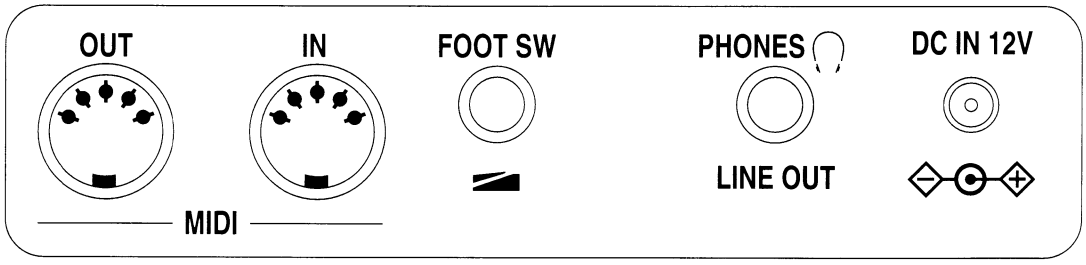
The various stored memories and function settings are preserved even if the **PLAY** button is turned off, as long as power is being supplied through the AC adaptor or the batteries. If the power supply to this instrument is discontinued (either through the AC adaptor or the batteries), the various memories and settings will be cleared after about 10 minutes.

Options and connections

This page shows the optional accessories that are available for your 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)



FOOT SW
An optional SZ-P1 Foot Switch (sold separately) can be connected to this terminal to control various functions. (Refer to page 45.)

PHONES ( )/LINE OUT (output level 1.5 Vrms, 16 Ω)
Headphones, a keyboard amplifier, or stereo equipment can be connected to this terminal. When another apparatus is connected to this terminal, the speaker system is automatically switched off, and sound is heard only through the connected device.

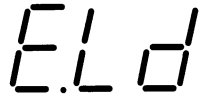
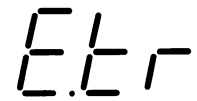
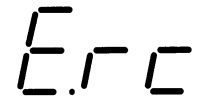
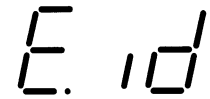
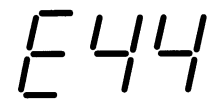
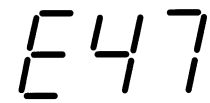
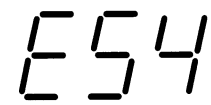
MIDI
These terminals are for connection to another MIDI instrument. (Refer to page 46.)

Separately sold options

SZ-P1
Foot Switch

Error messages

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

Error display	Reason
	**SONG LOAD** failure.
	The number of the **SONG MEMORY** that you tried to load is empty.
	Batteries exhausted.
	There is an error in the **SEQUENCER** data. The performance cannot be played back.
	The **SEQUENCER, COMPOSER** or **MANUAL SEQUENCE PADS** memory is full. No more data can be stored.
	You attempted to change the number of measures or the time signature of the rhythm without first clearing the **COMPOSER** memory.
	An error has occurred during **MIDI BULK DUMP** transmission.
	An error has occurred during **MIDI BULK DUMP** reception.
	The identification (ID) code of the **SYSTEM EXCLUSIVE** data received by this instrument is for a different product.
	You attempted to edit a **KEYBOARD PERC** sound.
	A rhythm other than a preset rhythm was selected.
	**MANUAL SEQUENCE PADS**, Preset numbers other than No.11 do not allow recording.

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
Sounds and effects	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 **SOUND/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.
	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 12.) • The local control for a part performed on the keyboard is set to OFF. Set the LOCAL CONTROL to ON. (Refer to page 50.)
	When using batteries, the volume level becomes low or the sound is distorted.	• The batteries are low. Replace the batteries as soon as possible.
	The type of effect does not alternate when the **CHORUS/FLANGER** button is pressed.	• Follow the procedure to select the type of effect. (Refer to page 13.)
	Some sounds cannot be selected.	• When the GENERAL MIDI status is set to on, the sounds which can be selected and operations which can be executed are limited. Turn the GENERAL MIDI status off to return the instrument to its normal operation. (Refer to page 54.)
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. • In the **SOUND/RHYTHM** select section, a rhythm in **MEMORY** with no stored pattern was selected. Select a different rhythm. • The MIDI CLOCK is set to MIDI. Set the MIDI CLOCK to INT. (Refer to page 50.) • The rhythm does not work when the GENERAL MIDI mode is set to ON. Turn the GENERAL MIDI status off to return the instrument to its normal operation. (Refer to page 54.)
AUTO PLAY CHORD	No sound is produced for the automatic accompaniment.	• In the **SOUND/RHYTHM** select section, a rhythm in **MEMORY** with no stored pattern was selected. Select a different rhythm.
	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
SEQUENCER	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 32.)
	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 29.)
COMPOSER	Storage is not possible.	• The remaining memory capacity of the **COMPOSER** is 0.
	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 35.)
	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 37.)
Other	Noise from a radio or TV can be heard.	• 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 instrument. • The sound may be coming from a nearby broadcast station or amateur radio station. If the sound is bothersome, 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 indication of trouble.

