Technics

DIGITAL ENSEMBLE

SX-PR303

ENGLISH EN MC EP X

QQTG0236A

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY. (for UNITED KINGDOM)

This appliance is supplied with a moulded three-pin mains plug for your safety and convenience.
A 5 amp fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ⟨ASTA⟩ or the BSI mark on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local Panasonic/Technics Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT-OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT: —The wires in this mains lead are coloured in accordance with the following code:—

Blue:	Neutral
Brown:	Live

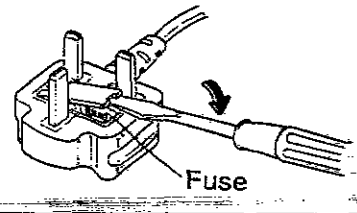
As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three-pin plug, marked with the letter E or the Earth Symbol ⏚.

How to replace the fuse. Open the fuse compartment with a screwdriver and replace the fuse and fuse cover.



Technics

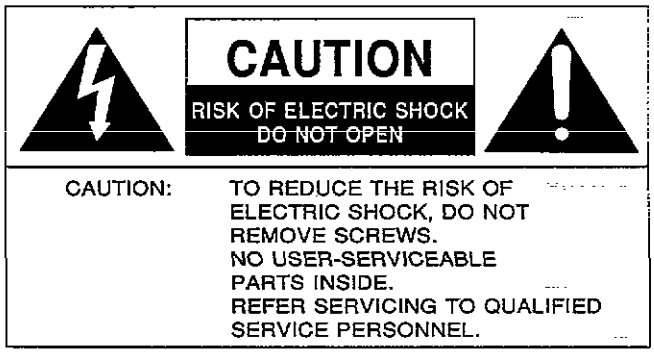
OWNER'S MANUAL

Caution

Voltage (except North America, Mexico, New Zealand and Europe excluding United Kingdom)
Be sure the voltage adjuster located on the rear panel is in accordance with local voltage in your area before using this unit. Use a screwdriver to set the voltage adjuster to the local voltage.

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.



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 PR303 piano, it is strongly recommended that you read through this Owner's Manual once.

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

BASIC FUNCTIONS	This part includes an explanation of basic procedures and points you should be aware of for proper operation of your instrument.
PRACTICAL APPLICATIONS	This part comprises a detailed explanation of sound, effect, rhythm, **SEQUENCER**, **COMPOSER**, Disk Drive and MIDI.
REFERENCE GUIDE (separate booklet)	Reference guide for the contents of the **SOUND SELECT**, **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.

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.

Handling the power cord

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

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, disconnect the power cord plug from the electrical outlet, and contact the store where the unit was purchased.

If water gets into the unit

Disconnect the power cord plug from the electrical outlet, and contact the store where it 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, disconnect the power cord plug from the electrical outlet, 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 source is located inside the unit, it is normal for the cabinet to become warm.

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.

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.

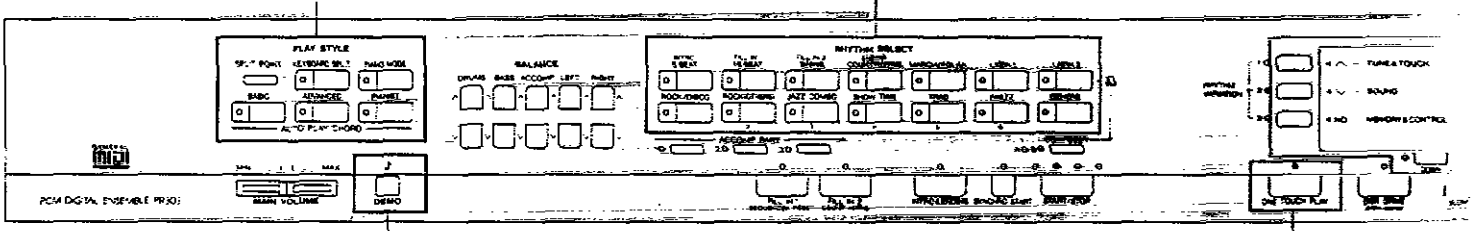
SERVICE MUST BE CARRIED OUT BY DEALER OR OTHER QUALIFIED PERSON

Contents

Controls and functions

PLAY STYLE
Select standard piano or one of various other performance styles. (Refer to page 16.)

RHYTHM SELECT
Choose preset automatic rhythm patterns. (Refer to page 24.)



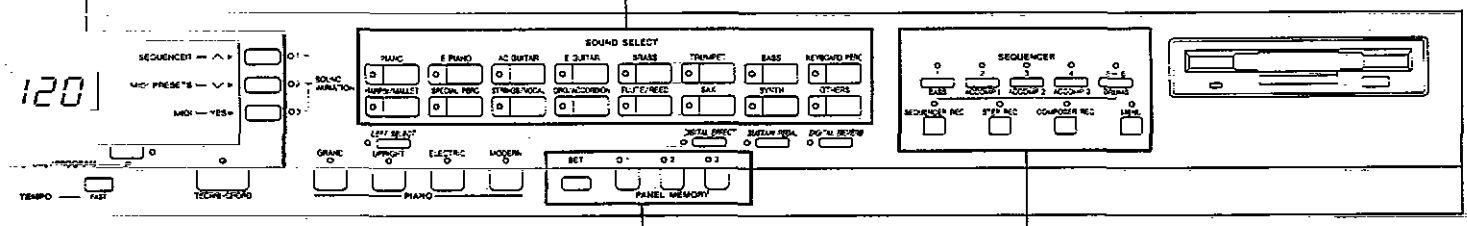
DEMO
You can listen to programmed demonstration tunes which show what your Digital Ensemble can do. (Refer to page 7.)

ONE TOUCH PLAY
Sounds and effects which fit the selected rhythm are automatically selected. (Refer to page 31.)

■ **About the backup memory**
The panel settings and stored memories, such as the **SEQUENCER** and **COMPOSER**, are maintained in a backup memory for about 80 minutes after the power to this instrument is turned off. If you wish to keep the memory contents, before you turn off the instrument, use the SAVE procedure to store the desired data on a disk for recall at a later time.
- The back-up memory does not function unless the power has been on for about 10 minutes.

DISPLAY
The tempo is usually shown. When setting one of the various functions, the relevant message is displayed.

SOUND SELECT
You can select from four piano-type sounds. Or choose the sounds of various instruments. (Refer to page 17.)



PANEL MEMORY
Store the current panel settings for instant recall. (Refer to page 32.)

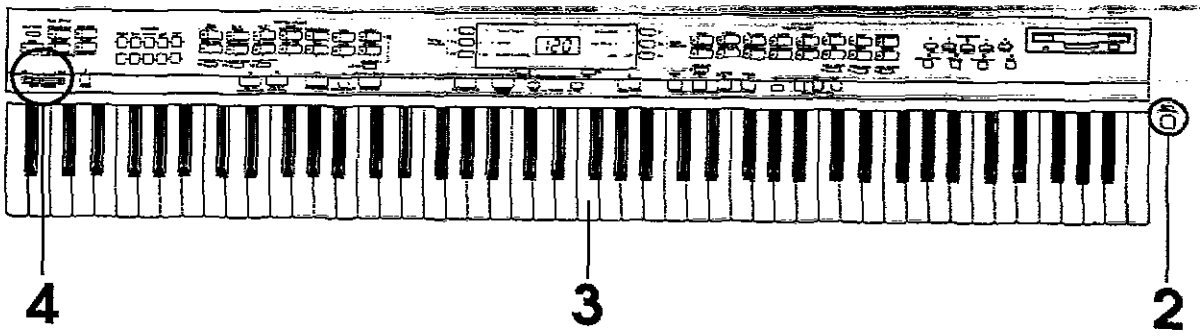
SEQUENCER
Record and play back your performance. (Refer to page 33.)

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

Tuning
Unlike an acoustic piano, your PR Series Digital Ensemble never needs tuning.

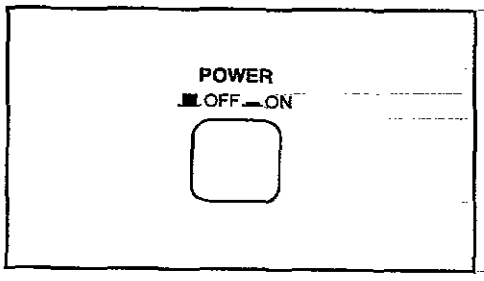
- The pitch of this instrument can be adjusted for when playing along with other instruments. (Refer to page 63.)

Getting started



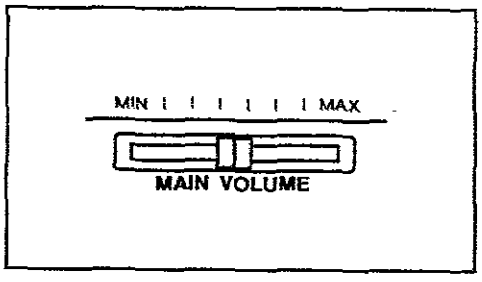
1 Plug the power cord into an outlet.

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

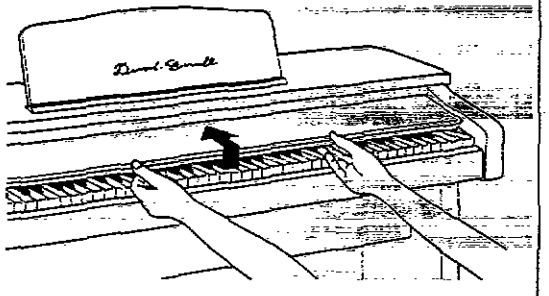


3 Touch any note on the keyboard. You will hear the **GRAND PIANO** sound.

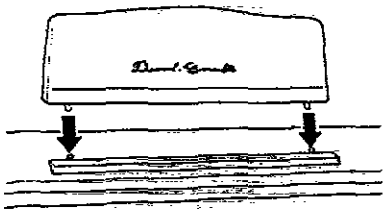
4 Set the **MAIN VOLUME** to an appropriate level with the sliding control.



Keyboard cover
Open and close the cover slowly.



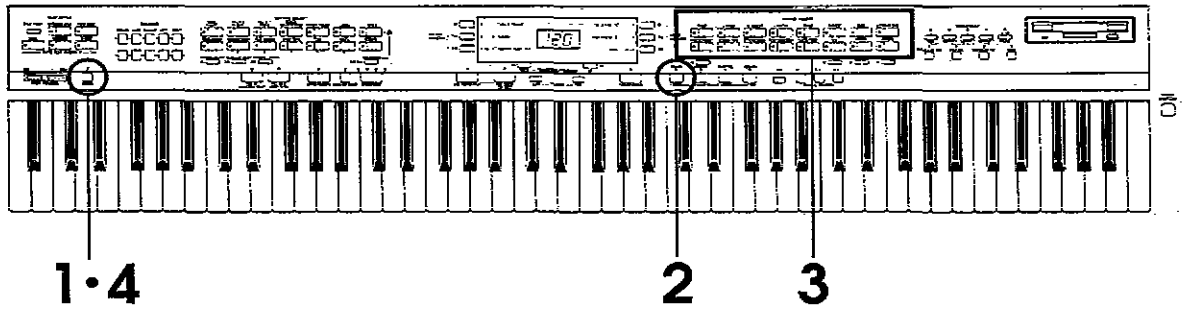
Music Stand
To set up the music stand, gently raise it from its folded down position.
To lower the music stand, first fold in the metal support at the rear of the stand and then lower the stand gently.



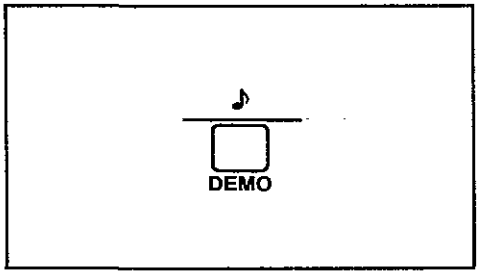
Listen to the demonstration

Listen to the Grand Piano demonstration performance.

Six **GRAND PIANO** demonstration performances are recorded in your piano.

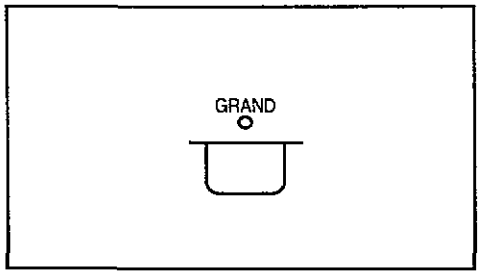


1 Press the **DEMO** button.



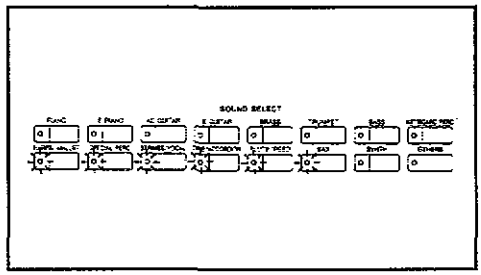
- The display changes to [– – –].

2 Press the **GRAND** button.



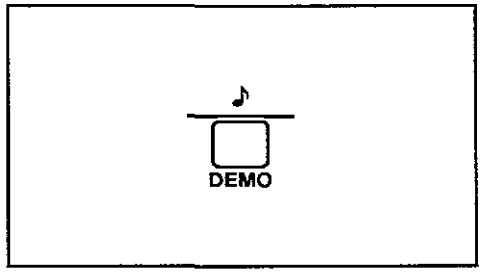
- In the **SOUND SELECT** section, the indicators for the sound buttons which contain **GRAND PIANO** demonstration performances flash.

3 Select one of the buttons with the flashing indicators.



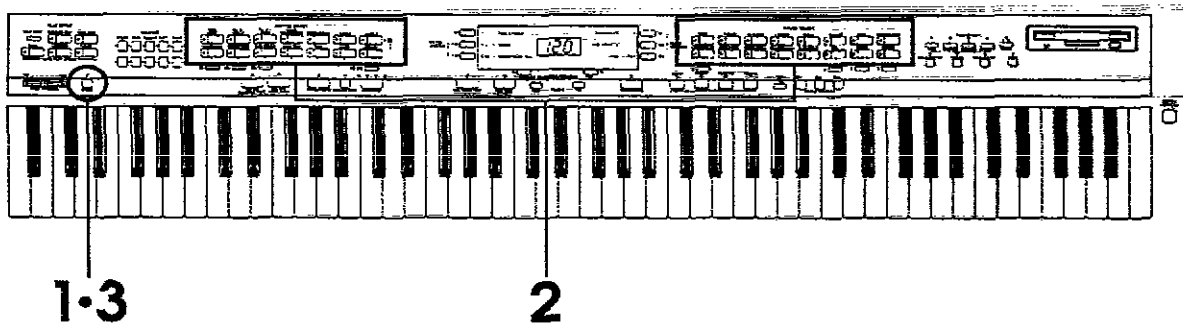
- The demonstration performance corresponding to your selection will begin.
- To end the demonstration before it has finished, again press the button for the selected sound.
- Press any other button with a flashing indicator to hear the demonstration performance.

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

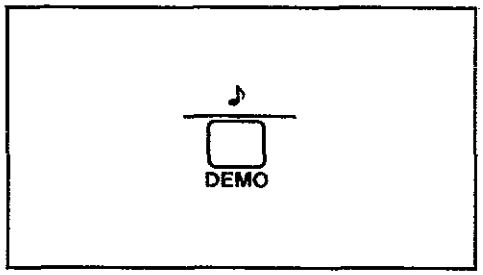


Listen to a particular sound or rhythm demonstration.

In addition to the **GRAND PIANO** demonstration performances, there are 6 songs to introduce the sounds and 6 songs to introduce the rhythms.



1 Press the **DEMO** button.



- The display changes to [– – –].
- Sounds and rhythms for which demonstration performances are available are shown by flashing indicators.

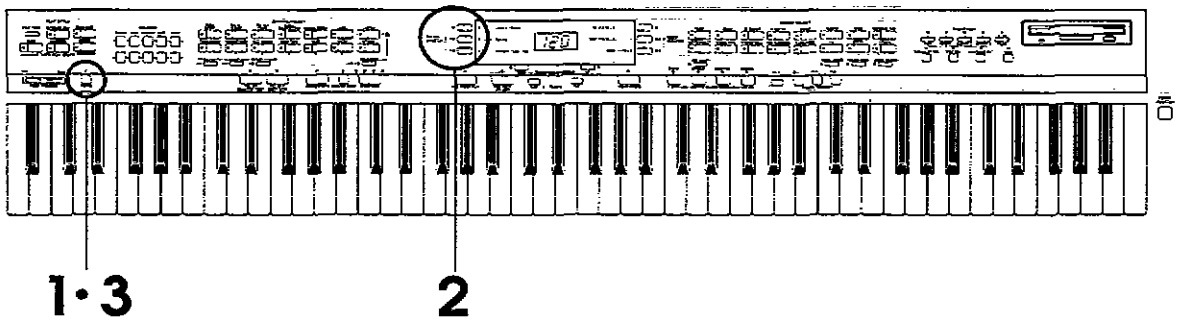
2 Press the button for the sound or rhythm demonstration performance you wish to hear.

- The demonstration performance corresponding to your selection begins.
- To end the demonstration before it has finished, again press the button for the selected sound or rhythm.
- Listen to other sounds and rhythms by pressing the corresponding buttons.

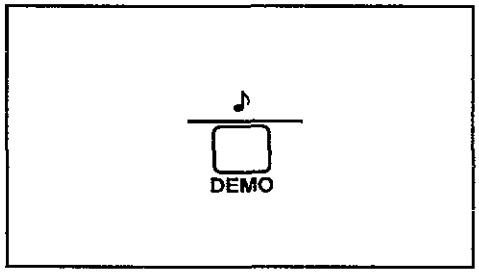
3 When you are finished listening to the demonstration tunes, press the **DEMO** button again.

Listen to the style demonstration performance.

One MAIN MEDLEY to introduce the various music styles in order as well as two performances to demonstrate music styles such as FILM SCORE are stored in this piano.

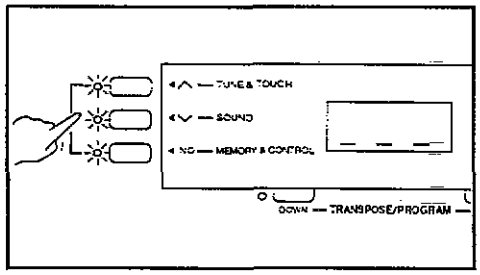


1 Press the **DEMO** button.



- The display changes to [– – –].

2 Use the buttons to the left of the display to select the style demonstration performance you wish to hear.



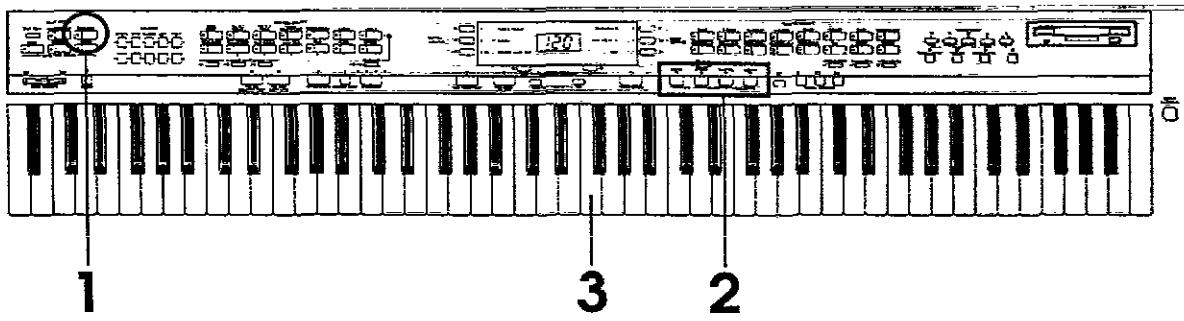
- Press the top button to hear the MAIN MEDLEY style demonstration, the middle button for FILM SCORE, and the bottom button for CONCERT.
- The demonstration performance corresponding to your selection will begin.
- To end the demonstration before it has finished, again press the button for the selected style.
- Repeat this procedure to listen to other styles.

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

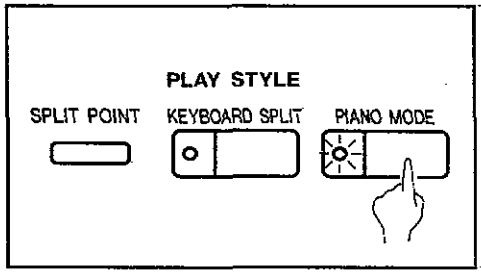
- If you press and hold the **DEMO** button for a few seconds, or if you press first the **DEMO** button and then the **START/STOP** button, the sounds, rhythms and styles are demonstrated in order in a medley performance. The medley performance continues until the **START/STOP** button or the **DEMO** button is pressed again.
- During the medley performance, if you wish to skip from the current song to the next song, press the button with the flashing indicator.
- Some of the buttons do not function while the demonstration performances are being played.

Playing the piano

Your piano is equipped with various fine functions which make it an extremely versatile instrument. But it should be remembered that it is first of all a fine piano. Select one of the piano sounds and enjoy its excellent quality.

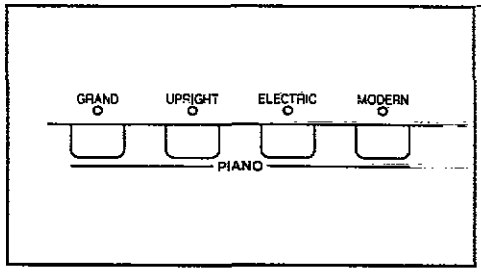


1 In the **PLAY STYLE** section, press the **PIANO MODE** button to turn it on.



- The indicator lights.
- **PIANO MODE** is the default selection when the instrument is first turned on.

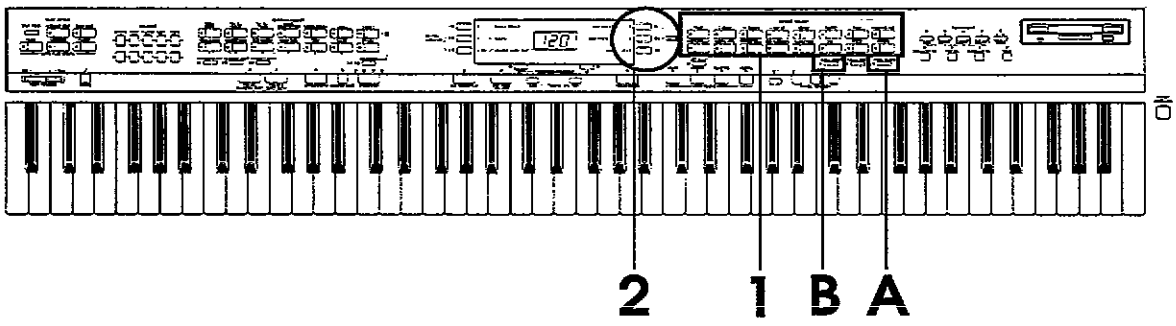
2 Select one of the four **PIANO** sounds by pressing the corresponding button.



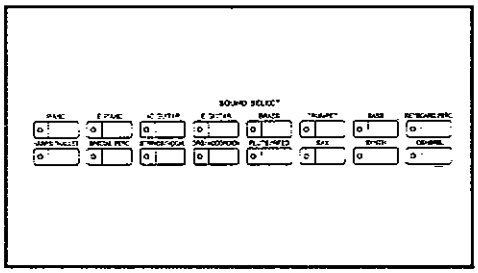
3 Play anywhere on the keyboard.

Selecting other sounds

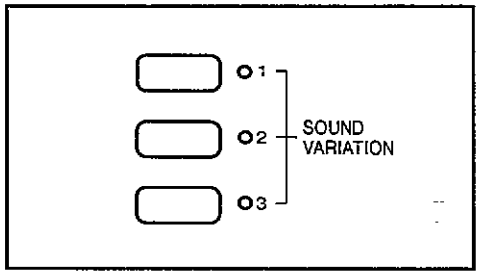
In addition to piano sounds, this instrument is provided with the colorful sounds of various other instruments.



1 In the **SOUND SELECT** section, select a sound.



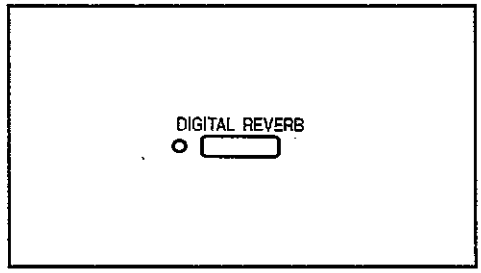
2 Use the **SOUND VARIATION** buttons to select the variation number (**1, 2 or 3**).



- When **OTHERS** is selected, you can select from a wide variety of sounds by number. (Refer to page 18.)

Add reverb to the sound.

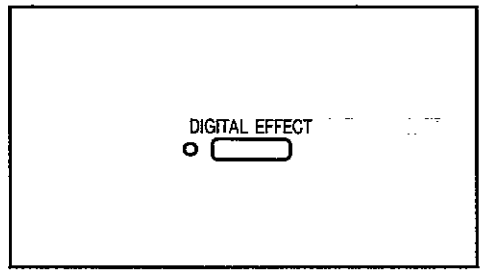
A Press the **DIGITAL REVERB** button to turn it on.



- The indicator lights.

Add a feeling of spaciousness to the sound.

B Press the **DIGITAL EFFECT** button to turn it on.

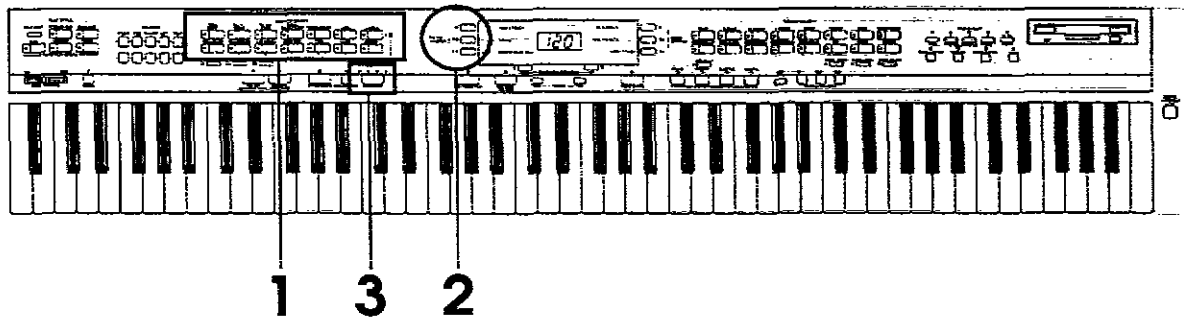


- The indicator lights.

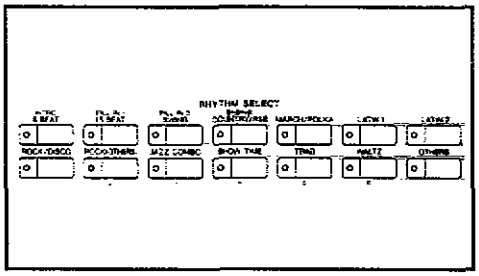
- When one of these sounds is selected, the **PIANO MODE** indicator in the **PLAY STYLE** section automatically turns off.
- Other things you can do are mixing sounds and playing different sounds on the left and right areas of the keyboard. (Refer to pages 20 and 21.)

Playing automatic rhythms

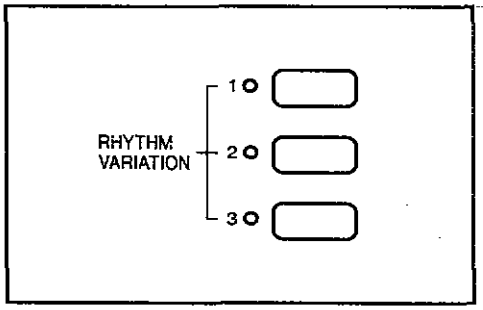
Listen to preset rhythms.



1 In the **RHYTHM SELECT** section, select a rhythm.

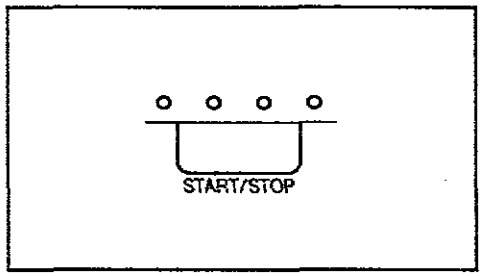


2 Use the **RHYTHM VARIATION** buttons to select the variation number (**1**, **2** or **3**).



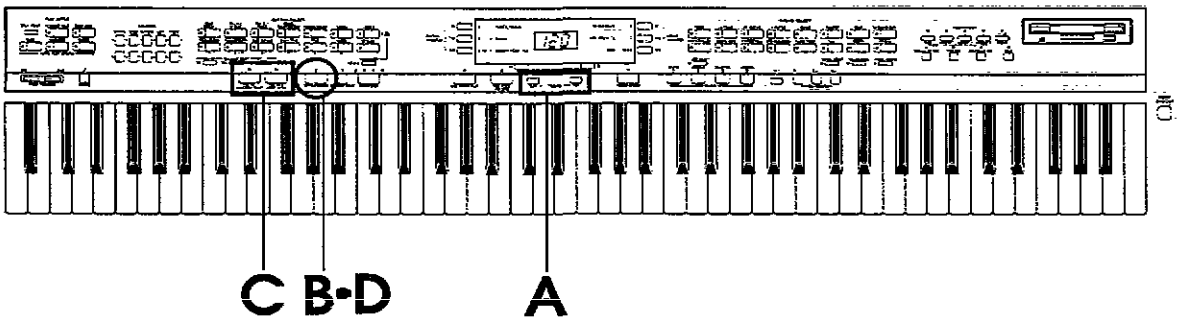
- When **OTHERS** is selected, you can select from a wide variety of rhythms by number. (Refer to page 24.)

3 Start the rhythm by pressing the **START/STOP** button.



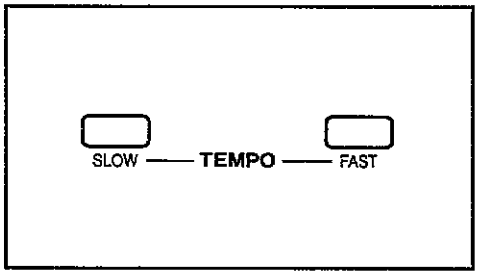
- Stop the rhythm by pressing the **START/STOP** button again.

Control the rhythm.



Adjust the tempo.

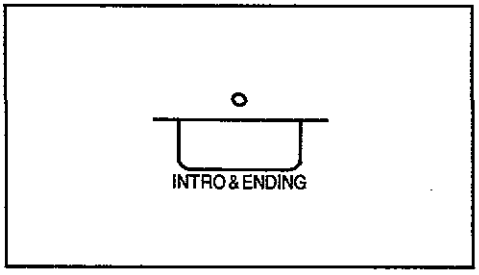
A Adjust the tempo with the **TEMPO** buttons (**SLOW** and **FAST**).



- The tempo is shown in the display as a numerical value.

Insert an intro pattern.

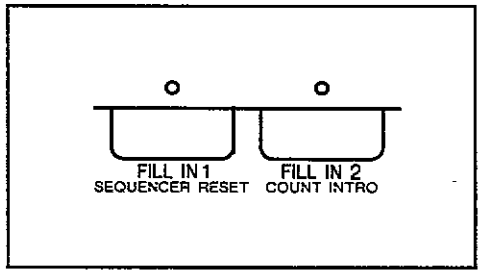
B To start your performance with an introduction, press the **INTRO & ENDING** button before starting the rhythm.



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

Insert a fill-in pattern.

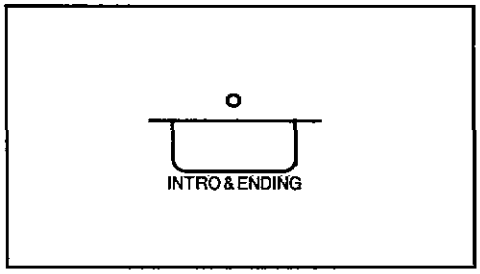
C While the preset rhythm pattern is playing, press either the **FILL IN 1** or **FILL IN 2** button.



- A fill-in pattern immediately starts to play.

Insert an ending pattern.

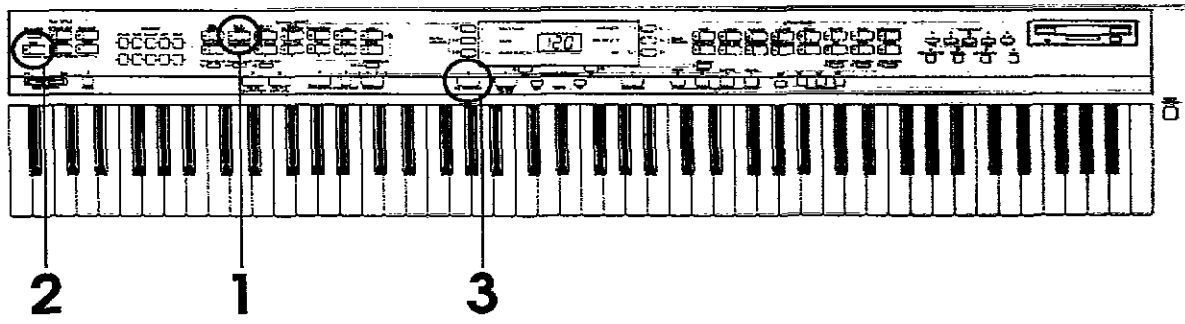
D While the rhythm is playing, press the **INTRO & ENDING** button.



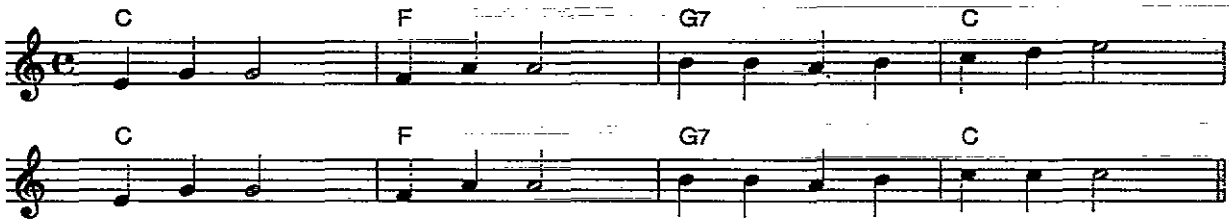
- You will hear an ending pattern, and then the rhythm stops.

Automatic accompaniment

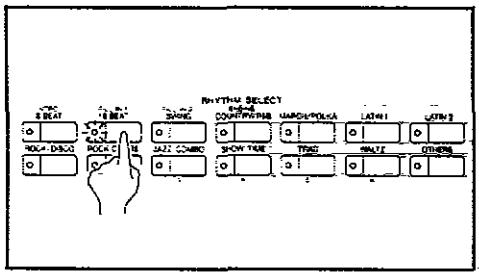
Just by specifying a chord on the keyboard, an accompaniment pattern which matches the selected rhythm is automatically played.



Use the **AUTO PLAY CHORD** with the following tune.

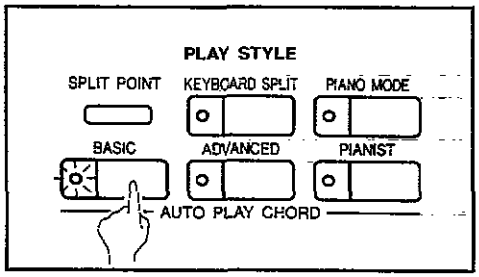


1 In the **RHYTHM SELECT** section, press the **16 BEAT** button.



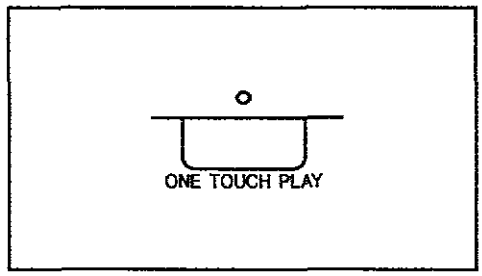
- Select **RHYTHM VARIATION 1.**

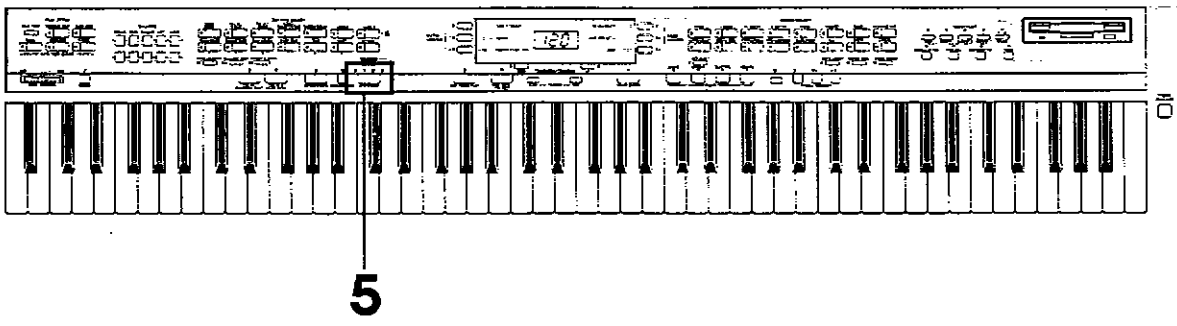
2 In the **PLAY STYLE** section, press the **BASIC** button to turn it on.



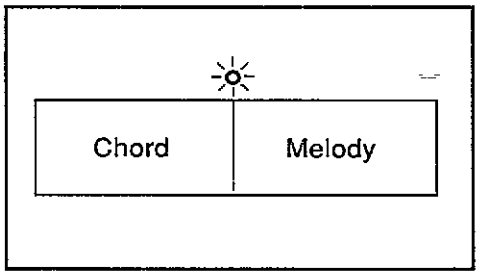
- The keyboard automatically divides into left and right playing areas.

3 Press and hold the **ONE TOUCH PLAY** button until the indicator goes out.



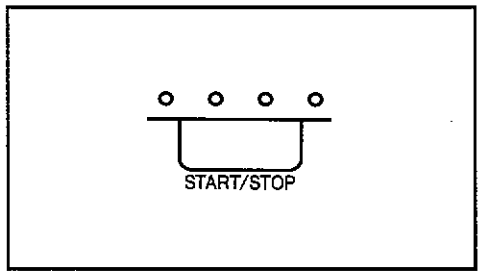


4 Use your left hand to play the chords and your right hand to play the melody.

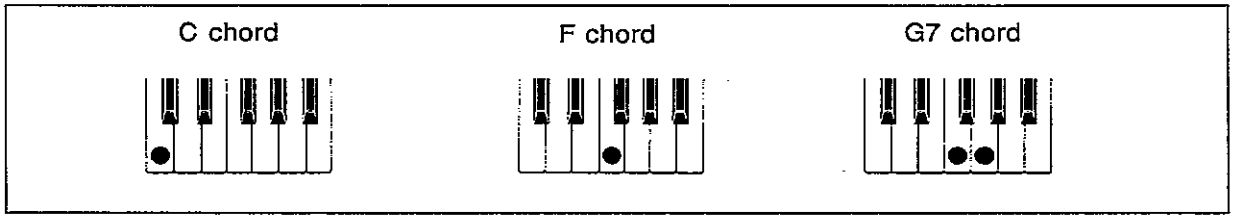


- Pressing a key on the left area of the keyboard will cause the automatic rhythm pattern to start playing (synchro start).
- When the C key is pressed on the left area of the keyboard, an accompaniment begins to play in the C major key.
- Playing the chord key (root note) and the white key to its left will produce a 7th chord.

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



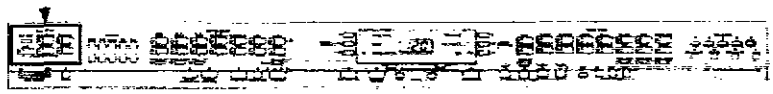
- The automatic accompaniment stops.



- In this example you played chords by pressing the keys for the "root notes" (one-finger chords). But you can also specify the chord by playing all the notes in the chord. (Refer to page 29.)

Part I Sounds and effects

Play Style



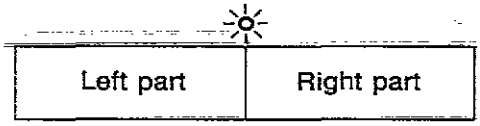
In addition to a standard piano performance, this instrument can be used to play various different performance styles. The type of keyboard is centrally controlled by the **PLAY STYLE** section.

Normal Play

■ **PIANO MODE**
When this button is on, this instrument can be played as a standard piano.

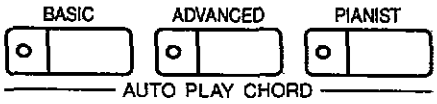
- If sounds other than piano-type sounds have been chosen, the **PLAY STYLE** indicators all go out.

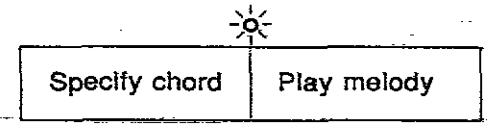
■ **KEYBOARD SPLIT**
The keyboard divides into two playing areas, each with a different sound. (Refer to page 21.)



AUTO PLAY CHORD

These buttons are used when you perform with the automatic accompaniment. (Refer to page 28.)





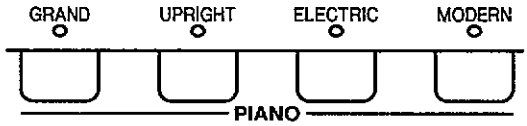
Selecting sounds

Enjoy trying the sounds of many different instruments.

PIANO MODE

When playing this instrument as a standard piano, press the **PIANO MODE** button to turn it on.

You can then select one of the piano-type sounds: **GRAND**, **UPRIGHT**, **ELECTRIC**, **MODERN**. Press the button for the desired sound.

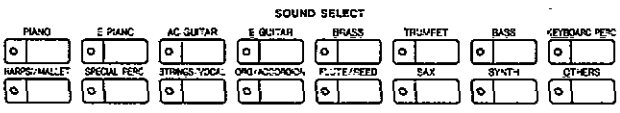


- When the piano is first turned on (initialized mode), the **PIANO MODE** is on and the default sound is **GRAND PIANO.**
- When this button is pressed, the entire keyboard will return instantaneously to the **PIANO MODE**, regardless of the mode which is currently selected, the **KEYBOARD SPLIT** status (refer to page 21) or the **AUTO PLAY CHORD** status (refer to page 28). The sound will be set to the piano-type sound which was selected last.
- Selecting a sound other than one of the four **PIANO** sounds will cause the **PIANO MODE** to turn off automatically.

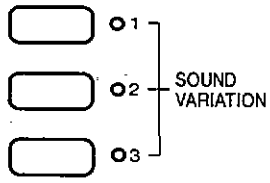
SOUND SELECT

In addition to piano sounds, you can select the sounds of various instruments.

1. In the **SOUND SELECT** section, select a sound.



2. Use the **SOUND VARIATION** buttons to select the variation number (**1**, **2** or **3**).

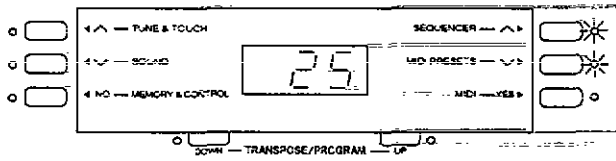


- For further information about the variations, refer to the separate "REFERENCE GUIDE" provided.
- The selected variation is memorized independently for each sound, so that whenever a **SOUND SELECT** button (except for **OTHERS**) is pressed, the variation you chose is automatically available.

■ OTHERS sounds

When **OTHERS** is selected, you can select from a wide variety of sounds by number.

1. In the **SOUND SELECT** section, press the **OTHERS** button to turn it on.
2. Use the ∧ and ∨ buttons to the right of the display to select the number of the sound you want.



- A list of sounds and their corresponding numbers can be found in the separate "REFERENCE GUIDE" provided.
- A few seconds after you have made the selection, the display returns to the tempo display.

■ Percussion sounds

You can create a percussion performance on your keyboard.

1. In the **SOUND SELECT** section, press the **KEYBOARD PERC** button.
2. Use the ∧ and ∨ buttons to the right of the display to select the type of percussion sounds.

1: Rock Kit 1	**4**: Soul Kit
2: Rock Kit 2	**5**: Jazz Kit
3: Light Rock Kit	**6**: Brush Kit

3. Play the keyboard.

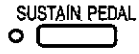
- Percussion instrument sounds are produced by the keyboard keys as indicated by the picture code above each key.
- For details about the arrangement of the percussion sounds, refer to the separate "REFERENCE GUIDE" provided.

Pedals

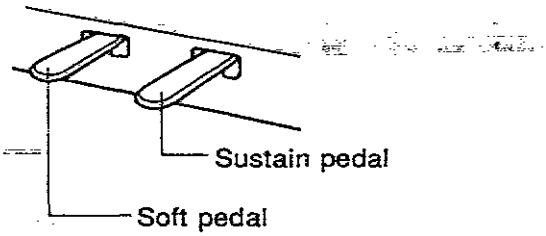
■ Sustain pedal

When a key is released while this pedal is depressed, the sound is sustained so that it lingers and slowly fades out.

- For the **GRAND PIANO** and **UPRIGHT PIANO** sounds, you will always hear a small amount of sustain on the top 17 keys, just like an acoustic piano.
- If the **SUSTAIN PEDAL** button is off, the sustain effect does not work.



- The sustain on/off status can be set for the right and left parts independently when the keyboard is split. (Refer to page 21.)



■ Soft pedal

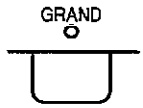
When this pedal is depressed, the sound is softer and the volume is slightly lower.

- You can assign a different function to the soft pedal. (Refer to page 68.)

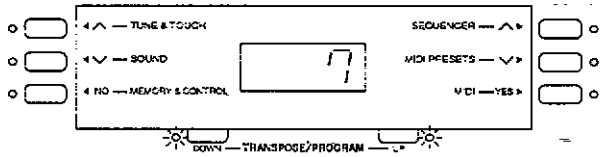
String resonance

String resonance is the sound heard in an acoustic piano when the struck strings produce a sympathetic resonance of the other unstruck strings. For the **GRAND PIANO** and **UPRIGHT PIANO** sounds, string resonance is produced as long as the sustain pedal is depressed. The amount of string resonance can be adjusted.

1. Press and hold the **GRAND** button for about 3 seconds.



- The indicator flashes slowly, and the display looks similar to the following.



2. Use the **TRANSPOSE/PROGRAM** buttons to adjust the amount of resonance (0 to 7).
- The higher the number, the greater the amount of resonance.
- When set to 0, there is no string resonance.

3. When you have finished adjusting the string resonance, press the **GRAND** button again.

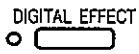
Effects

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

DIGITAL EFFECT

DIGITAL EFFECT gives the sound richness and enhances your performance.

Press the **DIGITAL EFFECT** button to turn it on for the selected sound.

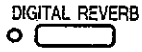


- The on or off status of the **DIGITAL EFFECT** is preset for each sound, so that **DIGITAL EFFECT** turns on when certain sounds are selected.
- This effect differs depending on the selected sound.

DIGITAL REVERB

DIGITAL REVERB applies a reverberation effect to the sound.

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



- This effect works for all generated sounds, including the rhythm patterns.
- The display can be used to select the type of **DIGITAL REVERB** and to make related fine adjustments. (Refer to page 66.)

Mixing two sounds

You can play two completely different sounds at the same time.

Mixing sounds

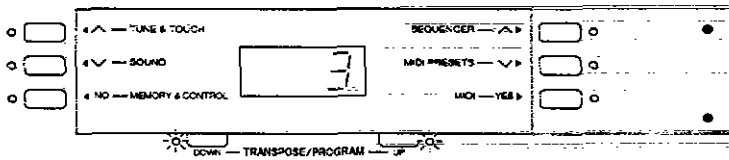
To mix two sounds, simultaneously press the two buttons (from the four **PIANO** sounds and from the **SOUND SELECT** section) for the desired sounds.

- The sounds selected for the **SOUND SELECT** button should be set beforehand.
- Two sounds from the same **SOUND SELECT** button cannot be mixed.

Volume balance

By adjusting the volume of one of the two mixed sounds, you can regulate the volume balance.

1. Press and hold the button for the first sound. While holding down the button for the first sound, press and hold the button for the second sound. The second sound you select is the one whose volume level can be adjusted.
- The indicator for the second sound you selected flashes, and the display looks similar to the following.



2. Use the **TRANSPOSE/PROGRAM** buttons (**UP** and **DOWN**) to adjust the volume.
- There are 10 different levels of volume for the selected sound (0 to 9). The selected level is shown on the display.
- You can confirm the volume by playing the keyboard.

3. When you have finished setting the volumes, press any sound button.
- The volume level which is set in this manner is recalled only when the sound is selected as the second of two mixed sounds.
- When the **DIGITAL EFFECT** button is turned on, an effect suitable for the mixed sound is applied.
- To return the volumes to the factory-preset levels, follow the initialization procedure. (Refer to page 82.)

Keyboard Split

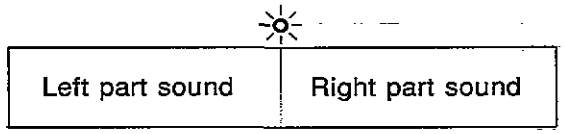
The keyboard can be divided into left and right playing sections, and a different sound played in each section.

1. Select a sound for the right part of the keyboard, and set the effects to on or off.
- You can also mix two sounds.

2. In the **PLAY STYLE** section, press the **KEYBOARD SPLIT** button to turn it on.

3. In the **SOUND SELECT** section, press the **LEFT SELECT** button to turn it on. Now select a sound to be assigned to the left part of the keyboard, and set the effects to on or off.

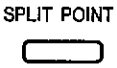
- A few seconds after making the selection, the **LEFT SELECT** button turns off.
- The indicator for the selected sound lights momentarily, and then the indicator for the right-hand part lights.
- You can now play a different sound for each of the left and right keyboard sections.



- If you press the button for the **SOUND VARIATION** which is currently active for the left part sound, the left part turns off.

SPLIT POINT

Press this button to change the location of the keyboard split point.



- Each time the button is pressed, the split location changes in this sequence: from G2 up → *C3* → *C4*.

■ Custom split point

You can specify a split point at a location other than G2, C3 or C4.

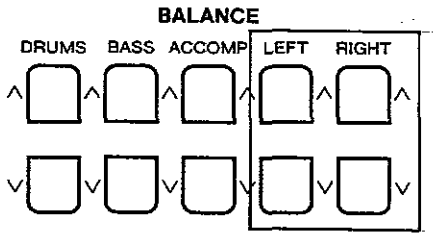
1. Press and hold the **SPLIT POINT** button for a few seconds.
- The display changes to the setting display.

2. Press a key on the keyboard to specify the desired split point.
- The note name of the specified key is shown on the display. A sharp is indicated by [♯] and a flat by [♭].
- The key at the split point is the lowest note of the right keyboard section.
- After a few seconds, the display returns to the previous display.