Index

A

APC/CHORD 28
AUTO PLAY CHORD 23
AUTO PLAY CHORD INPUT 52
AUTO PLAY CHORD OUTPUT 53

B

BALANCE 12
BASIC CHANNEL 49
Beat 20
BEND RANGE 38,43
BULK DUMP 53

C

CHORUS/FLANGER 13
CLOCK 50
COMPOSER 33
COMPOSER PART CLEAR 36
COMPOSER QUANTIZE 37
CONDUCTOR 11
Connections 56
COUNT INTRO 21

D

DEMO 9
DRUM PATTERN OUTPUT 53

E

Error messages 57

F

FILL IN 22
FINGERED 24
FOOT SW 45,56
FOOT SWITCH SETTING 45

G

GENERAL MIDI 48
GM MODE SET 54
GLIDE 43

H

Headphones 56

I

IMAGE EXPANDER 14
INITIAL 55
Initialize 55
INTRO & ENDING 21,22

K

KEY SCALING 17,43
KEY SHIFT 43
KEYBOARD PERC 10
KEYBOARD SET UP 44

L

LEFT HOLD SETTING 44
LINE OUT 56
LOCAL CONTROL 50

M

MAIN VOLUME 9
MANUAL PERCUSSION 19
MANUAL SEQUENCE PADS 18
MELODY/CTL 28
Metronome 34,35
MIDI 46
MIDI SETUP LOAD 51
MODE SET 41
Music stand 8

N

NOTE ONLY 51

O

OCTAVE SHIFT 50
ON BASS 24
ONE FINGER 23
ONE TOUCH PLAY 26
Options 56

P

PAN POT 43
PANEL MEMORY 26
PART SETTING 42
PIANIST 24
PITCH BEND 15
PLAY 9
PRESETS 54
PROGRAM CHANGE MODE 51
PROGRAM CHANGE TO PANEL MEMORY 52

R

REALTIME COMMAND 50
REALTIME RECORD 29
REVERB/PHASER 14
RIGHT 1 INPUT 52

S

SEQUENCER 27
SEQUENCER CLEAR 32
SEQUENCER RESET 29
SET SOUND ARRANGER 25
SONG LOAD/SAVE 39,40
SONG SELECT 51
SOUND/RHYTHM select section 9
SOUND ARRANGER 25
Specifications 61
SPLIT POINT 12
START/STOP 20
STEP RECORD 30
(Volume) SUB BALANCE 23,42
SUSTAIN 13
SYNCHRO 20

T

TECHNI-CHORD 16
TECHNI-CHORD OUTPUT 52
TEMPO 21
TOUCH SENSITIVITY 44
TRANSPOSE 15
TRANSPOSE OUTPUT 51
Troubleshooting 58
TUNING 44

V

VARIATION 22

Specifications

	SX-KN501	SX-KN701
KEYBOARD	61 KEYS (WITH INITIAL TOUCH)	
SOUND GENERATOR	PCM	
MAXIMUM NUMBER OF NOTES PRODUCED SIMULTANEOUSLY	32 NOTES	
SOUNDS	129 SOUNDS	136 SOUNDS
EFFECTS	SUSTAIN, CHORUS, REVERB, PITCH BEND	SUSTAIN, CHORUS/FLANGER, REVERB/ PHASER, IMAGE EXPANDER, PITCH BEND
PART	RIGHT 1, RIGHT 2, LEFT	
TRANSPOSE	G-C-F♯	
RHYTHM	100 RHYTHMS + 100 VARIATION	
CONTROLS	MAIN VOLUME, BALANCE, CONDUCTOR, START/STOP, INTRO & ENDING, FILL IN 1, FILL IN 2, COUNT INTRO, SYNCHRO, TEMPO, SPLIT POINT	
MANUAL SEQUENCE PADS	4 PADS × 6 PRESET PHRASES, MANUAL PERC, SELECT, STOP	6 PADS × 10 PRESET PHRASES, USER MEMORY MANUAL PERC, SELECT, RECORD/STOP
AUTO PLAY CHORD	ONE FINGER, FINGERED, SOUND ARRANGER	ONE FINGER, FINGERED, PIANIST, ON BASS, SOUND ARRANGER
ONE TOUCH PLAY	○	
TECHNI-CHORD	○	
PANEL MEMORY	10 BANKS (0~9)	
SEQUENCER	2 TRACKS STORAGE CAPACITY: APPROX. 2800 NOTES INPUT MODES: REALTIME RECORD, STEP RECORD (CHORD) FUNCTION: SEQUENCER CLEAR	
COMPOSER	———	5 PARTS: BASS, ACCOMP 1, ACCOMP 2, ACCOMP 3, DRUMS STORAGE CAPACITY: APPROX. 2700 NOTES INPUT MODES: REALTIME RECORD FUNCTIONS: CLEAR, PERCUSSION ERASE, MODE SELECT, BEND RANGE MEMORY: M1~3, INTRO, FILL IN 1, FILL IN 2, ENDING
MODE SET	INITIAL, SUB BALANCE, PART SETTING, KEY BOARD SET UP, KEY SCALING, MIDI SETTING, GM MODE SET	
SONG MEMORY	———	3 SONGS, SAVE, LOAD
DISPLAY	LED (3 DIGITS), EXIT	
DEMO	○	
TERMINALS	DC IN 12 V, PHONES/LINE OUT, FOOT SW, MIDI (IN, OUT)	
OUTPUT	1.5 W × 2 (WITH BATTERIES), 5 W × 2 (WITH SY-AD6/AD6B AC ADAPTOR)	
SPEAKERS	12 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 (CANADA)
	AC: WITH SY-AD6B AC ADAPTOR	AC 230 V 50/60Hz (EUROPE EXCEPT FOR UNITED KINGDOM)
DIMENSIONS (W × H × D)	99.8 cm × 11.7 cm × 34.6 cm (39-9/32″ × 4-19/32″ × 13-5/8″)*	
NET WEIGHT	5.8 kg (12.8 lbs.)*	
ACCESSORIES	MUSIC STAND	

* Without MUSIC STAND, BATTERIES
Design and specifications are subject to change without notice.

Matsushita Electric Industrial Co., Ltd.
Central P.O. Box 288, Osaka 530-91, Japan

Printed in Japan

QQTG0352A

ENGLISH

S0695F0