- You can select your custom split point by pressing the **SPLIT POINT** button until none of the split point indicators is lit.
- *The custom split point is erased when the split* keyboard status is discontinued, or when the power to this instrument is turned off.

BALANCE

The volumes for the left and right parts of the split keyboard are adjusted with the **LEFT** and **RIGHT** buttons in the **BALANCE** section.



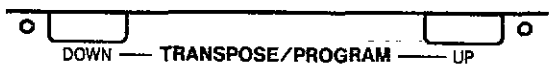
- While the volume is being adjusted, the volume for the corresponding part is indicated on the display (0 to 127).

Transpose

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

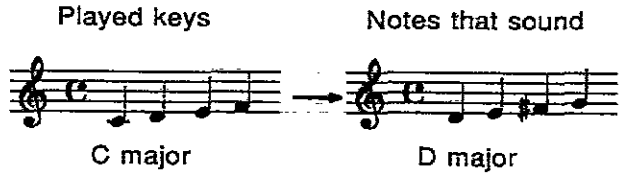
Suppose you learn to play a song—in the key of C, for example—and decide you want to sing it, only to find that it's either too high or too low for your voice. Your choice is to either learn the song all over again in a different key, or to use the **TRANSPOSE** feature.

Adjust the key with the **TRANSPOSE/PROGRAM** buttons (**UP** and **DOWN**).



- Each press of the **UP** button changes the key as follows (square brackets [ ] indicate how the key is shown on the display): D♭ [d♭] → D [d] → E♭ [E♭] → E [E] → F [F] → F♯ [F♯]. Each press of the **DOWN** button changes the key as follows: B [b] → B♭ [b♭] → A [A] → A♭ [A♭] → G [G].
- If the two buttons are pressed at the same time, the key returns to C.
- When the **TRANSPOSE** function is active, the indicator for the **UP** or **DOWN** button remains lit.

<Example: transposed to D>

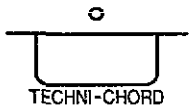


Techni-Chord

TECHNI-CHORD transfers the chord notes you play on the left section of the keyboard to each melody note you play on the right section of the keyboard.

1. Split the keyboard into left and right sections.
   (Refer to page 21.)

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

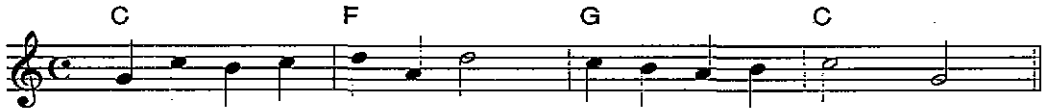


3. Play the keyboard.

- The melody you play with your right hand is automatically played in chords which are based on the chords you play with your left hand.

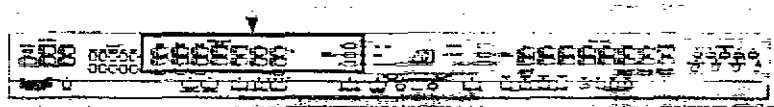
- The **TECHNI-CHORD** is very effective when used with the **BASIC** mode or **ADVANCED** mode of the **AUTO PLAY CHORD**. However, this feature is not available for the **PIANIST** mode.
- The display can be used to select the desired harmony style. (Refer to page 65.)

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



Part II Playing the rhythm

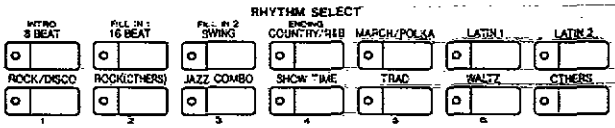
Selecting rhythms



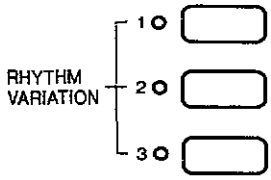
Select various rhythms and hear how they sound.

Select a rhythm.

1. In the **RHYTHM SELECT** section, select a rhythm.



2. Use the **RHYTHM VARIATION** buttons to select the variation number (**1**, **2** or **3**).



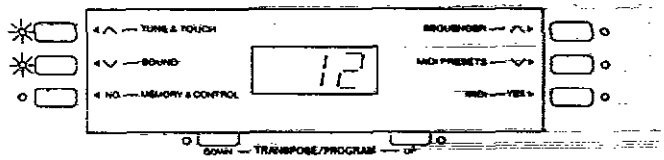
- For further information about the variations, refer to the separate "REFERENCE GUIDE" provided.
- The selected variation is memorized independently for each rhythm, so that whenever a **RHYTHM SELECT** button (except for **OTHERS**) is pressed, the variation you chose is automatically available.

■ OTHERS rhythms

When **OTHERS** is selected, you can select from a wide variety of rhythms by number.

1. In the **RHYTHM SELECT** section, press the **OTHERS** button to turn it on.

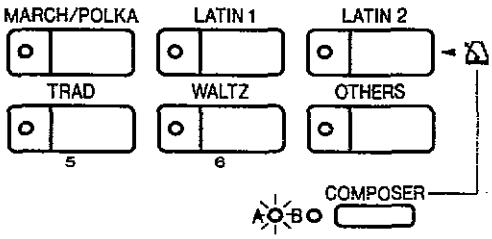
2. Use the ∧ and ∨ buttons to the left of the display to select the number of the rhythm you want.



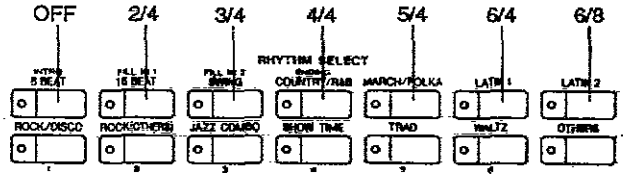
- A list of rhythms and their corresponding numbers can be found in the separate "REFERENCE GUIDE" provided.
- A few seconds after you have made the selection, the display returns to the tempo display.

Metronome

1. Press the **COMPOSER** button to turn it on (**A** or **B**).



2. In the upper row of the **RHYTHM SELECT** section, press the button for the desired metronome.
- The time signatures correspond to the buttons as shown below.



- To turn off the accented beat of the metronome, select "OFF."
- The indicator of the selected metronome lights.
- Press the **START/STOP** button to start the metronome.

Start the rhythm

1. Select a rhythm.

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

- The selected rhythm pattern begins to play.
- If the **START/STOP** button is pressed again, the rhythm will stop.
- The beat indicators above the **START/STOP** button light to indicate the beat. On the first beat of the measure, the red indicator lights. On the second and succeeding beats of the measure, the green indicators light in order.

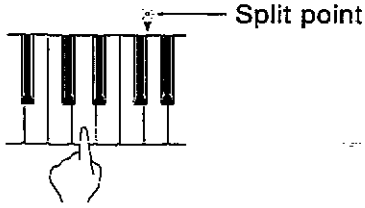
SYNCHRO START

When the **SYNCHRO START** button is on, the *rhythm is started by pressing a key on the keyboard.*

1. Select a rhythm.

2. Press the **SYNCHRO START** button to turn it on.

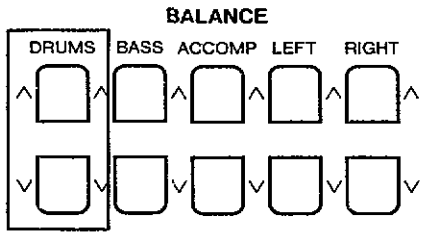
3. Press a key to the left of the keyboard split point.



- The selected rhythm starts to play.
- Even when the keyboard is not divided into left and right sections, the indicator at the split position will light when the **SPLIT POINT** button is pressed. If desired, you can change the split point by pressing the **SPLIT POINT** button at this time. To start the rhythm, press a key to the left of the indicated split point. (Refer to page 21.)

BALANCE

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



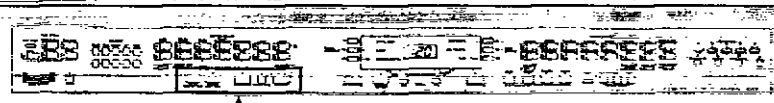
- While the volume is being adjusted, the volume for the corresponding part is indicated on the display (0 to 127).

Adjust the tempo

The tempo of the rhythm pattern is adjusted with the **TEMPO** buttons (**SLOW** and **FAST**).

- The tempo is shown on the display as a numerical value (40 to 300).
- Keep the button pressed to change the tempo indication more rapidly.
- If the two buttons are pressed at the same time, the tempo returns to 120.

Playing the rhythm



Intro, fill-in and ending patterns fitting each different rhythm pattern are permanently recorded in your piano, 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.

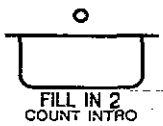
2. Press the **START/STOP** button to start the rhythm.

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

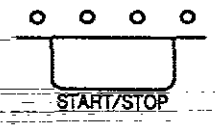
COUNT INTRO

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.



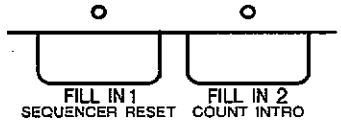
- A one-measure count is played, after which the normal rhythm pattern begins.

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.

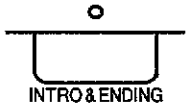


- A fill-in pattern is heard immediately for the remainder of the measure.
- When a **FILL IN** button is pressed on the last beat of the measure, the fill-in pattern continues to the end of the following measure.

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.

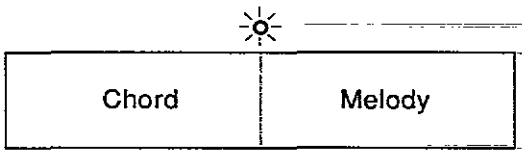


- An ending pattern is produced, and then the rhythm performance stops.
- If you accidentally press the **INTRO & ENDING** button in the middle of the tune, you can press the **FILL IN 1** or **FILL IN 2** button. The ending pattern stops, and a fill-in pattern is produced, after which the normal rhythm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

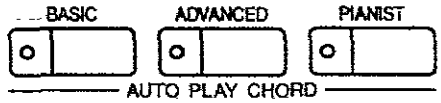
Auto Play Chord

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



You can choose from one of the following three **AUTO PLAY CHORD** modes.



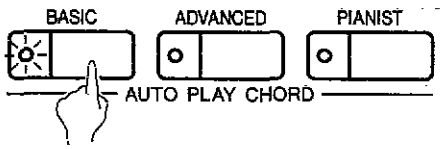
When an **AUTO PLAY CHORD** mode is selected, an automatic accompaniment which matches the rhythm you have chosen is played in the chord which you specify with your left hand. The melody is played with your right hand.

- The accompaniment pattern of the **AUTO PLAY CHORD** is composed of five parts: **DRUMS, BASS, ACCOMP 1, ACCOMP 2** and **ACCOMP 3.**
- When you use **FILL IN, INTRO** and **ENDING,** the automatic accompaniment is also used in these patterns.
- When the rhythm is off, if the **BASIC** mode of the **AUTO PLAY CHORD** is on and a chord is specified, the specified root note and chord notes are produced.

BASIC

In the **BASIC** mode, the chord can be specified either by playing just its root note or by playing the chord itself.

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



- The keyboard automatically divides into left and right sections.

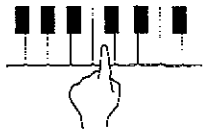
2. Start the rhythm playing.

3. Play the chord on the left keyboard.
- You can either press one key on the left keyboard to specify the root note (one-finger mode), or play all the notes of the chord (fingered mode).
- The sound selected for the left section of the keyboard cannot be heard. If you select a sound for the left keyboard while in this mode, the left-part sound can then be heard, but the one-finger chord function will not work.
- Touch Response does not work for the left keyboard.
- With the rhythm on, even when the keys are released, the accompaniment continues to play the specified chord until another chord is specified.

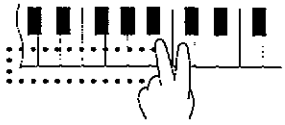
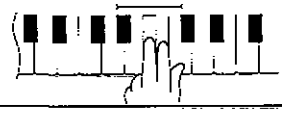
■ One-finger

Press a key on the left keyboard to specify the root note. The major chord corresponding to this root note is automatically played in an accompaniment pattern.

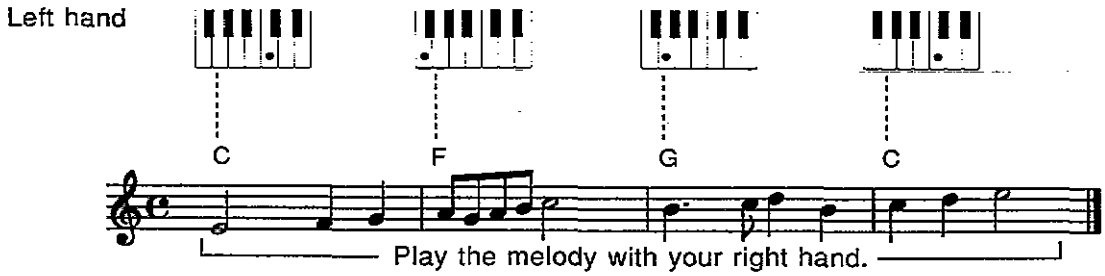
Example: C chord



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

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

- Example of one-finger accompaniment performance



■ Fingered

When you play a chord on the left keyboard, the chord is automatically played in an accompaniment pattern.

In the fingered mode, the **AUTO PLAY CHORD** recognizes more chord types, and thus the scope of your performance expression is expanded.

- The piano can distinguish the following played 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.
- If a chord other than these is played, the chord in this group which is most closely related is used.

ADVANCED

In the **ADVANCED** mode, the chord is specified by playing it (fingered mode) on the left part of the keyboard.

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

- The keyboard automatically divides into left and right sections.

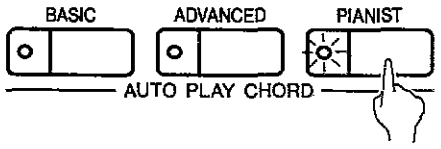
2. Start the rhythm playing.

3. Play the chord on the left keyboard.
- The sound selected for the left section of the keyboard is heard.
- You can turn off the left part. (Refer to page 21.)
- The chord is automatically played in an accompaniment pattern.
- Play chords by pressing at least three keys.
- With the rhythm on, even when the keys are released, the accompaniment continues to play in the specified chord until another chord is specified.
- You can specify the type of chord recognition. (Refer to page 67.)

PIANIST

In the **PIANIST** mode, the entire keyboard can be used to specify chords (fingered mode) for the automatic accompaniment. This mode is used to add an automatic accompaniment to the performance on a standard piano.

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



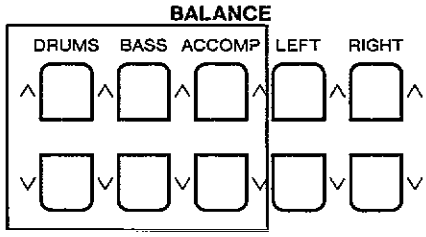
- The keyboard does not divide.

2. Start the rhythm playing.

3. Play the chord.
- Chords can be specified anywhere on the keyboard. An accompaniment pattern in the specified chord is automatically produced.
- Play chords by pressing at least three keys.
- When specifying chords, if you press a key a perfect 5th or more below the lowest note of the chord, the bass part becomes a pattern based on that note.
- In this mode, the piano can also distinguish chords such as 9th and 13th chords.
- With the rhythm on, even when the keys are released, the accompaniment continues to play the specified chord until another chord is specified.

BALANCE

The volume of each part comprising the **AUTO PLAY CHORD** is adjusted with the buttons in the **BALANCE** section.



- While the volume is being adjusted, the volume for the corresponding part is indicated on the display (0 to 127).
- The **ACCOMP** buttons adjust the total volume of all the accompaniment parts (**ACCOMP PART 1**, **2** and **3**).

Modifying the ACCOMP

The **ACCOMP** part of the **AUTO PLAY CHORD** is comprised of three separate accompaniment parts.

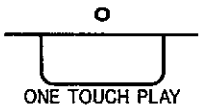
By turning the **ACCOMP PART 1**, **2** and **3** buttons on and off, you can modify the way the **ACCOMP** component of the **AUTO PLAY CHORD** sounds.

- If all three **ACCOMP PART** buttons are turned off, the **ACCOMP** part does not sound.
- The volume of each part of the accompaniment (**ACCOMP PART 1**, **2** and **3**) can be adjusted. (Refer to page 66.)

One Touch Play

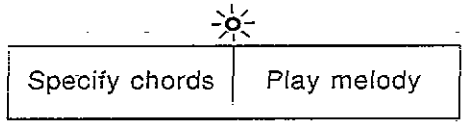
With the **ONE TOUCH PLAY** feature, the sounds and effects, etc. matching the selected rhythm are easily set in seconds and you are ready to play immediately.

1. Select a rhythm pattern.
2. Press and hold the **ONE TOUCH PLAY** button until the indicator light goes out.



- The panel settings are those which are suitable for the rhythm you selected.
- The keyboard automatically splits into left and right parts.

3. Play the keyboard.

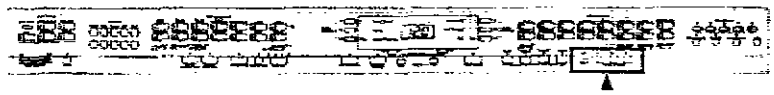


- The automatic rhythm begins to play immediately when a key on the left keyboard is pressed (**SYNCHRO START**). Play the melody with your right hand.

Suggestions for using ONE TOUCH PLAY

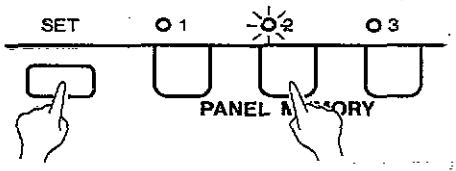
Press the **INTRO & ENDING** button before you play for a professional-sounding introduction. Use the **ONE TOUCH PLAY** registration as a starting point for your own registration. Alter the sounds, balance and tempo to your own taste and store your new registration in the **PANEL MEMORY** for future use. (Refer to page 32.)

Panel Memory



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

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

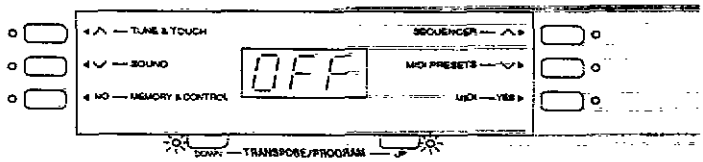


- The panel settings are stored in the selected number button. You can recall these panel settings any time during your performance just by pressing the same number button.

PANEL MEMORY mode

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

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



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

NORMAL [OFF]
Stores sound and volume balance settings only.

EXPAND [On]
Stores the total setting including rhythm, **TRANSPOSE** and tempo.

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

Suggestions for using PANEL MEMORY

The initial factory setting of the **PANEL MEMORY** contains professional settings which you may choose to use or to alter to your own taste. These can be restored at any time by initializing the **PANEL MEMORY**. (Refer to page 82.) Selecting the EXPAND mode will allow you to make full use of the initial factory settings of the **PANEL MEMORY**.

- You can change from one **PANEL MEMORY** to another by using a pedal. (Refer to page 68.)

Part III Sequencer

Outline of the Sequencer

A sequencer records your performance in a similar way to a tape recorder. Your piano's **SEQUENCER** allows you to record in a variety of ways. You may want to record your entire performance in one go (especially if you are using **AUTO PLAY CHORD** to provide the accompaniment), or to build up a complex arrangement with several different parts playing together, like an orchestral score. Your piano's **SEQUENCER** has 16 tracks. This means that you can record 16 different parts. However, you don't have to use all 16 tracks. For some uses you may only need to use one or two tracks. The **SEQUENCER** enables you to edit your recorded performance.

SEQUENCER features

Unlike a tape recorder, which records sounds, the **SEQUENCER** records your performance as bits of digital data. This means that the special characteristics described below give you great versatility to modify your recorded performance.

■ **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

The following three types of recording methods can be used as you like.

■ **EASY RECORD** (page 34)
EASY RECORD is a feature that allows you to bypass the more complex recording procedures so you can record and play back your performance quickly and easily.
- You can also record an accompaniment from the **AUTO PLAY CHORD**.

■ **REALTIME RECORD** (page 36)
Use the REALTIME RECORD function to record your performance in up to 16 tracks and create your own orchestra or band.

■ **STEP RECORD** (page 38)
The STEP RECORD can be used to store the notes of the chord progression or rhythm progression one by one.

Memory capacity
Expressed in terms of notes, the total number of notes which can be stored in all the tracks is about 19,000.
- When the remaining memory available for recording is less than 20%, it is shown on the display as a percentage.
- When [FUL] appears on the display, no more data can be stored in the **SEQUENCER**.

Easy Record

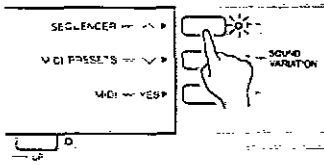
Suppose you are playing the piano and you wish to record and play back your performance to hear how it sounds. You can bypass the set-up procedures of the full-scale sequencer and begin recording quickly and easily.

Recording procedure

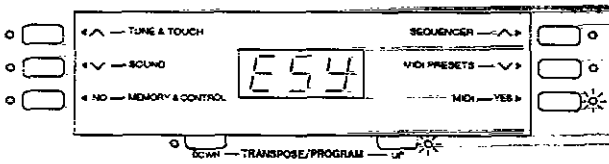
1. Set the desired sounds, effects, rhythms, etc.

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

3. Press the **SEQUENCER** button to turn it on.



4. Use the **TRANSPOSE/PROGRAM** buttons to select the EASY RECORD [ESy] display.



5. Press the **YES** button.
- The [yES] confirmation display appears. Press the **YES** button to execute the function, or press the **NO** button to cancel the function.

Here is what happens when you select the EASY RECORD mode.
- The contents of all **SEQUENCER** tracks are erased (SONG CLEAR).
- Tracks available for recording are selected as follows.
  1: RIGHT part
  2: LEFT part
  3: CONTROL part

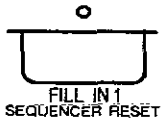
6. Play the keyboard.
- Recording begins as soon as you start the rhythm or play the keyboard.

7. When you have finished recording, press the **SEQUENCER REC** button to turn it off.

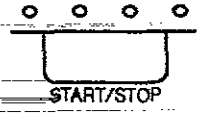
You can also access the EASY RECORD display by pressing the **SEQUENCER REC** button for a few seconds.

Playback

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



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



- Your recorded performance is played back automatically.

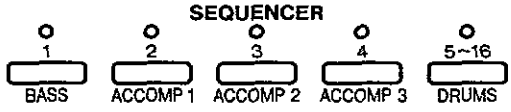
Sequencer parts

The **SEQUENCER** has 16 recording tracks. The track assignment and recorded contents are as outlined in the following table.

Part name [name on display]	Used for	Recorded contents
RIGHT [RT] **PART2** [P 2] **LEFT** [LFT] **PART4** [P 4] ⋮ **PART15** [P15]	Recording the performance of each part (REALTIME)	• Keyboard note data • Sound and volume settings • **DIGITAL EFFECT, DIGITAL REVERB, SUSTAIN PEDAL** on/off • **FILL IN 1, 2, INTRO & ENDING** on • **START/STOP** on/off
DRUM [DRM]	Recording the drums performance with the **KEYBOARD PERC** group sounds (REALTIME)	• Keyboard note data • Sound (drum KIT) and volume settings • **FILL IN 1, 2, INTRO & ENDING** on • **START/STOP** on/off • **DIGITAL REVERB** on/off
CONTROL [CTL]	Recording changes in the panel button status (REALTIME)	• Sound and rhythm changes, volume settings • **DIGITAL EFFECT, SUSTAIN PEDAL** on/off • **DIGITAL REVERB** on/off • **AUTO PLAY CHORD** status • **FILL IN 1, 2, INTRO & ENDING** on • **SPLIT** status • **PANEL MEMORY** selection changes • **TRANSPOSE** status • **TEMPO** setting, **START/STOP** on/off • Pedal operation etc.
CHORD [CHD]	Recording chord progression for the **AUTO PLAY CHORD** (STEP)	• Rhythm settings and selection changes • **FILL IN 1, 2, INTRO & ENDING** on • **TEMPO** setting • Volume of **ACCOMP, BASS** and **DRUMS** parts • **TRANSPOSE** status, **PANEL MEMORY** selection changes
RHYTHM [RHY]	Settings related to rhythm (STEP)	• Rhythm settings and selection changes • **FILL IN 1, 2, INTRO & ENDING** on • **TEMPO** setting, **START/STOP** on/off

- You can use the TRACK ASSIGN function to assign parts to tracks as you wish. (Refer to page 43.)

■ Factory-preset track assignment



1: RIGHT
2: PART2
3: LEFT
4: CHORD
5: CONTROL
6: RHYTHM
7: DRUM
8: PART4
9: PART5
10: PART6
11: PART7
12: PART8
13: PART9
14: PART10
15: PART11
16: PART12

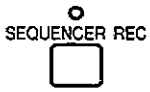
Realtime Record

With REALTIME RECORD, your performance is recorded with the timing exactly as you played it on the keyboard.

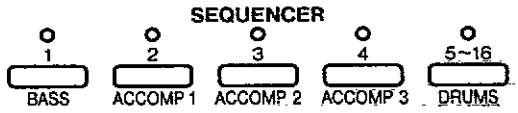
Recording

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

2. Press the **SEQUENCER REC** button to turn it on.



3. Use the **SEQUENCER** track buttons to specify the track for the part you are going to record. (For details about track assignment, refer to pages 35 and 43.)



- To specify a track number between 5 and 16, press the **5-16** button to turn it on.
- The selected track button indicator flashes. (For tracks 5 to 16, the **5-16** indicator flashes.)
- You can select two or more tracks to record at one time.
- At this time, the panel settings you selected in step 1 are stored.

4. Use the **TEMPO** buttons (**FAST** and **SLOW**) to adjust the tempo.
- The tempo is shown on the display.

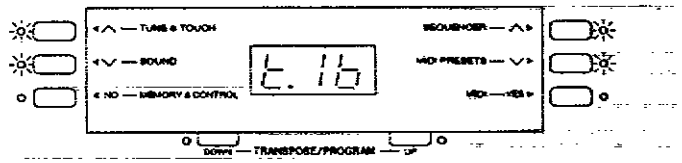
5. Play the keyboard.
- Recording begins. You can also press the **START/STOP** button to start the rhythm and begin recording.
- If you make a mistake in recording, you can erase the recording. (Refer to page 44.)

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

■ To mute track numbers between 5 and 16

When you turn on the **5-16** button, tracks 5 through 16 all become recording tracks. However, you can turn off (mute) specific tracks.

1. Press and hold the **5-16** button for a few seconds.
- The display looks similar to the following.



2. Use the ∧ and ∨ buttons to the left of the display to select the track number.
- When [ALL] is specified, tracks 5 through 16 are selected (factory-preset setting).

3. Use the ∧ and ∨ buttons to the right of the display to select [On] or [OFF].

4. Repeat steps 2 and 3 for other tracks as desired.

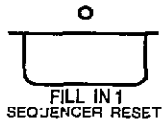
5. When you have finished making the settings, press the **5-16** button to turn it off.

- This setting is automatically set to [ALL] when the power is turned on.

Playback

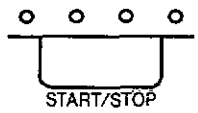
1. Turn on the track buttons for the parts you wish to play back.
- Tracks whose indicators are not lit will not be played back.
- For tracks 5 to 16, refer to page 36.

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



- The recorded panel settings are recalled.

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



- The recorded performance is played back automatically.

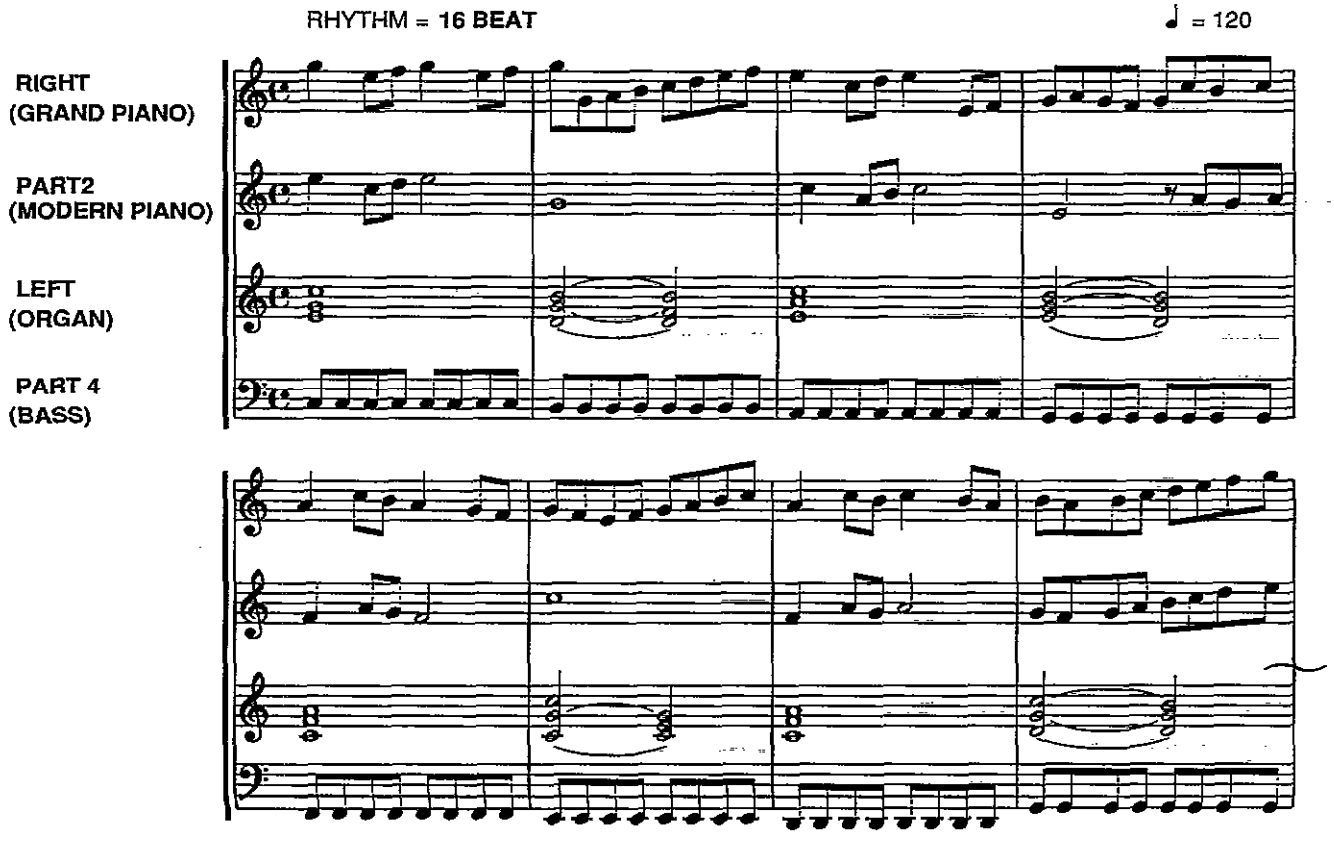
Multi-track recording

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

1. Follow the procedure to record the first track.
- When you turn the **SEQUENCER REC** button off, confirm that the indicator for the track you recorded is lit. Turn on the buttons for the tracks you wish to have played back.

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

3. Repeat steps 1 and 2 to record all the desired parts.



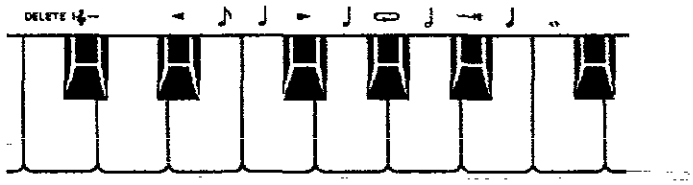
Recording chord and rhythm progressions

You can use the STEP RECORD mode to record a chord progression and rhythm changes for the **AUTO PLAY CHORD** beforehand. When the **AUTO PLAY CHORD** is used during playback, the chords and rhythms change automatically exactly at the right place.

Store a chord progression

Store the chord progression for the **AUTO PLAY CHORD**, and the panel settings.

- 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.
- DELETE Erase the stored 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.

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

■ Example of storing a chord progression

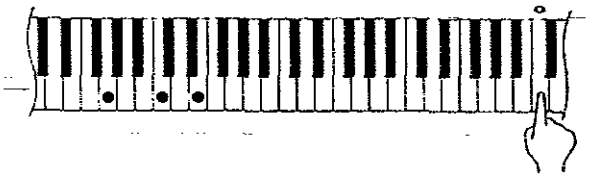
C	C	F	G7	C	Am
𝅝	𝅝	𝅗𝅥	𝅗𝅥	𝅗𝅥	𝅗𝅥

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

2. Use the **SEQUENCER** track buttons to select the track to which the CHORD part is assigned (the factory preset is 4).
- The measure number is shown on the display.
- To select a track number between 5 and 16, refer to page 42.

3. 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 C major chord of whole-note length is stored.

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

(2) While playing a 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 pattern at the desired position. (An intro can be stored only at the beginning.)
- Store a rest by pressing a note value key without specifying a chord.
- Chords can also be specified with the one-finger method.

4. At the end of the chord progression, press the End key (—𝄀).
- The piano exits the recording mode.
- 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 (—𝄀).
- If you press the **INTRO & ENDING** button instead of the End key (—𝄀), when you play back your performance, an ending pattern will be produced and then the performance will stop.
- 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. Press the **STEP REC** button to turn it on and enter the chord step-record mode.

2. Use the **TRANSPOSE/PROGRAM** buttons to go to the measure you wish to modify. Use the ◀ and ▶ Corrections keys to go to the chord you wish to edit.
- The chord stored at the specified point will sound.
- If an intro, fill-in or ending is stored at the specified point, the respective indicator flashes.
- To go to the end of the chord progression, while pressing the Reset key (𝄆—), press the ◀ key.

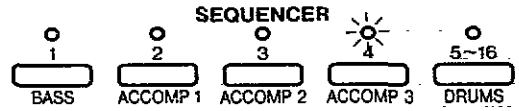
3. Press the **DELETE** key to erase the data.
- The data which is stored at the current position is erased.
- When a chord is erased, the following data shifts to take its place.
- To erase all the data from the current track, while pressing the **DELETE** key, press the End key (—𝄀).

4. Store new chords.
- You can store chords and fill-ins, etc.

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

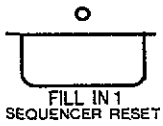
■ Playing back your stored chord progression with the AUTO PLAY CHORD

1. Confirm that the indicator for the CHORD track is lit.



- If the indicator is not lit, press the button to turn it on.
- To confirm the on/off status of tracks 5 through 16, refer to page 36.

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



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

- The chords of the automatic accompaniment change in accordance with the stored chord progression. This means that you can concentrate on playing the melody.

■ Store rhythm changes

In addition to chord progressions, you can also store changes in the rhythm by using the **STEP REC** function.

<Storing the beginning panel settings>
If you wish to have the panel settings at the beginning of the tune stored, select the beginning sounds, rhythm and other panel settings before starting the recording procedure.

<Storing an intro>
To store a drums-only intro, first turn on the **STEP REC** button, then turn on the **INTRO & ENDING** button.

- To store an intro played as part of the accompaniment pattern, first turn on the **STEP REC** button, then, while pressing the keys for a chord, turn on the **INTRO & ENDING** button.
- An intro can be stored only at the beginning of the first measure. When an intro is stored, the measure number is incremented by the corresponding number of measures.

<Storing the count>
If you wish to store the count, first turn on the **STEP REC** button, then turn on the **COUNT INTRO (FILL IN 2)** button.

- A count can be stored only at the beginning of the first measure. When a count is stored, the measure number is incremented by the corresponding number of measures.

<Storing a rhythm change in the middle of the tune>
Store the chord progression up to the point where the rhythm changes. Select a different rhythm just before the chord where the rhythm changes.

- The new rhythm will be in effect from this point until a different rhythm is specified.

<Storing a fill-in>
To store a drums-only fill-in pattern, press the **FILL IN 1** or **2** button, then use the note unit keys to specify the number of notes in the fill-in.

- To store a fill-in played as part of the accompaniment pattern, press the **FILL IN 1** or **2** button, then store a chord.

<Storing a rhythm variation>
To store a rhythm variation at the desired position, before storing the chord, press the **RHYTHM VARIATION 1, 2** or **3** button.

<Storing an ending>
If the **INTRO & ENDING** button is pressed at the end of the tune, an ending pattern is stored.

- If the **INTRO & ENDING** button is pressed while the keys for a chord are pressed, the ending will be played as part of the accompaniment pattern.

<Storing **PANEL MEMORY** changes in the middle of the tune>
Changes in the **PANEL MEMORY** selection can be stored in the **SEQUENCER**. Store the chord progression up to the point where the **PANEL MEMORY** selection changes. Press the desired **PANEL MEMORY** button just before the chord where the panel settings change.

- The new settings will be in effect from this point until a different **PANEL MEMORY** is specified.

<Other settings which are stored in the **SEQUENCER**>

- **ACCOMP PART** button on/off status
- Balance settings for the **DRUMS, BASS** and **ACCOMP** parts
- **TEMPO** setting, **TRANSPOSE** setting
- **TECHNI-CHORD** on/off
- **PLAY STYLE** setting

Store a rhythm progression

Data for the rhythm progression can be stored by measures with the step recording method.

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

2. Use the **SEQUENCER** track buttons to select the track to which the RHYTHM part is assigned (the factory preset is 6).
- If the factory-preset settings are used for the track assignment (refer to page 35), press the **5-16** button to select the RHYTHM track.
- When both the RHYTHM track and the CHORD track are assigned to track numbers between 5 and 16, refer to the following page.
- The measure number is shown on the display.

3. Use the ◀ and ▶ keys to go to the measure you wish to record.

4. Use the panel buttons to store the rhythm data.
- Data which can be stored:

  START/STOP
  Changes in the rhythm selection
  COUNT INTRO, INTRO, FILL IN, ENDING
  Tempo changes

- Be sure to store the **START/STOP** data in the measure in which the rhythm starts.
- If you are storing a **COUNT INTRO** or **INTRO**, store this data before the **START/STOP** data.

5. Repeat steps 3 and 4 to continue storing the rhythm progression.

6. At the end of the rhythm progression, press the End key (—ıı).
- The piano exits the recording mode.
- During playback, playback of the recorded rhythm progression stops at this point. For automatic repeat playback of the rhythm progression, press the Repeat key (⊂⊃) instead of the End key (—ıı).
- If you press the **INTRO & ENDING** button instead of the End key (—ıı), when you play back your performance, an ending pattern will be produced and then the performance will stop.

■ **Correct the recorded rhythm progression**

1. Press the **STEP REC** button to turn it on and enter the rhythm step-record mode.

2. Use the ◀ and ▶ Correction keys to go to the point you wish to modify.

- The indicator for the function stored at that point flashes.
- To go to the end of the rhythm progression, while pressing the Reset key (𝄞—), press the ◀ key.

3. Press the **DELETE** key to erase the data.
- The data which is stored at the current position is erased.
- To erase all the data from the current track, while pressing the **DELETE** key, press the End key (—𝄀).

4. Store a different rhythm, if desired.
- If you select a rhythm with a different time signature, the time signature of all subsequent measures will also change.
- If data as already been recorded in other tracks, you cannot select a rhythm with a different time signature.

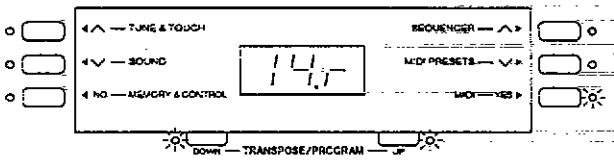
5. When you have finished correcting the data, press the **STEP REC** button to turn it off.

■ **When both the RHYTHM track and the CHORD track are assigned to track numbers between 5 and 16**

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

2. Press the **5-16** button.

3. Use the **TRANSPOSE/PROGRAM** buttons to select the track for the RHYTHM or CHORD part.
- In this case, the RHYTHM part is indicated as [r] on the display, and the CHORD part as [C].



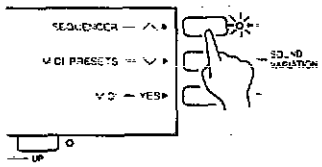
4. Press the **YES** button.

Track Assign

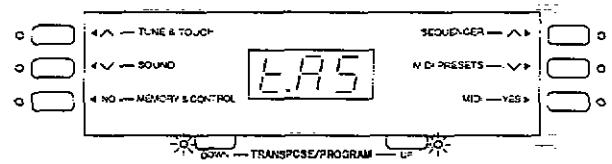
Each **SEQUENCER** part is already assigned to a track number. However, you can use the TRACK ASSIGN function to assign parts to tracks as you wish. This function is also used to designate the tracks used for the rhythm data and chord progression data.

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

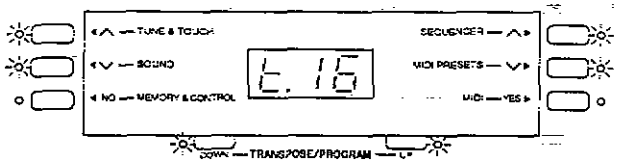
2. Press the **SEQUENCER** button to turn it on.



3. Use the **TRANSPOSE/PROGRAM** buttons to select the TRACK ASSIGN [t.AS] display.



- After about two seconds, the display similar to the following appears.



4. Use the ∧ and ∨ buttons to the left of the display to specify the track number.

5. Use the ∧ and ∨ buttons to the right of the display to select the part for the specified track.
- Select one of the following parts (square brackets [ ] indicate how the part is shown on the display): RIGHT [rt.], LEFT [LFt], PART [P] 2 and 4 through 15, DRUMS [drM], CHORD [CHd], CONTROL [CtL], RHYTHM [rhy]. (For an explanation of each **SEQUENCER** part, refer to page 35.)
- When a part other than the RHYTHM [rhy], CONTROL [CtL] or CHORD [CHd] part is assigned, the track assign procedure is completed at this point.
- The RHYTHM [rhy], CONTROL [CtL] and CHORD [CHd] parts cannot be assigned to more than one track.

6. When assigning the RHYTHM, CONTROL or CHORD part, press the **YES** button.
- The [yES] confirmation display appears. Press the **YES** button to confirm that you wish to execute the specified track assignment. Or press the **NO** button to stop the track assignment.

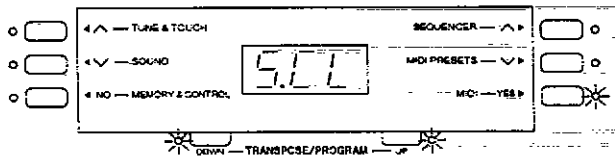
Erasing the stored performance

You can erase specific tracks of your performance, or you can erase the entire performance at once.

SONG CLEAR

Erase the recorded contents of all tracks.

1. Press the **MENU** button to turn it on.
2. Press the **SEQUENCER** button to turn it on.
3. Use the **TRANSPOSE/PROGRAM** buttons to select the SONG CLEAR [S.CL] display.

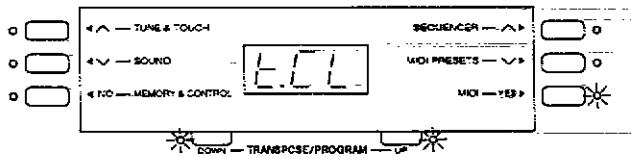


4. Press the **YES** button.
   - The [yES] confirmation display appears. Press the **YES** button to confirm that you wish to execute the function. Or press the **NO** button to cancel the procedure.
   - When you press the **YES** button, [End] is shown on the display and all the tracks are cleared.
   - The instrument returns to the normal performance mode.

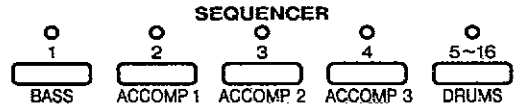
TRACK CLEAR

Erase the contents of a specific track.

1. Press the **MENU** button to turn it on.
2. Press the **SEQUENCER** button to turn it on.
3. Use the **TRANSPOSE/PROGRAM** buttons to select the TRACK CLEAR [t.CL] display.



4. Turn on the buttons for the tracks you wish to erase.



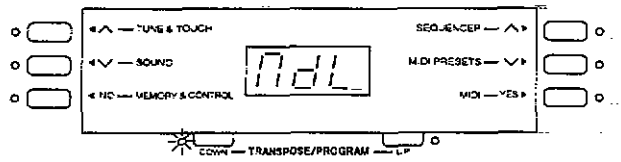
   - The indicators of the specified tracks light.

5. Press the **YES** button.
   - The [yES] confirmation display appears. Press the **YES** button to confirm that you wish to execute the function. Or press the **NO** button to cancel the procedure.
   - If you press the **5-16** button, tracks 5 through 16 will be cleared.
   - When you press the **YES** button, [End] is shown on the display and the specified tracks are cleared.
   - Repeat steps 4 and 5 as necessary.
6. Press the **MENU** button to turn it off.
   - The instrument returns to the normal performance mode.

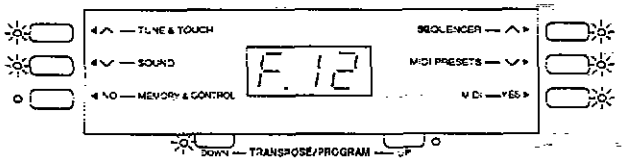
Sequencer Medley

You can have the songs on a disk played back continuously in order.

1. Insert the disk into the Disk Drive.
2. Press the **MENU** button to turn it on.
3. Press the **SEQUENCER** button to turn it on.
4. Use the **TRANSPOSE/PROGRAM** buttons to select the MEDLEY [MdL] display.



- After about two seconds, the display changes to the following.

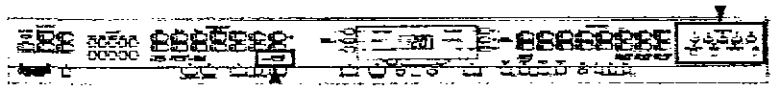


5. Use the ∧ and ∨ buttons to the left of the display to specify the first song you wish to have played.
6. Use the ∧ and ∨ buttons to the right of the display to specify the last song.
7. Press the **YES** button.
   - The songs from the specified range are repeatedly played back in order.
   - During medley playback, the current song number is shown on the display.
   - If you press the **START/STOP** button during medley play, the song currently playing will stop, and playback continues from the next recorded song on the disk.
8. To stop medley play, press the **YES** button again.
9. Press the **MENU** button to turn it off.

- Only data which has been saved in the Technics File format can be played in a medley performance.
- The procedure for saving your **SEQUENCER** performances on a disk is explained in the chapter "Disk Drive" (page 58).

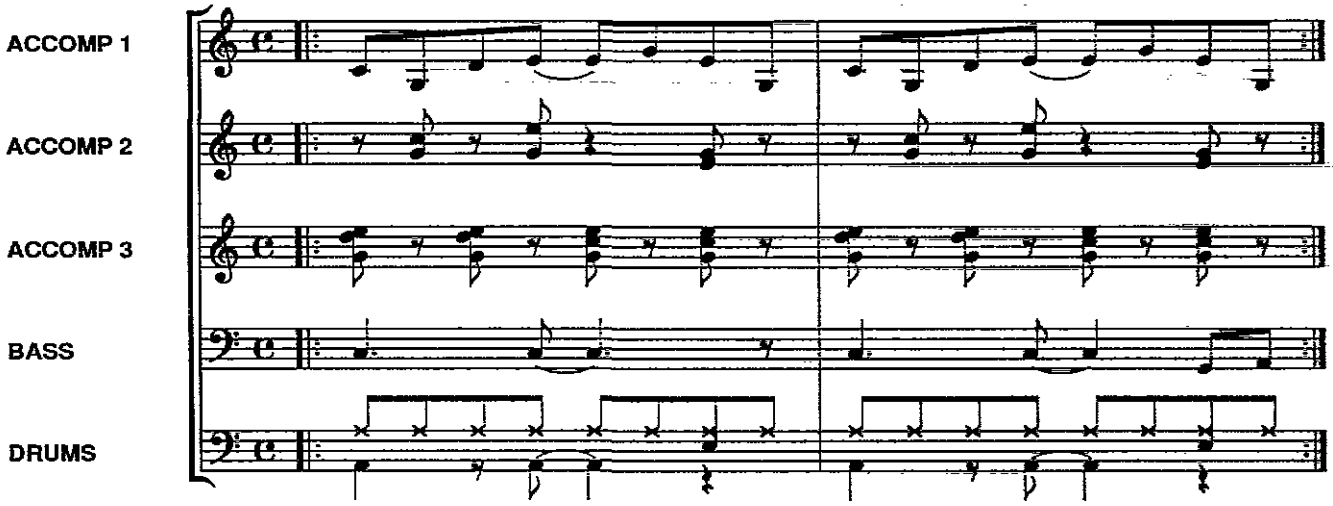
Part IV Composer

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 in the **RHYTHM SELECT** section.

■ **Structure of a rhythm pattern**



Components of a rhythm pattern

You can store up to 12 different rhythms (6 each in banks **A** and **B**).

- Each pattern is comprised of five parts: **DRUMS**, **BASS**, and **ACCOMP 1**, **2** and **3**.
- By changing the **COMPOSER** mode, you can also create **INTRO**, **FILL IN** and **ENDING** patterns. (Refer to page 51.)

Two ways to record in the COMPOSER

There are two ways to create and record a rhythm.

■ **Edit a preset rhythm**
Copy 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 8,600.

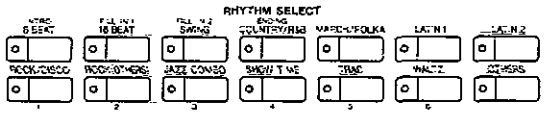
- When the remaining memory available for recording is less than 20%, it is shown on the display as a percentage.
- When [FUL] appears on the display, no more data can be stored in the **COMPOSER**.

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. If you are going to create a completely new rhythm pattern, follow the instructions on page 48.

Edit a preset rhythm pattern

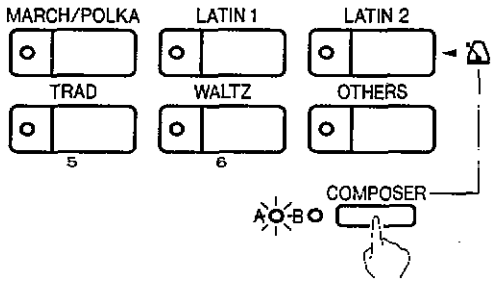
1. Select a preset rhythm using the **RHYTHM SELECT**.



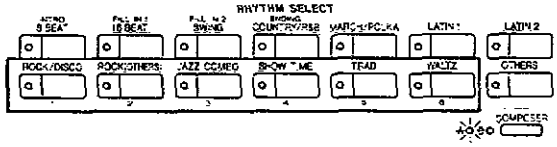
- Do not select a metronome.

2. Press the **COMPOSER REC** button to turn it on.

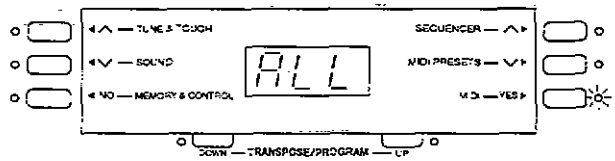
3. Press the **COMPOSER** button to select a bank in which to record the rhythm (**A** or **B**).



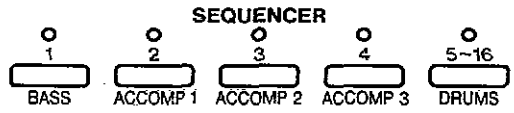
4. In the lower row of the **RHYTHM SELECT** section, press one of the numbered buttons (**1** to **6**) in which to record the rhythm.



- Select one of the six buttons with the flashing indicators.
- First [CPy] is shown on the display for a few seconds, and then the display looks similar to the following.



5. Press the button for the part of the pattern you want to change.

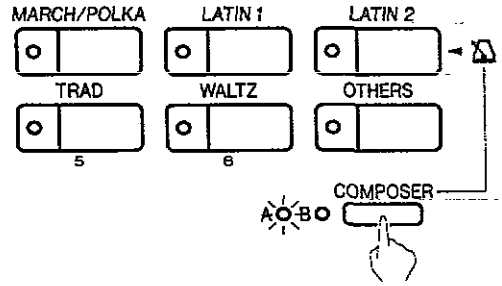


- The indicator flashes.
- The rhythm you selected in step 1 and the metronome start, and recording begins. (Refer to page 49.)

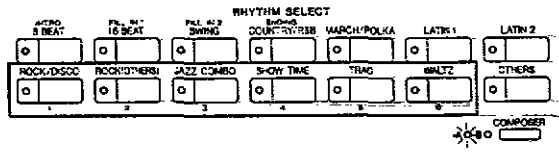
Create a completely new rhythm

1. Press the **COMPOSER REC** button to turn it on.

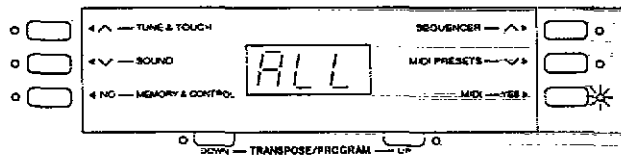
2. Press the **COMPOSER** button to select a bank in which to record the rhythm (**A** or **B**).



3. In the lower row of the **RHYTHM SELECT** section, press one of the numbered buttons (**1** to **6**) in which to record the rhythm.



- Select one of the six buttons with the flashing indicators.
- First [CPy] is shown on the display for a few seconds, and then the display looks similar to the following.

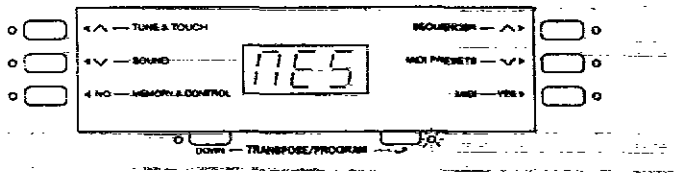


4. Press the **YES** button.
- The memory contents of the numbered button you selected in step 3 are erased.

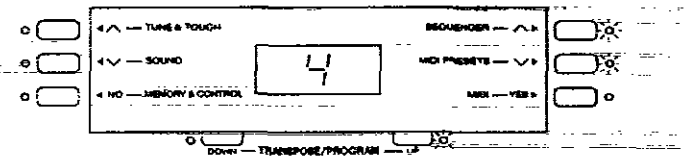
5. Press the **MENU** button to turn it on, and select the time signature and number of measures in your repeating rhythm pattern.

■ Number of measures

(1) Use the **TRANSPOSE/PROGRAM** buttons to select the MEASURE [MES] display.



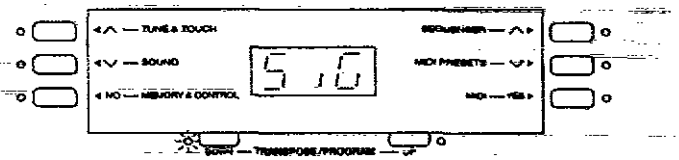
- After about two seconds, the display changes to the following.



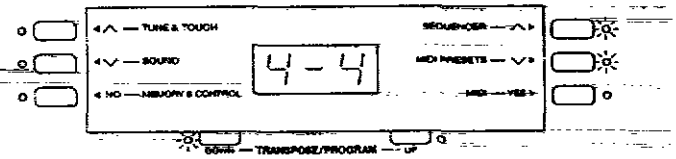
(2) Use the ∧ and ∨ buttons to the right of the display to specify the number of measures in your repeating rhythm pattern (from 1 to 8).

■ Time signature

(1) Use the **TRANSPOSE/PROGRAM** buttons to select the TIME SIGNATURE [SiG] display.

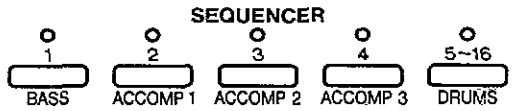


- *After about two seconds, the display changes to the following.*



(2) Use the ∧ and ∨ buttons to the right of the display to specify the time signature. Select from 1–4 (1/4 time) to 8–4 (8/4 time).

6. Press the button for the part you wish to record first.



- The indicator flashes.
- The metronome sound starts and recording begins. (Refer to the following section.)

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** sound group.
- For the **ACCOMP 1, ACCOMP 2, ACCOMP 3** and **BASS** parts, select sounds from sounds other than the **KEYBOARD PERC** sound group.

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.
- Record the performance in C major for correct chord progressions during playback.
- Various recording functions allow you to edit your pattern while you are recording it. (Refer to the following page.)

4. When you have finished recording one part, use the part buttons to select the next part to record.

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

6. When you have finished recording the rhythm, press the **COMPOSER REC** button 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.

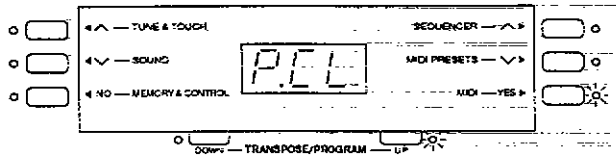
Recording functions

Press the **MENU** button to turn it on and select the desired function.

■ PART CLEAR

You can erase all recorded contents of the currently selected part.

1. Use the **TRANSPOSE/PROGRAM** buttons to select the PART CLEAR [P.CL] display.



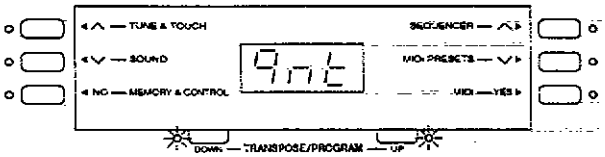
2. Press the **YES** button.

- The contents of the part are erased, and the display returns to the measure display.

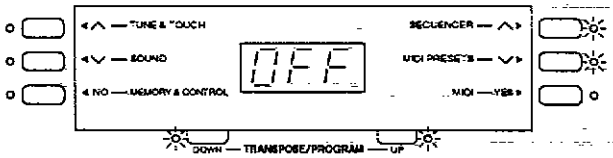
■ QUANTIZE

Set the desired quantize level to smooth out any unevenness in the timing of your performance. Each time this button is pressed, the indicated level changes.

1. Use the **TRANSPOSE/PROGRAM** buttons to select the QUANTIZE [qnt] display.



- After about two seconds, the display changes to the following.



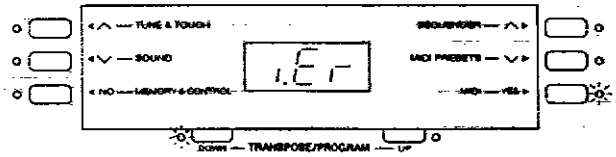
2. Use the ∧ and ∨ buttons to the right of the display to select the desired quantize level. Select from 𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯3 [32.3], 𝅘𝅥𝅯𝅘𝅥𝅯 [32], 𝅘𝅥𝅯𝅘𝅥3 [16.3], [OFF], 𝅘𝅥𝅯 [16], 𝅘𝅥𝅯3 [8.3], ♪ [8], and ♩ [4]. (A 3 denotes a triplet-type note.)

- The QUANTIZE function can be turned on/off and the level changed as desired during the recording procedure, depending on the particular phrase you are playing.
- The display returns to the measure display if you press the **MENU** button to turn it off.

■ INSTRUMENT ERASE

When the **DRUMS** part is selected, the **DRUMS** part can be cleared instrument by instrument.

1. Use the **TRANSPOSE/PROGRAM** buttons to select the INSTRUMENT ERASE [i.Er] display.



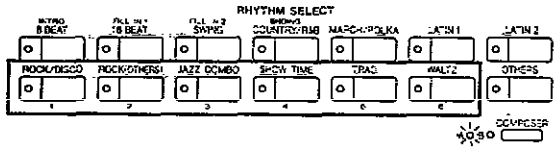
2. Hold down the **YES** button and specify the instrument sound to be deleted by pressing the corresponding Instrument key on the keyboard.

- Only the specified instrument will be erased for as long as the **YES** button is kept pressed.
- The display returns to the measure display if you press the **MENU** button to turn it off.

Playback

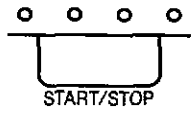
1. Press the **COMPOSER** button to select the bank in which the rhythm pattern is stored (**A** or **B**).

2. Press the number button in which the rhythm is recorded.



- The indicator of the selected button lights.
- Adjust the tempo.

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



- The **DRUMS** part begins to play back.
- The **BASS** and **ACCOMP** parts are played back when you use the **AUTO PLAY CHORD**.
- The **ACCOMP PART 1**, **2** and **3** buttons should be on.

Creating intro and fill-in patterns

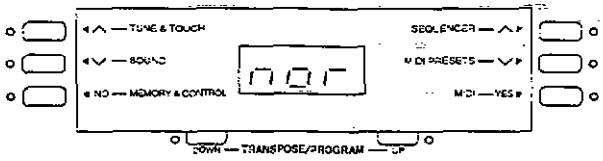
You can create and play back your original intro, fill-in and ending patterns.

Composer mode

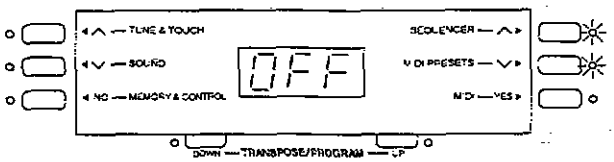
1. Press the **COMPOSER REC** button to turn it on.
- If you wish to use the patterns from a preset rhythm, select the rhythm beforehand from the **RHYTHM SELECT** section.

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

- The display looks similar to the following.



- After about two seconds, the display changes to the following.



3. Use the ∧ and ∨ buttons to the right of the display to select the mode.

NORMAL [OFF]
When a **FILL IN** button or the **INTRO & ENDING** button is pressed during playback, the corresponding pattern for a preset rhythm is played back.

EXPAND [On]
When a **FILL IN** button or the **INTRO & ENDING** button is pressed during playback, the corresponding pattern you created is played back.

- Select [On] when you wish to create your own fill-ins and intros, etc.

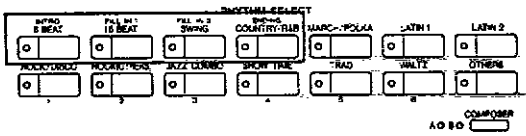
4. Press the **MENU** button to turn it off.

Recording

After setting the **COMPOSER** mode to EXPAND, perform the following procedure.

1. Press the **COMPOSER** button to select the bank into which to record the pattern (**A** or **B**).

2. Select one of the four leftmost buttons in the upper row of the **RHYTHM SELECT** in which to record your pattern.

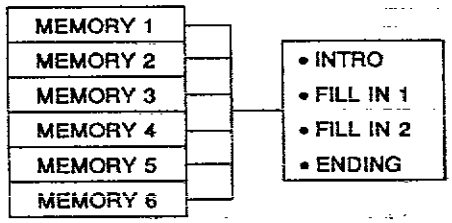


- The indicators for the **INTRO**, **FILL IN 1**, **FILL IN 2** and **ENDING** buttons flash. Select the one corresponding to the pattern you are going to record.

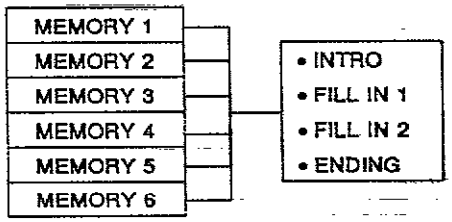
3. Make the appropriate recording settings. (Refer to page 48.)

4. Record the rhythm. (Refer to page 49.)
- The newly recorded intro and fill-in patterns are used with all the **COMPOSER** rhythms (**1** to **6**) in the same bank (**A** or **B**).

<BANK A>



<BANK B>



Part V Disk Drive

Disk Drive

The Disk Drive enables you to store your **SEQUENCER** performances and **COMPOSER** rhythm patterns on floppy disks. Then you can load the recorded data into your piano's memory at any time.

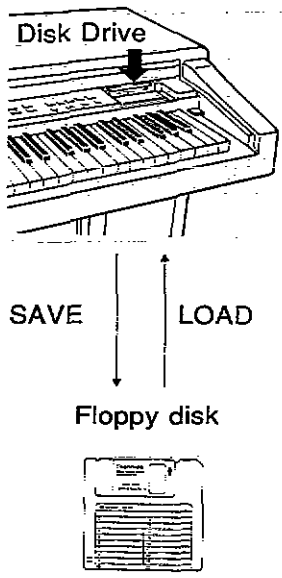
Piano memory and disk memory

The storable internal memory is fixed at a limited capacity, but this external memory device expands the storable memory infinitely. By recording performance data, one simple procedure lets you load the recorded settings into the piano's memory at any time.

- Only 3.5 inch 2DD or 2HD disks can be used.
- Specific formats are handled as follows.

		SAVE	LOAD
TECHNICS File FORMAT		○	○
Standard MIDI File	FORMAT 0	○	○
	FORMAT 1	×	○

FORMAT 0: There is one track on the disk, and it contains the 16 MIDI channels.
FORMAT 1: There is an unlimited number of tracks on the disk, each of which can contain the 16 MIDI channels.



■ Playback of commercial software

Disks recorded using the Disk Drive of this instrument can, of course, be played back on your piano. But this instrument also reads song data from disks recorded in the Standard MIDI File format, enabling you to play commercial song disks on this instrument. In addition, by saving this instrument's **SEQUENCER** data in the Standard MIDI File format, you can play it back on an external sequencer.

About Standard MIDI Files

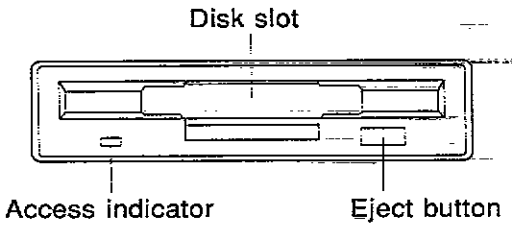
"Standard MIDI File" is a standardized format which makes it possible for music data to be exchanged among different sequencers. Data stored in this format on sequencers of different models can be played back on this instrument, and vice versa.

- Only files with the ".MID" extension can be loaded.
- No more than 128 KB of data can be loaded into this instrument.

■ Warning

Standard MIDI Files ensure the compatibility of data such as key on, key off, velocity, program number. It does not guarantee 100% faithful reproduction of recorded music which is replete with such data. For exact playback of music, it may be necessary to perform extensive adjustments of all the sound generator settings. As you the listener are the ultimate judge of what sounds best, you should perform such adjustments to your satisfaction.

Main parts of the Disk Drive



Eject button
Press to remove the disk from the Disk Drive.

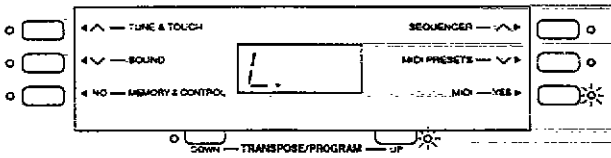
Access indicator
Lights when data is being loaded from or saved to disk.

- To prevent data loss, do not remove the disk from the Disk Drive or turn off the power when the access indicator is lit.

Outline of procedure

1. Press the **DISK DRIVE** button to turn it on.

2. Use the **TRANSPOSE/PROGRAM** buttons to select the desired function on the display.
- The function names as they appear on the display are abbreviated and enclosed in brackets [ ] in the explanation below.



DISK LOAD [L.] (page 55)
Load data from a disk into your instrument's memory.

DISK SAVE [S.] (page 58)
Save data from your instrument's memory to a disk.

MIDI FILE LOAD [MF.L] (page 56)
Load song data which was stored in the Standard MIDI File format into your instrument's memory.

MIDI FILE SAVE [MF.S] (page 59)
Save data from your instrument's memory in the Standard MIDI File format to a disk.

DISK FORMAT [FMt] (page 57)
Format new disks or erase the contents of recorded disks so they can be used by this instrument.

3. Follow the procedures on the corresponding display.
- The indicators of the buttons you need to use are lit.
- During the procedure, you can use the **TRANSPOSE/PROGRAM** buttons to change to another menu.

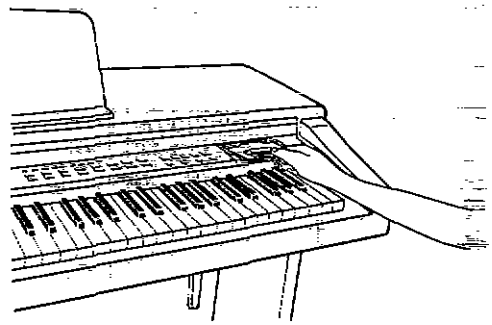
4. When you have finished setting the functions, press the **DISK DRIVE** button to turn it off.

Loading data

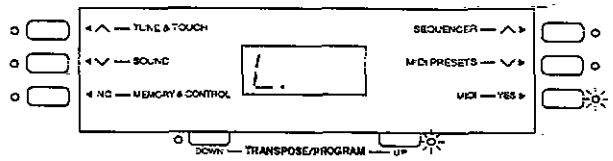
Recall (load) the data from the disk to your instrument's memories. Please note that the load procedure causes any data which is currently stored in the relevant memories to be erased.

DISK LOAD

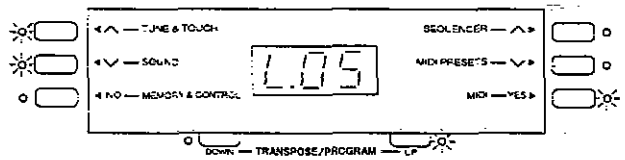
1. Insert the disk with the stored data into the Disk Drive.



2. Select the DISK LOAD [L.] display. (Refer to page 54.)
- The display changes to the following.



- Press the **YES** button. The display similar to the following appears.



3. Use the ∧ and ∨ buttons to the left of the display to select the number of the song file to load.

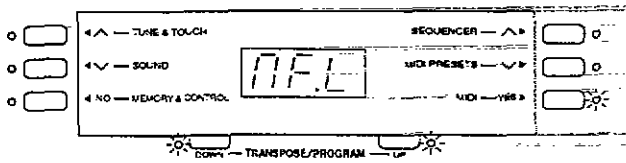
4. Press the **YES** button.
- The DISK LOAD operation begins.
- [L.] is shown on the display while the data is being loaded, and [End] is shown when the load operation is completed.
- If song data was loaded, you can press the **START/STOP** button to begin playback.

MIDI FILE LOAD

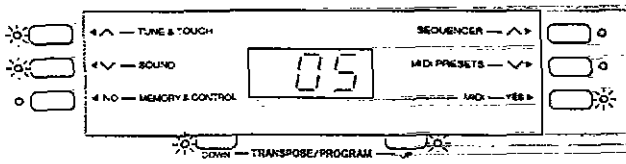
Data which has been saved in the Standard MIDI File format can be loaded into this instrument's **SEQUENCER**.

1. Insert the disk on which data is saved in Standard MIDI File format into the Disk Drive.

2. Select the MIDI FILE LOAD [MF.L] display. (Refer to page 54.)
- The display looks similar to the following.



- Press the **YES** button. The display similar to the following appears.



3. Use the ∧ and ∨ buttons to the left of the display to select the number of the file with the desired data.

4. Press the **YES** button.
- The MIDI FILE LOAD operation begins.
- [L.] is shown on the display while the data is being loaded, and [End] is shown when the load operation is completed.
- Press the **START/STOP** button to begin playback of the song data.

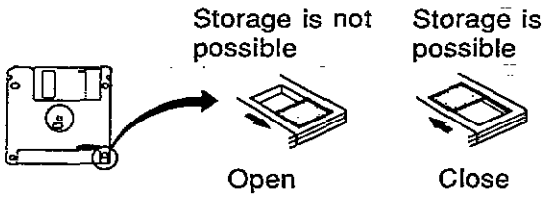
You can also access the MIDI FILE LOAD display by pressing the **DISK DRIVE (DISK LOAD)** button for a few seconds.

Formatting a disk

New disks can be used only after they have been formatted. Follow the procedure below to format a new disk or erase the contents of a recorded disk.

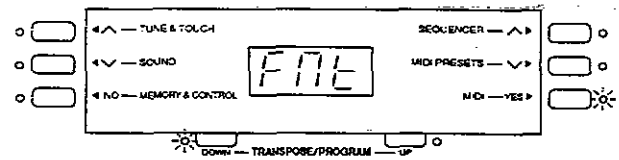
DISK FORMAT

- This procedure clears the entire contents of the disk.
- You can use 3.5 inch 2DD or 2HD disks; however, 2HD disks formatted as 2DD cannot be used.
- Reformat a disk if it cannot be saved to or loaded from properly because of exposure to a magnetic field.
- To format the disk, the write-protect window must be closed, as illustrated.

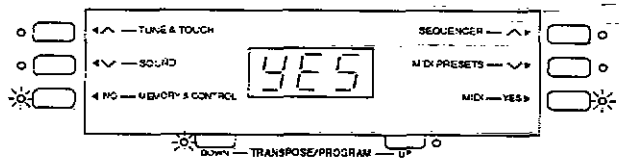


1. Insert the disk into the Disk Drive slot. Push it all the way in until you hear a click.

2. Select the DISK FORMAT [FMt] display. (Refer to page 54.)
- The display looks similar to the following.



- Press the **YES** button. The display similar to the following appears.



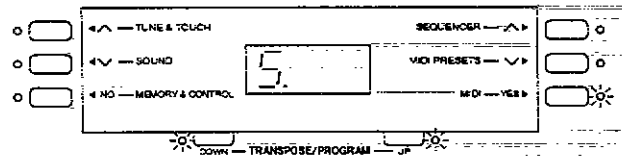
3. Press the **YES** button to format the disk, or press the **NO** button to cancel the format.
- If the **YES** button was pressed, formatting begins immediately.
- After about one minute, formatting is completed and [End] is shown on the display.

Saving data

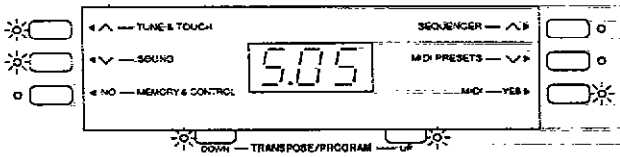
Use the Disk Drive to save the recorded data and panel settings on a disk. A formatted disk should be in place in the Disk Drive.

DISK SAVE

1. Select the DISK SAVE [S.] display. (Refer to page 54.)
- The display changes to the following.

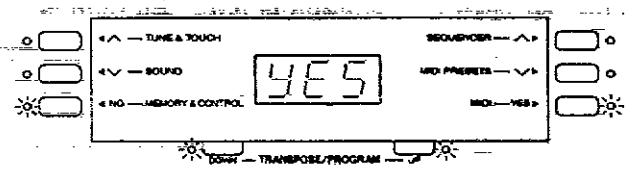


- Press the **YES** button. The display similar to the following appears.



2. Use the ∧ and ∨ buttons to the left of the display to select the number of the song file in which to save (01 to 20).
- The maximum number of songs which can be saved may be less than 20 if you are saving many songs which use a lot of memory.

3. Press the **YES** button.
- The DISK SAVE operation begins.
- [S.] is shown on the display while the data is being saved, and [End] is shown when the save operation is completed.
- If you attempt to save data to a file number in which data is currently saved, the display changes to the confirmation display. Press the **NO** button if you wish to cancel the procedure. When the **YES** button is pressed, the DISK SAVE operation begins.

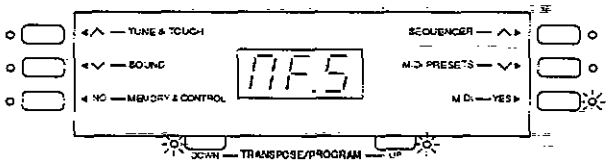


MIDI FILE SAVE

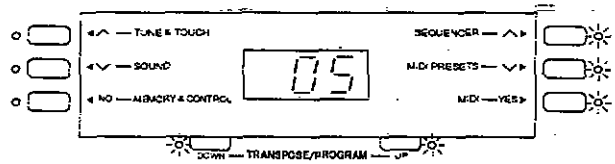
The data from this instrument's **SEQUENCER** can be saved in the Standard MIDI File format.

- What you can save in the Standard MIDI File format is ordinary performance data, such as note data. Data which is specific to Technics instruments (such as **SEQUENCER** data for the chord and rhythm parts, **COMPOSER** data, **PANEL MEMORY** data, etc.) is not saved. If you wish to also save the special Technics data, first use the DISK SAVE procedure to save the data to a disk in the Technics format, and then follow the MIDI FILE SAVE below.

1. Select the MIDI FILE SAVE [MF.S] display. (Refer to page 54.)
- The display changes to the following.



- Press the **YES** button. The display similar to the following appears.



2. Use the ∧ and ∨ buttons to the right of the display to select the number of the song file in which to save.
3. Press the **YES** button.
- The MIDI FILE SAVE operation begins.
- [S.] is shown on the display while the data is being saved, and [End] is shown when the save operation is completed.
- If you attempt to save data to a file number in which data is currently saved, the display changes to the confirmation display. Press the **NO** button if you wish to cancel the procedure. When the **YES** button is pressed, the MIDI FILE SAVE operation begins.

Part VI Adjusting the functions

Various functions on your instrument can be custom-set to match your personal tastes and style of play, giving you maximum versatility and control of your instrument.

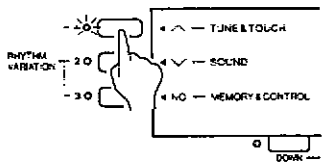
Outline of procedure

TUNE & TOUCH

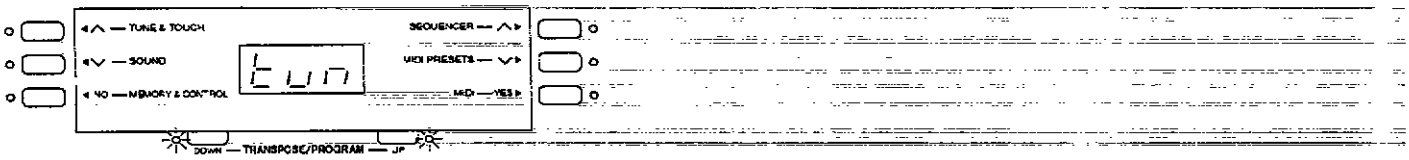
The tuning of this instrument for when playing with other instruments, the touch response and other functions can be adjusted.

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

2. Press the **TUNE & TOUCH** button to turn it on.



3. Use the **TRANSPOSE/PROGRAM** buttons to select the desired function.
- The function names as they appear on the display are abbreviated and enclosed in brackets [ ] in the explanation below.



4. Follow the procedures on the corresponding display.
- The indicators of the buttons you need to use are lit.
- During the procedure, you can use the **TRANSPOSE/PROGRAM** buttons to change to another menu.

5. When you have finished making the settings, press the **MENU** button to turn it off.
- The instrument returns to the normal performance mode.

TOUCH SENSE [tch] (page 62)
Adjust the keyboard touch response.

MASTER TUNING [tun] (page 63)
Fine tune the pitch of the entire instrument.

PIANO TUNING [Pno] (page 63)
Select the type of tuning.

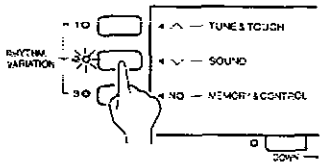
MINIMUM RANGE [Min] (page 64)
Select whether or not sound is generated when the keys are pressed very softly.

SOUND

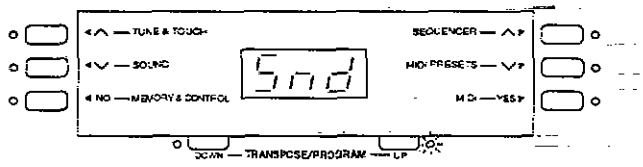
Functions related to the sounds can be adjusted.

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

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



3. Use the **TRANSPOSE/PROGRAM** buttons to select the desired function.
- The function names as they appear on the display are abbreviated and enclosed in brackets [ ] in the explanation below.



SOUND SELECT [Snd] (page 64)
Set the sound for each part.

KEY SHIFT [SFt] (page 65)
Shift the key of each part in semitone increments.

TECHNI-CHORD TYPE [tEC] (page 65)
Select the desired harmony style for the **TECHNI-CHORD**.

REVERB SET [rEV] (page 66)
Select the type and depth of the **DIGITAL REVERB**.

BALANCE [bAL] (page 66)
Adjust the volume of each part.

PITCH BEND RANGE [bnd] (page 67)
Set the pitch range when MIDI pitch bend data is received.

ADVANCED TYPE [AdV] (page 67)
Select the type of **ADVANCED** mode for the **AUTO PLAY CHORD**.

4. Follow the procedures on the corresponding display.
- The indicators of the buttons you need to use are lit.
- During the procedure, you can use the **TRANSPOSE/PROGRAM** buttons to change to another menu.

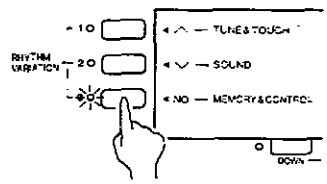
5. When you have finished making the settings, press the **MENU** button to turn it off.
- The instrument returns to the normal performance mode.

MEMORY & CONTROL

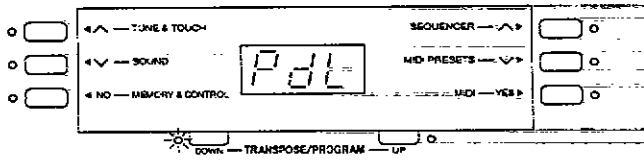
These settings are used to assign a function to the soft pedal, and to return the memories and settings to the factory-preset status.

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

2. Press the **MEMORY & CONTROL** button to turn it on.



3. Use the **TRANSPOSE/PROGRAM** buttons to select the desired function.
- The function names as they appear on the display are abbreviated and enclosed in brackets [ ] in the explanation below.



4. Follow the procedures on the corresponding display.
- The indicators of the buttons you need to use are lit.
- During the procedure, you can use the **TRANSPOSE/PROGRAM** buttons to change to another menu.

5. When you have finished making the settings, press the **MENU** button to turn it off.
- The instrument returns to the normal performance mode.

PEDAL SETTING [PdL] (page 68)
Assign a different function to the soft pedal.

INITIAL [ini] (page 82)
Return the instrument's memories and settings to their original status.

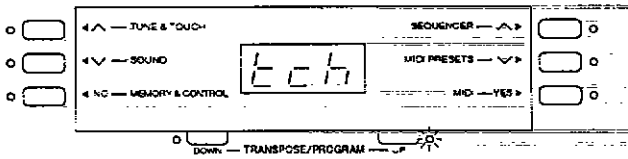
Tune & Touch functions

Select the item and perform the setting procedures.

TOUCH SENSE

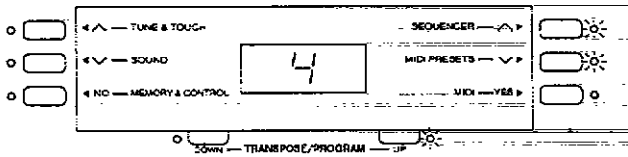
Adjust the amount of keyboard touch response.

1. Select the TOUCH SENSE [tch] display. (Refer to page 60.)
- The display looks similar to the following.



2. Use the ∧ and ∨ buttons to the right of the display to select the degree of touch sensitivity (1 to 5).
- The larger the number, the greater the keyboard touch sensitivity, and the easier it is to control the volume of the sound by striking the keys harder or softer.

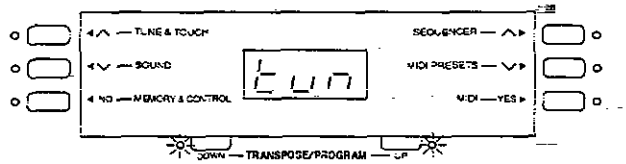
- After about two seconds, the display changes to the following.



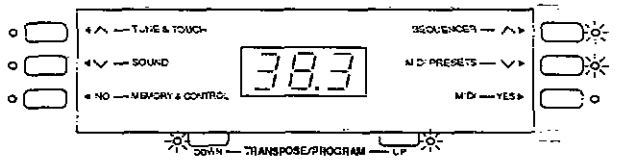
MASTER TUNING

You can fine-tune the pitch of the entire instrument. This is convenient when this instrument is played with other instruments or with a recorded performance.

1. Select the MASTER TUNING [tun] display. (Refer to page 60.)
- The display looks similar to the following.



- After about two seconds, the display changes to the following.

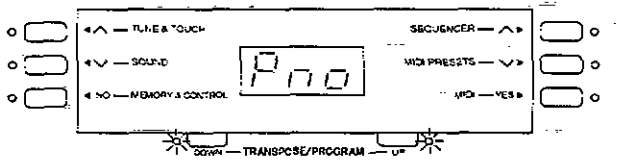


2. Use the ∧ and ∨ buttons to the right of the display to adjust the pitch within a range of 427.3 to 453.0 Hz.
- The 100's digit (4) is not shown on the display.
- The decimal can be set to 0, 3 or 6.

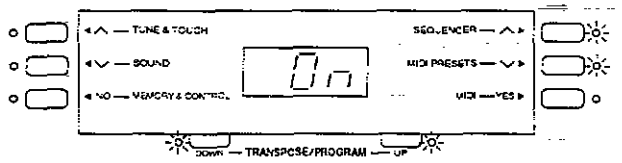
PIANO TUNING

Select from two types of tuning. The factory-preset status is [On] (acoustic piano).

1. Select the PIANO TUNING [Pno] display. (Refer to page 60.)
- The display looks similar to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to select the type of tuning.

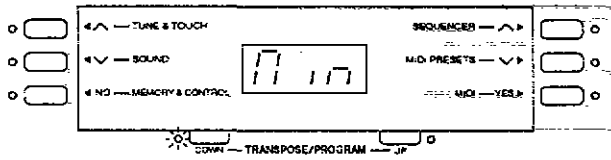
[On]: Standard acoustic piano tuning, in which the lower pitches are tuned slightly lower and the higher pitches are tuned slightly higher (default setting).

[OFF]: One octave is divided into pitches of 12 equally spaced intervals.

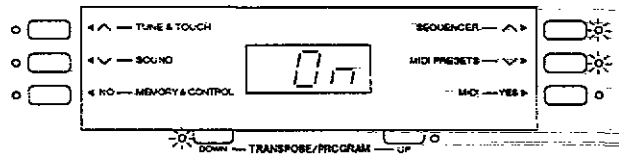
MINIMUM RANGE

For piano sounds, no sound is generated when the keys are played very softly. However, you can change the setting so that sound is produced no matter how softly the keys are pressed.

1. Select the MINIMUM RANGE [Min] display. (Refer to page 60.)
- The display looks similar to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to change the setting.

[On]: No sound is produced when a key is pressed extremely softly.

[OFF]: Sound is produced regardless of how softly the keys are pressed.

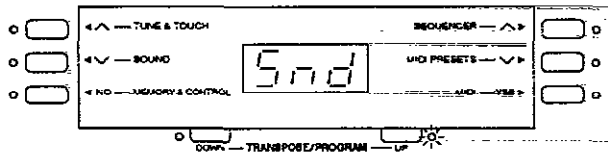
Sound functions

Select the item and perform the setting procedures.

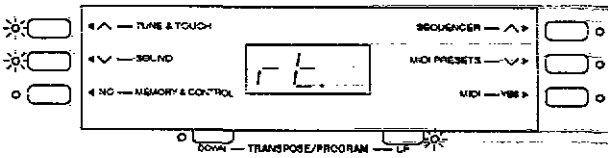
SOUND SELECT

Select the sound for each part.

1. Select the SOUND SELECT [Snd] display. (Refer to page 61.)
- The display looks similar to the following.



- After about 2 seconds, the display changes to the following.



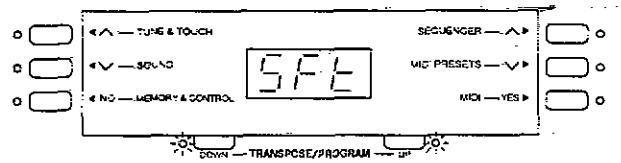
2. Use the ∧ and ∨ buttons to the left of the display to select the part.
- Select from RIGHT [rt.], PART 2 [P2], LEFT [LFt], PART 4 to 16 [P4 to P16], CHORD [Chd], ROOT BASS [r.bS].

3. Use the **SOUND SELECT** buttons to select the sound.

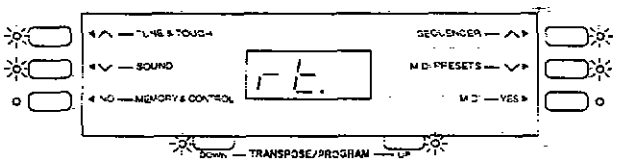
KEY SHIFT

The pitch of the part can be shifted up or down.

1. Select the KEY SHIFT [SFt] display. (Refer to page 61.)
- The display looks similar to the following.



- After about 2 seconds, the display changes to the following.



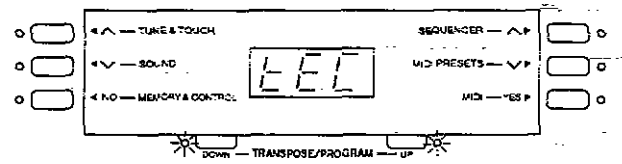
2. Use the ∧ and ∨ buttons to the left of the display to select the part.
- Select from RIGHT [rt.], PART 2 [P2], LEFT [LFt], PART 4 to 15 [P4 to P15].

3. Use the ∧ and ∨ buttons to the right of the display to specify the amount of key shift (–24 to 24).
- A value of 1 means a shift of one semi-tone. To raise (or lower) the pitch one octave, set the value to 12 (or –12).
- The ∨ button is used to lower the pitch, and the ∧ button to raise the pitch.

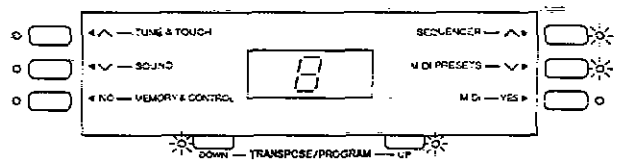
TECHNI-CHORD TYPE

Select the harmony style for the **TECHNI-CHORD**.

1. Select the TECHNI-CHORD TYPE [tEC] display. (Refer to page 61.)
- The display looks similar to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to select the harmony style (1 to 13).
- Refer to the following list to make your selection:

1: CLOSE	8: BLOCK
2: OPEN 1	9: BIG BAND BRASS
3: OPEN 2	10: BIG BAND REEDS
4: DUET	11: OCTAVE
5: COUNTRY	12: HARD ROCK
6: THEATER	13: FANFARE
7: HYMN	

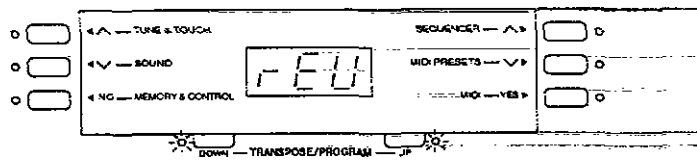
- When the OCTAVE, HARD ROCK or FANFARE style is select, the **TECHNI-CHORD** is effective for the right-part sound even when the keyboard is not split.
- For a detailed explanation of the different harmony styles, refer to the separate "REFERENCE GUIDE" provided.

You can also access this display by pressing the **TECHNI-CHORD** button for a few seconds.
- When this method is used to access the display, a few seconds after you have made the setting, the display returns to the previous display.

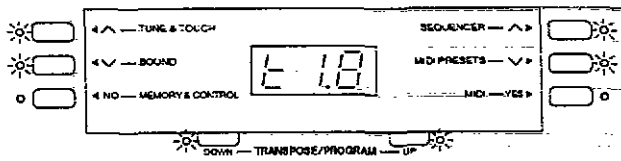
REVERB SET

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

1. Select the REVERB SET [rEV] display. (Refer to page 61.)
- The display looks similar to the following.



- After about two seconds, the display changes to the following.



2. Set the desired functions.

■ **Type**

Use the ∧ and ∨ buttons to the left of the display to select the type of reverb (1 to 3).

1: ROOM
2: STAGE
3: HALL

■ **Depth**

Use the ∧ and ∨ buttons to the right of the display to adjust the depth of the reverb (1 to 8).

- The higher the number, the greater the reverb depth.

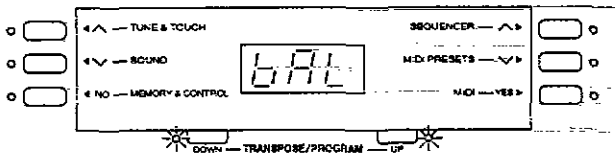
You can also access this display by pressing the **DIGITAL REVERB** button for a few seconds.

- When this method is used to access the display, a few seconds after you have made the setting, the display returns to the previous display.

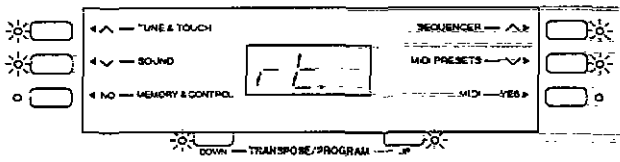
BALANCE

Adjust the volume for each part.

1. Select the BALANCE [bAL] display. (Refer to page 61.)
- The display looks similar to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the left of the display to select the part.
- Select from RIGHT [rt.], LEFT [LFt], ACCOMP 1 to 3 [AC1 to AC3], BASS [bAS], DRUMS [dr], PART 2 [P2], PART4 to 16 [P4 to P16], ACCOMP TOTAL [AC.t], ROOT BASS [r.bS], CHORD [Chd], TRACK 1 to 16 [t.1 to t.16].

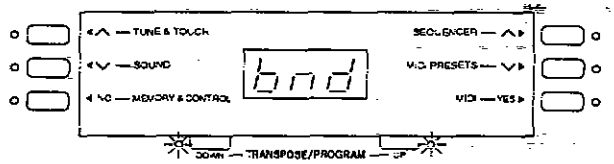
3. Use the ∧ and ∨ buttons to the right of the display to set the desired volume (0 to 127).

4. Repeat steps 2 and 3 for each part, as desired.

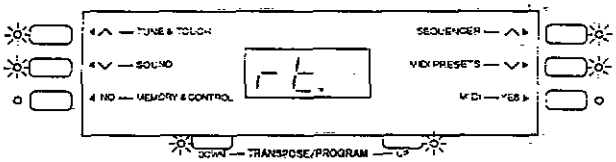
PITCH BEND RANGE

Set the pitch range when MIDI pitch bend data is received.

1. Select the PITCH BEND RANGE [bnd] display. (Refer to page 61.)
- The display looks similar to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the left of the display to select the part.
- Select from RIGHT [rt.], PART 2 [P2], LEFT [LFt], PART 4 to 15 [P4 to P15].

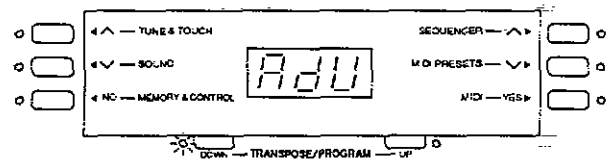
3. Use the ∧ and ∨ buttons to the right of the display to specify the range (0 to 12).
- Increments are in semitones.
- The higher the number, the greater the change in pitch when pitch bend data is received.

4. Repeat steps 2 and 3 for each part, as desired.

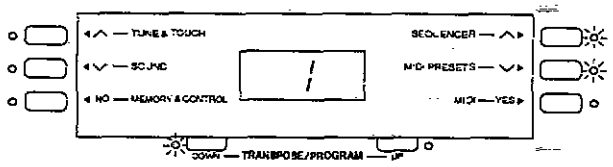
ADVANCED TYPE

Select the type of **ADVANCED** mode for the **AUTO PLAY CHORD**.

1. Select the ADVANCED TYPE [AdV] display. (Refer to page 61.)
- The display looks similar to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to select the type of **ADVANCED** mode (1 or 2).

1 [1]
When a chord that the piano does not recognize is played, the **AUTO PLAY CHORD** ignores it.

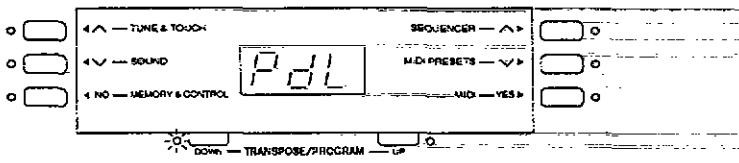
2 [2]
When a chord that the piano does not recognize is played, the **AUTO PLAY CHORD** performance follows the pitch of the chord notes.

Set the pedal function

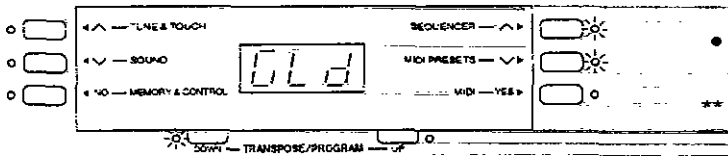
You can assign a different function to the soft pedal (left).

PEDAL SETTING

1. Select the PEDAL SETTING [PdL] display. (Refer to page 61.)
- The display looks similar to the following.



- After about two seconds, the display changes to the following.



- The function currently assigned to the pedal is shown on the display.

2. Use the ∧ and ∨ buttons to the right of the display to select the function you wish to assign to the pedal.
- *Select from the following functions:* SOSTENUTO [SOS], SOFT [SFt], INTRO & ENDING on/off [int], FILL IN 1 or 2 on [F1 or F2], START/STOP on/off [Srt], GLIDE* [GLd], TECHNI-CHORD on/off [tEC], PANEL MEMORY increment** [P.in], SUSTAIN [SuS].

* GLIDE: When the pedal is depressed, the sound of the entire instrument slides down by approximately one semitone.
- The glide function does not work for some sounds.

** PANEL MEMORY increment: The **PANEL MEMORY** number changes to the next number each time the pedal is depressed.

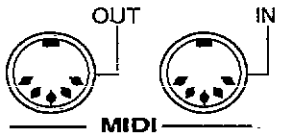
- When the piano is turned off, the left pedal automatically reverts to its initial function (SOFT).

Part VII 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.

About the MIDI terminals

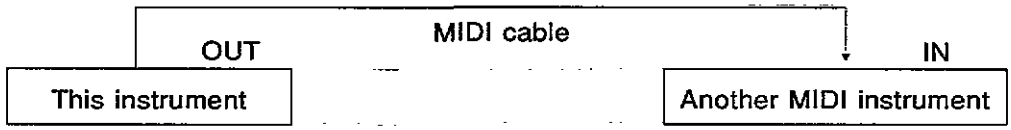


IN: The terminal by which this instrument receives data from other equipment.

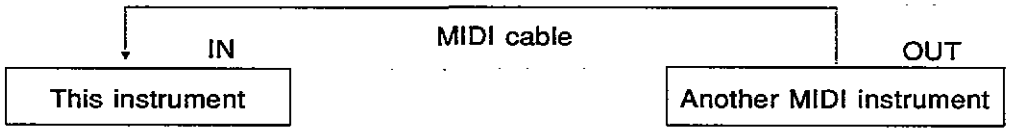
OUT: The terminal that transmits data from this instrument to other equipment.

Connection examples

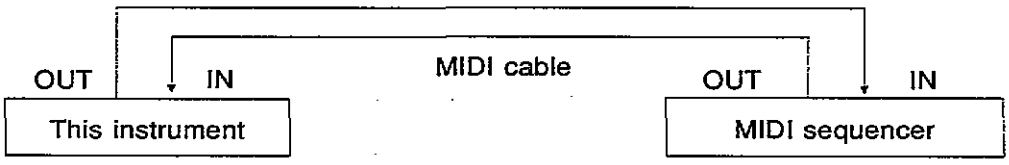
■ To generate sound from a connected instrument by playing this instrument



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

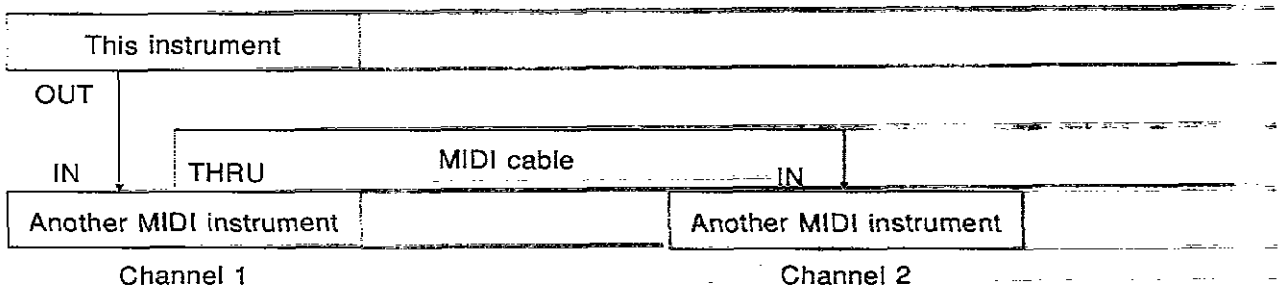


■ To connect to an external sequencer (including personal computers)



MIDI Channel

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.

- The MIDI notes are assigned numbers from 0 to 127, with middle C (C4) 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.

GENERAL MIDI

GENERAL MIDI (GM) means that sound changes, the drum map and various important controllers will correspond on all GENERAL MIDI instruments from any manufacturer. Standard MIDI File software which conforms to GENERAL MIDI will use the sounds and functions intended by the software manufacturer.

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

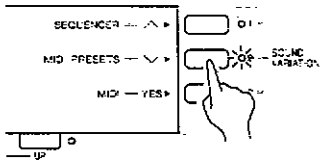
GENERAL MIDI

Setting the MIDI presets

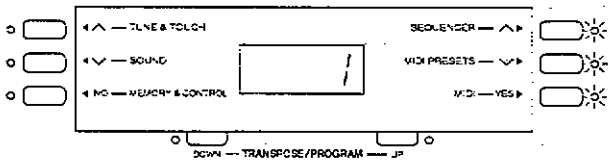
Establish the optimum settings depending on how this instrument is connected to other equipment.

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

2. Press the **MIDI PRESETS** button to turn it on.



- [PSt] is shown on the display. After about 2 seconds, the display similar to the following appears.



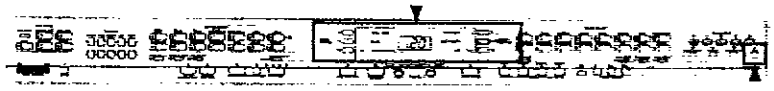
3. Use the ∧ and ∨ buttons to the right of the display to select the number for your equipment configuration (1 to 16).
- The numbers and corresponding configurations are shown in the table below. (Detailed information concerning the preset data can be found in the separate "REFERENCE GUIDE" provided.)

4. Press the **YES** button.
- [End] is shown on the display and the settings are executed.

5. When you have finished making the settings, press the **MENU** button to turn it off.
- The instrument returns to the normal performance mode.

No.	Transmitting side (master)	Receiving side (slave)	AUTO PLAY CHORD	No.	Transmitting side (master)	Receiving side (slave)	AUTO PLAY CHORD
1	PR series	Keyboard type 1	Not used	9	PR series	Keyboard type 1	Used
2	PR series	Keyboard type 2	Not used	10	PR series	Keyboard type 2	Used
3	PR series	Organ type 1	Not used	11	PR series	Organ type 1	Used
4	PR series	Organ type 2	Not used	12	PR series	Organ type 2	Used
5	PR series	Sound module	Not used	13	PR series	Sound module	Used
6	PR series	External SEQ.	Not used	14	PR series	External SEQ.	Used
7	Keyboard type 2	PR series	Not used	15	Keyboard type 2	PR series	Used
8	External SEQ.	PR series	Not used	16	External SEQ.	PR series	Used

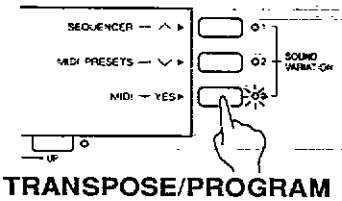
Outline of MIDI functions



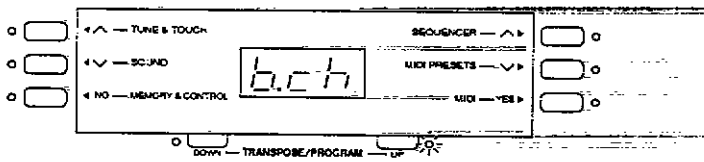
The various MIDI functions which you can set on this instrument are explained below.

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

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



3. Use the **TRANSPOSE/PROGRAM** buttons to select the desired function.



BASIC CHANNEL [b.ch] (page 73)
Assign a MIDI channel to each part.

OCTAVE SHIFT [oct] (page 74)
Shift the pitch of transmitted sound by octaves.

GENERAL MIDI [GM] (page 74)
Specify whether this instrument is compatible with GENERAL MIDI standard instruments.

LOCAL CONTROL [L.ct] (page 75)
Specify whether sound is generated from this instrument when MIDI data is transmitted.

REALTIME COMMAND [Srt] (page 75)
Settings for realtime data, such as tempo, **START/STOP**, etc.

CLOCK [CL] (page 76)
Settings for synchronization.

NOTE ONLY [nt.o] (page 76)
Select whether only note data is exchanged.

TRANSPOSE OUTPUT [trA] (page 77)
Specify how note data is handled when the **TRANSPOSE** is on.

PROGRAM CHANGE MODE [P.Ch.] (page 77)
Set the program change mode.

SONG SELECT [S.SL] (page 78)
Specify whether song number data from a disk is exchanged.

MIDI SETUP LOAD [M.Ld] (page 78)
Specify whether MIDI data is also loaded when disk data is loaded.

PROGRAM CHANGE TO PANEL MEMORY [P.P.M] (page 79)
Specify how **PANEL MEMORY** operation affects program change data.

RIGHT INPUT [r.in] (page 79)
Specify how received note data is handled.

APC INPUT [A.in] (page 80)
Specify how data for the **AUTO PLAY CHORD** is received.

TECHNI-CHORD OUTPUT [tEC] (page 80)
Specify how **TECHNI-CHORD** data is handled.

DRUM PATTERN OUTPUT [dr.o] (page 81)
Specify how data for the **DRUMS** part is transmitted.

APC OUTPUT [Ac.o] (page 81)
Specify whether **AUTO PLAY CHORD** data is transmitted.

4. Perform the setting procedures.
- The indicators of the buttons you need to use are lit.
- During the procedure, you can use the **TRANSPOSE/PROGRAM** buttons to change to another menu.

5. When you have finished making the settings, press the **MENU** button to turn it off.
- The instrument returns to the normal performance mode.

MIDI Implementation Chart
Although MIDI makes it easy for you to connect various instruments for an enhanced performance, it does not necessarily follow that all MIDI data can be exchanged. For example, if the transmitting instrument handles data that the receiving instrument cannot, then such data cannot be successfully sent. For data to be exchanged, both instruments must be able to handle it. You can find out what kind of data can be sent or received by each instrument by referring to the MIDI Implementation Chart for each instrument. The MIDI Implementation Chart for this instrument can be found in the separate "REFERENCE GUIDE" provided.

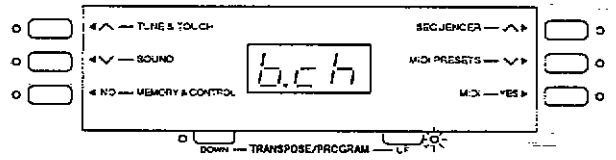
MIDI data format
A detailed explanation of how MIDI data of this instrument is organized can be found in the separate "REFERENCE GUIDE" provided.

Setting the MIDI functions

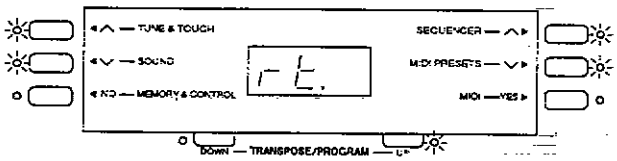
BASIC CHANNEL

Assign a MIDI channel to each part.

1. Select the BASIC CHANNEL [b.ch] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the left of the display to select the part.
- Select from RIGHT [rt.], PART 2 [P2], LEFT [LFt], PART 4 to 16 [P4 to P16], CONTROL [CtL], ACCOMP 1 to 3 [AC1 to AC3], BASS [bAS], DRUMS [dr], CHORD [Chd].
- After about 2 seconds, the display changes to the channel display.

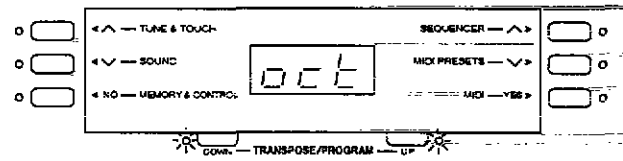
3. Use the ∧ and ∨ buttons to the right of the display to select a basic channel for the part (OFF, 1 to 16).
- A part which has been set to [oFF] cannot be used to transmit or receive MIDI data.

4. Repeat steps 2 and 3 for each part as desired.

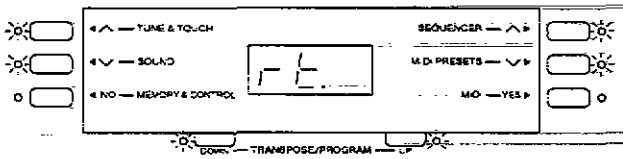
OCTAVE SHIFT

Set the octave shift value for transmitted key note data of each part independently.

1. Select the OCTAVE SHIFT [oct] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the left of the display to select the part.
- Select from RIGHT [rt.], PART 2 [P2], LEFT [LFt], PART 4 to 16 [P4 to P16], CONTROL [CtL], ACCOMP 1 to 3 [AC1 to AC3], BASS [bAS], DRUMS [dr], CHORD [Chd].
- After about 2 seconds, the display changes to the octave shift value display.

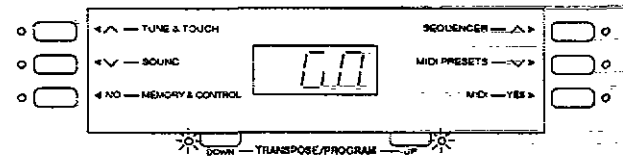
3. Use the ∧ and ∨ buttons to the right of the display to set the octave shift value (–2 to 2).
- The transmitted and received octave shifts are linked. For example, if the transmitted octave shift is set to 1, the received octave shift is automatically set to –1.

4. Repeat steps 2 and 3 for each part as desired.

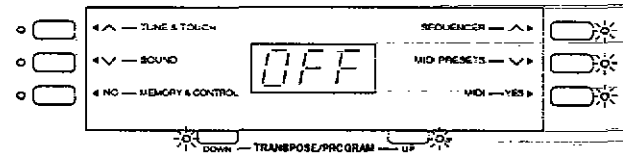
GENERAL MIDI

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

1. Select the GENERAL MIDI [GM] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to specify whether this instrument is compatible [On] or not compatible [OFF] with GENERAL MIDI standard instruments.
- This setting is automatically set to OFF when the power is turned on.
- This setting is automatically set to [On] if disk data other that Technics data is loaded.
- 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. (Refer to the separate "REFERENCE GUIDE" provided.)
- If GENERAL MIDI on/off data is received from connected MIDI instrument, the received data has priority.

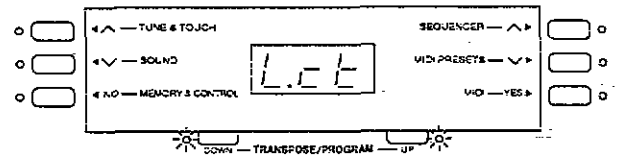
3. Press the **YES** button.
- The [yES] confirmation display appears. Press the **YES** button to confirm that you wish to execute the function. Or press the **NO** button to cancel the procedure.

Warning
- The **SEQUENCER** memory is cleared when the GENERAL MIDI mode is changed.
- If the power is turned off while the GENERAL MIDI mode is [On], the setting is automatically set to [OFF] and the **SEQUENCER** memory is cleared.

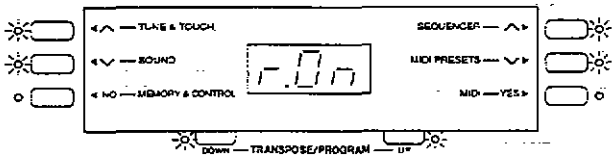
LOCAL CONTROL

Specify whether sound is generated from this instrument when MIDI data is transmitted.

1. Select the LOCAL CONTROL [L.ct] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the left of the display to select the part.
- Select from RIGHT [r] and LEFT [L].

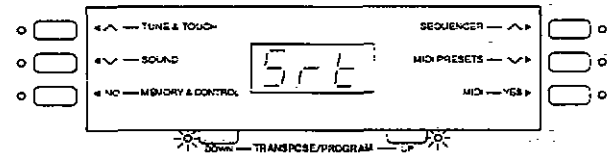
3. Use the ∧ and ∨ buttons to the right of the display to specify whether the performance from this instrument sounds from this instrument [On] or not [OF].

4. Repeat steps 2 and 3 for each part as desired.

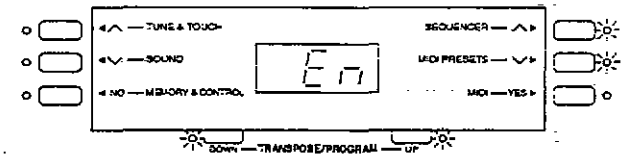
REALTIME COMMAND

Enable or disable the exchange of start/stop data (realtime commands).

1. Select the REALTIME COMMAND [Srt] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to change the setting.

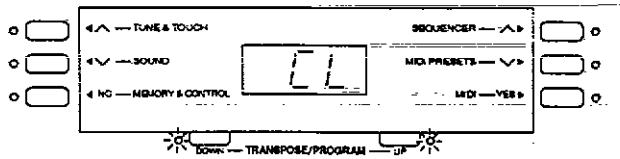
ENABLE [En]
Rhythm and **SEQUENCER** start/stop, continue, and song position pointer data can be transmitted/received.

DISABLE [diS]
This data cannot be transmitted/received.

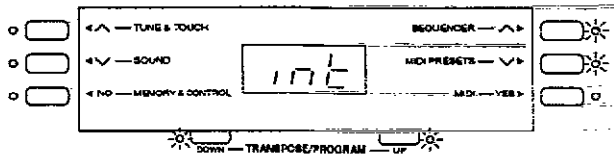
CLOCK

Specify whether this instrument's **RHYTHM** and **SEQUENCER** performance is controlled by the internal clock or by the clock of the connected instrument.

1. Select the CLOCK [CL] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to change the setting.

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

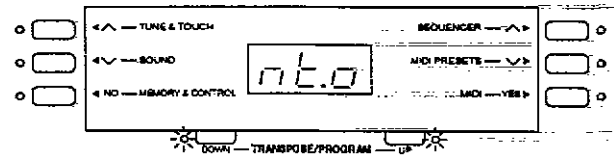
MIDI [– – –]
The clock of the connected equipment is used to control the performance. This instrument's clock is disabled.

- When MIDI is selected, the tempo is displayed as [– – –] and rhythm and **SEQUENCER** are disabled until the CLOCK signal is received from the connected instrument.

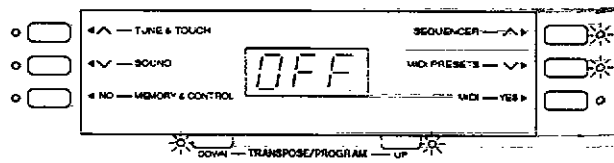
NOTE ONLY

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

1. Select the NOTE ONLY [nt.o] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to select whether data exchange is enabled [On] or disabled [OFF].

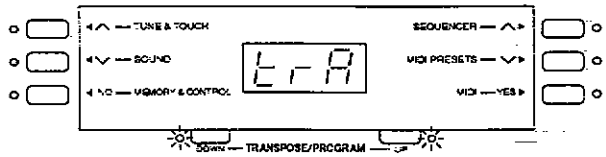
[On]: Only note on/off data is exchanged.

[OFF]: Other data is also exchanged.

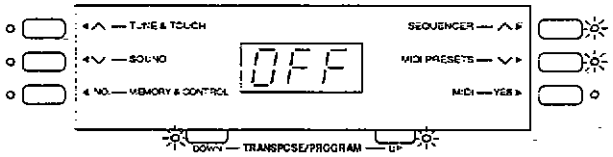
TRANSPOSE OUTPUT

Specify how note number data is transmitted when the **TRANSPOSE** function is active.

1. Select the TRANSPOSE OUTPUT [trA] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



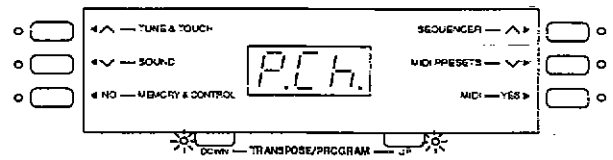
2. Use the ∧ and ∨ buttons to the right of the display to select [On] or [OFF].

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

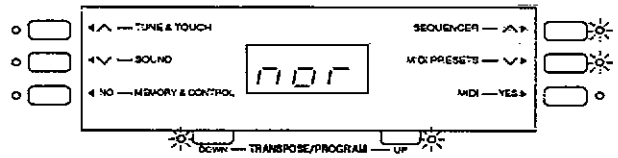
PROGRAM CHANGE MODE

Specify how program change numbers are interpreted during data exchange.

1. Select the PROGRAM CHANGE MODE [P.Ch.] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to change the setting.

NORMAL [nor]
The program change numbers follow the order of the sound buttons as they are lined up on the panel.

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.

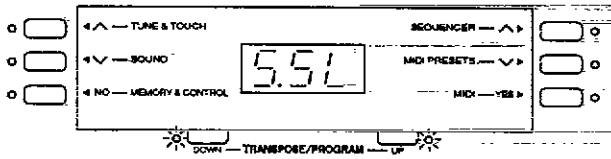
GM [GM]
Program change numbers follow the GENERAL MIDI standard.

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

SONG SELECT

Enable or disable the exchange of song number data (song number on a disk).

1. Select the SONG SELECT [S.SL] display. (Refer to page 72.)
- The display changes to the following.

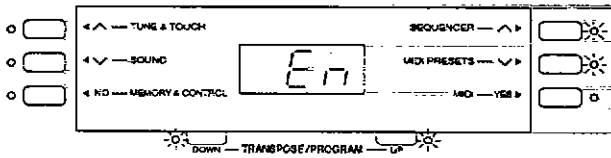


2. Use the ∧ and ∨ buttons to the right of the display to change the setting.

ENABLE [En]
Song number data can be exchanged.

DISABLE [diS]
Song number data cannot be exchanged.

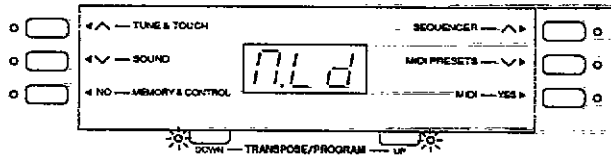
- After about two seconds, the display changes to the following.



MIDI SETUP LOAD

Enable or disable the recall of MIDI settings when disk data is loaded.

1. Select the MIDI SETUP LOAD [M.Ld] display. (Refer to page 72.)
- The display changes to the following.

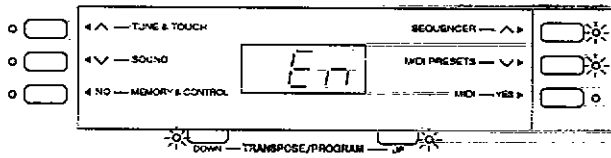


2. Use the ∧ and ∨ buttons to the right of the display to change the setting.

ENABLE [En]
When disk data is loaded, the MIDI settings stored on the disk are automatically recalled.

DISABLE [diS]
MIDI settings stored on the disk are not recalled.

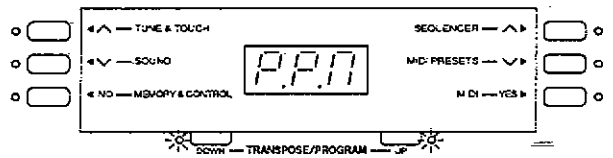
- After about two seconds, the display changes to the following.



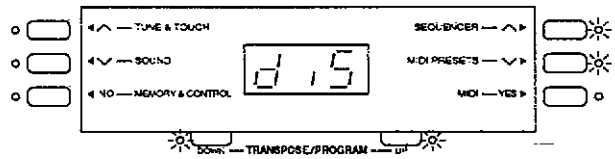
PROGRAM CHANGE TO PANEL MEMORY

Specify how **PANEL MEMORY** operation affects transmission or reception of program change data.

1. Select the PROGRAM CHANGE TO PANEL MEMORY [P.P.M] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to change the setting.

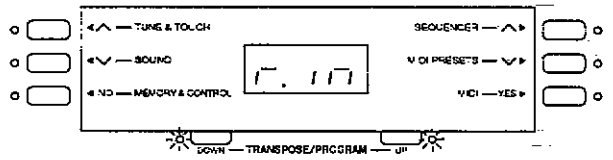
ENABLE [En]
Transmission/reception of data is enabled.

DISABLE [diS]
Transmission/reception of data is disabled.

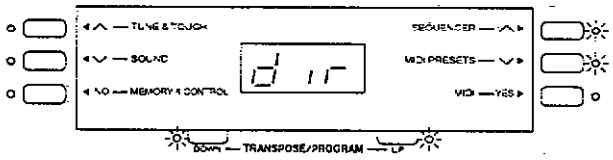
RIGHT INPUT

Specify how received note data is handled.

1. Select the RIGHT INPUT [r.in] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to change the setting.

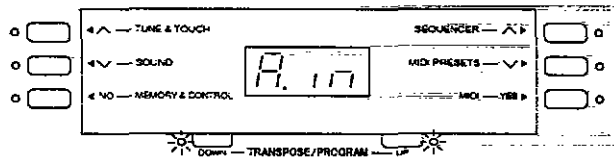
SINGLE [SGL]
Data is received only on the channel for the RIGHT part.

DIRECT [dir]
Select this mode when this instrument is to be used as the sound generator. Performance data for all parts is received on their respective channels.

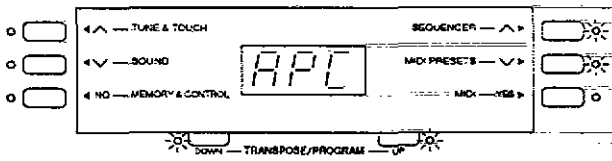
APC INPUT

Enable or disable the reception of **AUTO PLAY CHORD** data.

1. Select the APC INPUT [A.in] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to change the setting.

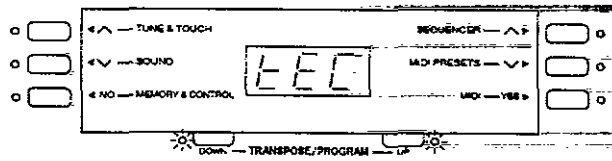
APC [APC]: Input data for the **ACCOMP 1, 2, 3, BASS DRUMS** and CHORD parts is received.

DIRECT [dir]: Data for the above parts is not received.

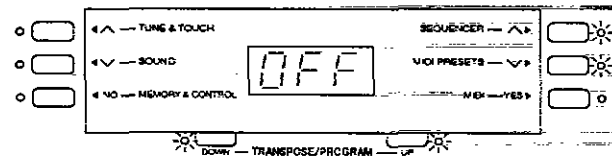
TECHNI-CHORD OUTPUT

Specify how **TECHNI-CHORD** data is handled.

1. Select the TECHNI-CHORD OUTPUT [tEC] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to select [On] or [OFF].

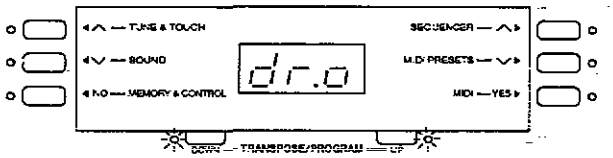
[On]: Key notes generated by the **TECHNI-CHORD** are also transmitted.

[OFF]: Only key note data of the played keys is transmitted.

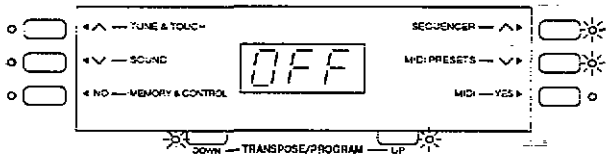
DRUM PATTERN OUTPUT

Enable or disable the transmission of **DRUMS** part data.

1. Select the DRUM PATTERN OUTPUT [dr.o] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to select [On] or [OFF].

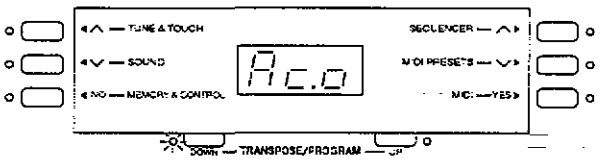
[On]: Data from the **DRUMS** part is transmitted.

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

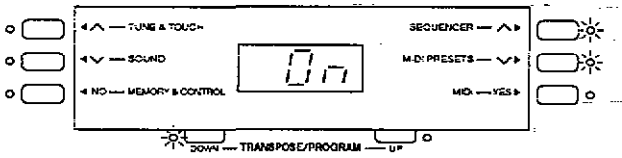
APC OUTPUT

Enable or disable the transmission of **AUTO PLAY CHORD** data.

1. Select the APC OUTPUT [Ac.o] display. (Refer to page 72.)
- The display changes to the following.



- After about two seconds, the display changes to the following.



2. Use the ∧ and ∨ buttons to the right of the display to select [On] or [OFF].

[On]: The data for the **ACCOMP 1, 2, 3, BASS** and CHORD parts is transmitted.

[OFF]: Data for the above parts is not transmitted.

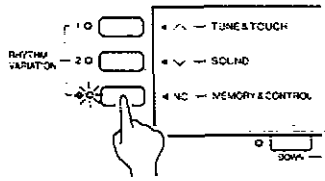
Initialize

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

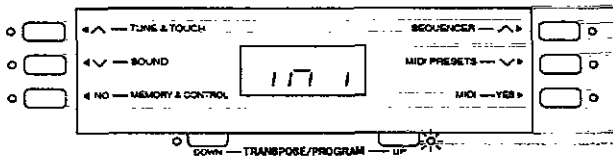
INITIAL

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

2. Press the **MEMORY & CONTROL** button to turn it on.



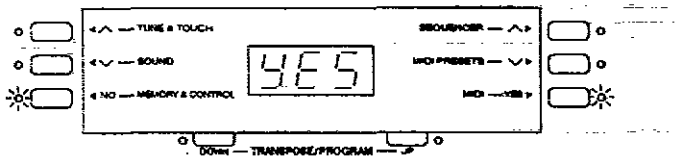
3. Use the **TRANSPOSE/PROGRAM** buttons to select the INITIAL [ini] display.



- After about two seconds, the display changes to the following.

4. Use the ∧ and ∨ buttons to the left of the display to select the desired type of initialization.
- Select from ALL [ALL], SEQUENCER [SEq], COMPOSER [CMP], and SOUND [Snd].

5. Press the **YES** button.
- The [yES] confirmation display appears. Press the **YES** button to confirm that you wish to execute the function. Or press the **NO** button to cancel the procedure.



- When you press the **YES** button, initialization begins. When initialization is completed, the instrument returns to the normal performance mode.
- You can also reset all the instrument settings with the following procedure: Turn off the **POWER** button once. Then, while pressing the three lower left buttons in the **RHYTHM SELECT** section at the same time, turn the **POWER** button on again.

■ About the backup memory

The panel settings and stored memories, such as the **SEQUENCER** and **COMPOSER**, are maintained in a backup memory for about 80 minutes after the power to this instrument is turned off. If you wish to keep the memory contents, before you turn off the instrument, use the SAVE procedure to store the desired data on a disk for recall at a later time.

- The back-up memory does not function unless the power has been on for about 10 minutes.

■ Power on settings

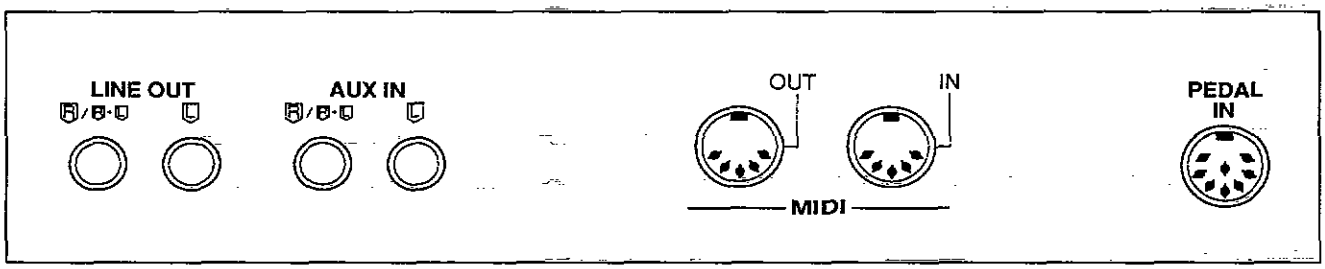
When the **POWER** button of this instrument is turned on, the settings below are automatically set to those suitable for piano performance.

PLAY STYLE: PIANO MODE
Sound: **GRAND PIANO**
TRANSPOSE: C
SUSTAIN PEDAL: On
DIGITAL EFFECT: Off
SYNCHRO START: Off
MINIMUM RANGE: On

- When you turn the power on, you can recall all the settings which were in effect at the time you turned the instrument off: while depressing the sustain (right) pedal, turn on the power.

Connections

(On the rear of the piano)



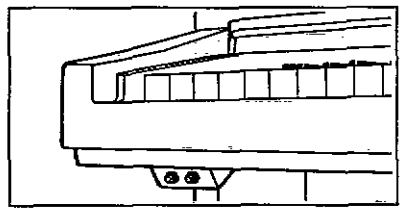
PEDAL IN
Connect the cord from the pedal unit to this terminal.

MIDI
These terminals are for connection to another MIDI instrument. (Refer to page 69.)

AUX IN (input level 0.5 Vrms, 6 kΩ)
Other instruments such as a sound generator can be connected to this terminal, and the sound will be output from this instrument's speakers. To receive monaural sound, connect the other instrument to the **R/R+L** terminal. (Do not connect the **L** terminal.)

LINE OUT (output level 1.0 Vrms, 600 Ω)
By plugging into a high-power amplifier, the sound can be reproduced at a high volume. To output monaural sound, connect the other equipment to the **R/R+L** terminal. (Do not connect the **L** terminal.)

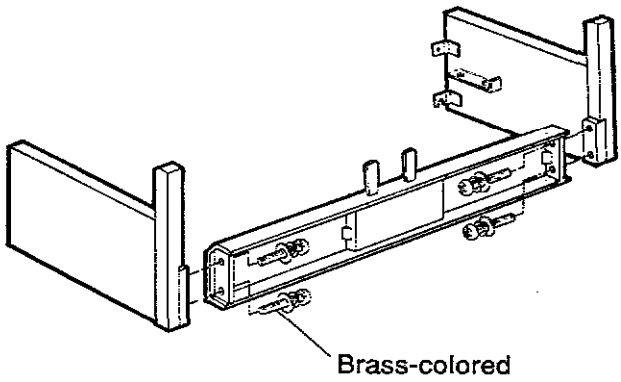
Phones (∩) × 2
For silent practice, headphones may be used. When plugged in, the speaker system is automatically switched off, and sound is heard only through the headphones.



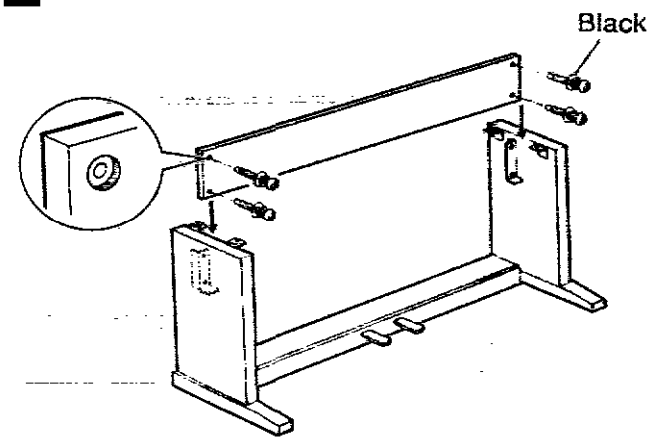
Assembly

- Assemble your Technics piano as shown in the following diagrams.
- To disassemble the piano, reverse the procedure.
- To prevent the piano from falling off the stand, secure it firmly with the bolts.

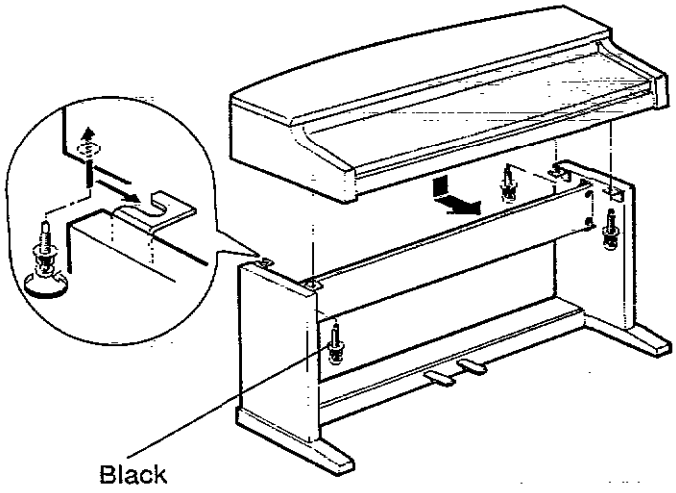
1



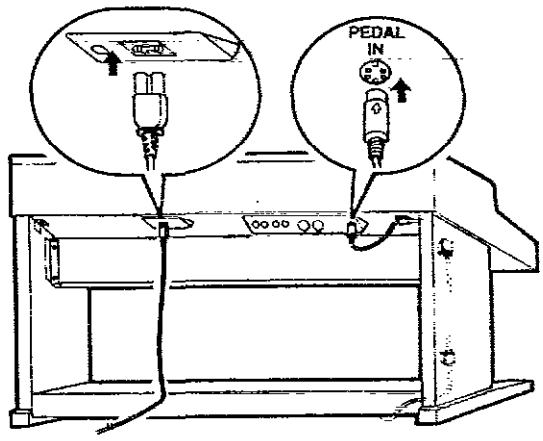
2



3



4



Symptoms which appear to be signs of trouble

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

	Phenomenon	Remedy
Sounds and effects	The buttons, keys, etc. malfunction.	• Turn off the **POWER** button once, then turn it on again. If this procedure is not successful, turn off the **POWER** button once. Then, while pressing the three lower left buttons in the **RHYTHM SELECT** section (**ROCK/DISCO**, **ROCK [OTHERS]** and **JAZZ COMBO**) at the same time, turn the **POWER** button on again. (Note that, in this case, all programmable settings, functions and memories return to their factory-preset status.)
	No sound is produced when the keys are pressed.	• The **MAIN VOLUME** is at the minimum setting. Adjust the volume with the **MAIN VOLUME** control. • The volumes for the selected parts are set to the minimum levels. Use the **BALANCE** buttons to set the volumes of the relevant parts to appropriate levels. (Refer to page 22.) • The LOCAL CONTROL for a part performed on the keyboard is set to OFF. Set the LOCAL CONTROL to ON. (Refer to page 75.)
	The volume is very low when the keyboard is played.	• The volume setting in the **SEQUENCER** contents is very low. Follow the INITIAL procedure to reset the settings. (Refer to page 82.)
	Only percussion instrument sounds are produced when the keyboard is played.	• In the **SOUND SELECT** section, the **KEYBOARD PERC** button is on.
	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 74.)
	The sound you hear is different from the sound you selected.	• This sometimes occurs when you play back **SEQUENCER** or **COMPOSER** data which was created on a different PR Series model, or when MIDI data is received from a connected instrument. Select the desired sounds again.
	The sustain does not work even when the sustain pedal is depressed.	• The sustain pedal is not connected. Connect the pedal cord firmly to the **PEDAL IN** terminal on the back of the instrument. • When the **SUSTAIN PEDAL** button is off, the sustain does not work even when the pedal is depressed. Turn on the **SUSTAIN PEDAL** button.
	The soft pedal does not operate properly. For example, when the soft pedal is depressed, the rhythm starts or a fill-in is played.	• Different functions can be programmed in the soft pedal. You can return the pedal to its original function by turning off the instrument once, or by using the PEDAL SETTING mode. (Refer to page 68.)
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 **RHYTHM SELECT** section, a **COMPOSER** rhythm in bank **A** or bank **B** with no stored pattern was selected. Select a different rhythm. • A **SEQUENCER** track button is on. When you are not playing back the **SEQUENCER** performance, turn off the track buttons. • CLOCK is set to MIDI. Set CLOCK to INTERNAL. (Refer to page 76.) • 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 74.)

	Phenomenon	Remedy
AUTO PLAY CHORD	No sound is produced for the automatic accompaniment.	• In the **RHYTHM SELECT** section, a **COMPOSER** rhythm in bank **A** or bank **B** 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.	• Some or all of the **ACCOMP 1, 2,** and **3** buttons are turned off. Press the buttons to turn them on. • The **ACCOMP** volumes are set to the minimum level. Use the **BALANCE** buttons to set the volumes to appropriate levels.
SEQUENCER	Storage is not possible.	• The remaining memory capacity of the **SEQUENCER** is 0. Follow the SONG CLEAR or TRACK CLEAR procedure to erase the memory. (Refer to page 44.)
	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 37.)
COMPOSER	Storage is not possible.	• The remaining memory capacity of the **COMPOSER** is 0.
	Setting the time signature and number of measures is not possible.	• The time signature and number of measures cannot be changed for a pattern which is currently recorded in the **COMPOSER**. If you wish to change the time signature and/or measure data, first follow the procedure to clear the memory. (Refer to page 48.)
	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 50.)
Disk Drive	The Disk Drive produces a noise during recording or playback.	• This occurs when the Disk Drive is reading a disk. It does not indicate a problem.
	When the procedure to load from a disk is performed, the contents of the piano memory are erased.	• When performing the load operation from a disk, the piano memory changes to that of the data loaded from the disk. If you wish to preserve a song which is stored in the piano memory, save it on a disk before performing the load procedure. (Refer to page 58.)
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 service center.
	The cabinet becomes warm during use.	• This instrument has a built-in power source that heats the cabinet to some degree. This is not an indication of trouble.

Error messages

No.	Contents
00	The data on the disk that you are using is for a different product.
01	An error has occurred while the disk was loading. Please try again!
02	There is no disk in the Disk Drive.
03	The file that you tried to load is empty.
05	An error has occurred while the disk was saving. Please try again!
06	The disk that you are using is write protected. Please remove the write protection and try again.
08	An error has occurred while the disk was formatting. The disk that you are using may be faulty. Please try formatting another disk.
10	The data is already copy protected.
11	The password that you entered is incorrect.
20	A problem has occurred with your **SEQUENCER** data. This might be due to a damaged or faulty disk.
23	It is impossible to change the time signature because it has already been set in the existing tracks.

No.	Contents
24	A RHYTHM track already exists. It is impossible to assign two tracks to RHYTHM.
28	This song is too long to be saved as a MIDI file.
29	The MIDI file that you have tried to load exceeds the memory capacity of this PR and cannot be played. The **SEQUENCER** memory has been cleared.
30	It is not possible to change the time signature or measure length of a **COMPOSER** pattern after it has been recorded. If you want to proceed, you must first clear the entire **COMPOSER** pattern.
45	This software format is not supported by the PR and cannot be loaded.
50	There was no data in the **SEQUENCER** when you attempted to save a Standard MIDI File.
52	MIDI FILE LOAD was used to load data from a disk which is not in the Standard MIDI File format.
53	There is no track which can be recorded in the step record mode.
FUL	Floppy disk; The disk that you are using is full. Please use another disk. **SEQUENCER**; Memory full **COMPOSER**; Memory full

Index

Specifications

		SX-PR303
KEYBOARD		88 KEYS
SOUND GENERATOR		PCM
MAXIMUM NUMBER OF NOTES PRODUCED SIMULTANEOUSLY		32 NOTES
PLAY STYLE		PIANO MODE, KEYBOARD SPLIT, AUTO PLAY CHORD
SOUNDS	PIANO	4 SOUNDS: GRAND, UPRIGHT, ELECTRIC, MODERN
SOUNDS	SOUND SELECT	161 SOUNDS
SOUNDS	SOUND SELECT	GROUP: PIANO, E PIANO, AC GUITAR, E GUITAR, BRASS, TRUMPET, BASS, KEYBOARD PERC, HARPSI/MALLET, SPECIAL PERC, STRINGS/VOCAL, ORG/ACCORDION, FLUTE/REED, SAX, SYNTH, OTHERS
KEY SPLIT		○ (G2, C3, C4)
PEDAL		SUSTAIN, SOFT
DIGITAL EFFECT		○
DIGITAL REVERB		○
TRANSPOSE		○ (G–C–F)
RHYTHM		70 RHYTHMS
RHYTHM		GROUP: 8 BEAT, ROCK/DISCO, 16 BEAT, SWING, ROCK (OTHERS), JAZZ COMBO, SHOW TIME, COUNTRY/R & B, TRAD, MARCH/POLKA, WALTZ, LATIN 1, LATIN 2, OTHERS
METRONOME		○
CONTROL		MAIN VOLUME, BALANCE, START/STOP, SYNCHRO START, FILL IN 1, FILL IN 2, INTRO & ENDING, TEMPO, TRANSPOSE/PROGRAM
ONE TOUCH PLAY		○
TECHNI-CHORD		○
AUTO PLAY CHORD		BASIC, ADVANCED, PIANIST, ACCOMP 1–3
PANEL MEMORY		SET, 1–3
SEQUENCER		16 TRACKS STORAGE CAPACITY: APPROX. 19000 NOTES INPUT MODES: REALTIME, STEP (CHORD, RHYTHM ONLY) FUNCTIONS: TRACK ASSIGN, TRACK CLEAR, SONG CLEAR, MEDLEY
COMPOSER		STORAGE CAPACITY: APPROX. 8600 NOTES, 5 PARTS (BASS, ACCOMP 1, 2, 3, DRUMS), MEMORY: 2 BANK × 6 FUNCTIONS: MODE SELECT
DISPLAY		LED (3 DIGITS)
DEMO		○
DISK DRIVE		DISK LOAD, DISK SAVE, MIDI FILE LOAD, MIDI FILE SAVE, DISK FORMAT
SOUND		SOUND SELECT, KEY SHIFT, PITCH BEND RANGE, BALANCE, TECHNI-CHORD TYPE, REVERB SET, ADVANCED TYPE
TUNE & TOUCH		MASTER TUNING, PIANO TUNING, TOUCH SENSE, MINIMUM RANGE
MEMORY & CONTROL		INITIAL, PEDAL SETTING
MIDI		MIDI PRESETS, BASIC CHANNEL, OCTAVE SHIFT, GENERAL MIDI, LOCAL CONTROL, REALTIME COMMAND, CLOCK, NOTE ONLY, TRANSPOSE OUTPUT, PROGRAM CHANGE MODE, SONG SELECT, MIDI SET UP LOAD, PROGRAM CHANGE TO PANEL MEMORY, RIGHT INPUT, APC INPUT, TECHNI-CHORD OUTPUT, DRUM PATTERN OUTPUT, APC OUTPUT
EXTERNAL MEMORY		DISK DRIVE for 2HD, 2DD
TERMINALS		HEADPHONE TERMINALS × 2, LINE OUT, AUX IN, MIDI (IN, OUT)
OUTPUT		25 W × 2
SPEAKERS		16 cm × 2, 6.5 cm × 2
POWER REQUIREMENT		150 W, 95 W (NORTH AMERICA AND MEXICO)
POWER REQUIREMENT		AC120/220/240 V 50/60 Hz AC120 V 60 Hz (NORTH AMERICA AND MEXICO) AC230 V 50/60 Hz (NEW ZEALAND AND EUROPE EXCEPT FOR UNITED KINGDOM) AC230–240 V (UNITED KINGDOM)
DIMENSIONS (W×H×D)		142.4 cm × 101.6 cm × 59.0 cm (56-1/16" × 40" × 23-7/32")
NET WEIGHT		53 kg (116.8 lbs.)
ACCESSORIES		STAND, AC CORD

* Specifications are subject to change without notice for further improvement.

Matsushita Electric Industrial Co., Ltd.
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ENGLISH EN MC EP X

QQTG0236A

Technics

SX-PR303 REFERENCE GUIDE

Contents

DISPLAY CHARACTERS

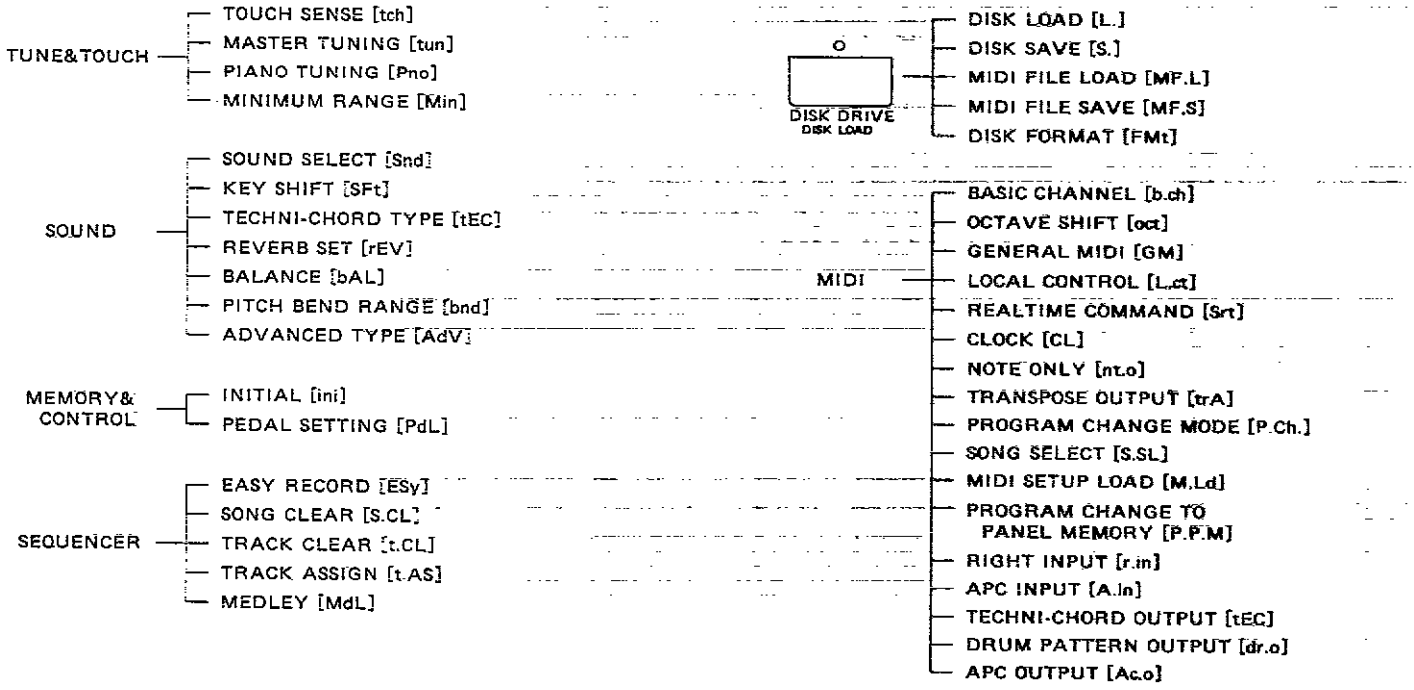
character	display	character	display	character	display	character	display
0		C		L		S	
1		c		l		s	
2		D		M		T	
3		d		m		t	
4		E		N		U	
5		e		n		u	
6		F		O		V	
7		f		o		v	
8		G		P		Y	
9		g		p		y	
A		H		Q			
a		h		q			
B		I		R			
b		i		r			

DEMO PERFORMANCE

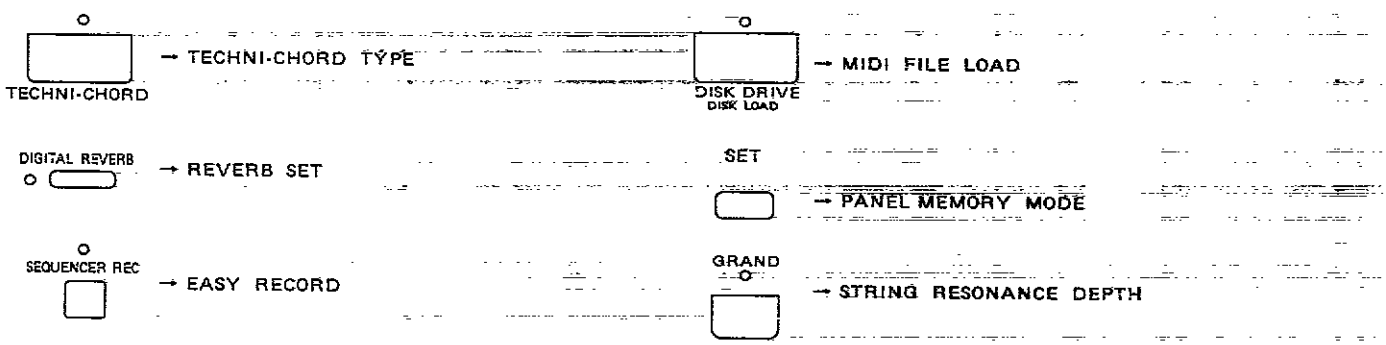
Style Demo	MAIN MEDLEY	Sound	E.PIANO
	FILM SCORE		GUITAR
	CONCERT (Rachmaninoff : Piano Concert No.2)		STRINGS
			SOLO BRASS
Piano Sound	MOZART (Mozart : Piano Sonata A major K. No.331)		PIPE ORGAN
			SYNTH
	LISZT (Liszt : Love's Dream No.3)	Rhythm	8BT BALLAD
	CHOPIN (Chopin : Grande Valse Brillante Opus34 No.1)		SAMBA ROCK
			JAZZ BALLAD
	JOPLIN (Joplin : Maple Leaf Rag)		COUNTRY
			FOXTROT
	QUARTET		BROADWAY SHOW
	PIANO COMBO		

•Demonstration performances for which no source is indicated are Technics original compositions.

DISPLAY GUIDE



EASY SETTING (Press and hold)



SOUND VARIATIONS

	SOUND VARIATIONS	MIDI PROGRAM CHANGE DATA NORM	TECH	GM
	GRAND PIANO			
	Grand Piano	1 (0)	0 (0)	1
	ELECTRIC PIANO			
	E.Piano 1	*3 (0)*	*5 (0)*	*5*
	PIANO			
1	Piano 1 Octave	13 (0)	0 (16)	—
2	Rock Piano	13 (1)	3 (32)	—
3	Honky Tonk	13 (2)	1 (16)	4
	E PIANO			
1	E.Piano 2	14 (0)	5 (32)	—
2	Modern E.Piano 2	14 (1)	4 (0)	—
3	Electric Grand	14 (2)	3 (0)	3
	AC GUITAR			
1	Classic Guitar	15 (0)	20 (0)	—
2	Bright Acoustic Guitar	15 (1)	21 (0)	25
3	Folk Guitar	15 (2)	22 (0)	26
	E GUITAR			
1	Jazz Guitar	16 (0)	25 (0)	27
2	Bright Solid	16 (1)	26 (0)	28
3	Hawaiian Guitar	16 (2)	31 (0)	—
	BRASS			
1	Brass	17 (0)	56 (0)	62
2	Trombone	17 (1)	53 (0)	58
3	Close French Horn	17 (2)	54 (0)	—
	TRUMPET			
1	Trumpet	18 (0)	48 (0)	57
2	Mute Trumpet	18 (1)	50 (0)	60
3	Flugel Horn	18 (2)	51 (0)	—
	BASS			
1	Acoustic Bass	19 (0)	43 (0)	33
2	Electric Bass	19 (1)	40 (0)	—
3	Slap Bass 1	19 (2)	41 (0)	37
	HARPSI/MALLET			
1	Harpsichord	5 (0)	16 (0)	7
2	Glockenspiel	5 (1)	9 (0)	10
3	Vibraphone	5 (2)	8 (0)	12
	SPECIAL PERC			
1	Banjo	6 (0)	33 (0)	106
2	Harp	6 (1)	32 (0)	47
3	Timpani	6 (2)	126 (0)	48
	STRINGS/VOCAL			
1	Strings	7 (0)	100 (0)	49
2	Soft Strings	7 (1)	101 (32)	—
3	Choir Ah	7 (2)	104 (0)	53
	ORG/ACCORDION			
1	Jazz Organ	8 (0)	88 (0)	18
2	Pipe Organ 1	8 (1)	84 (0)	20
3	Musette	8 (2)	82 (0)	—

	SOUND VARIATIONS	MIDI PROGRAM CHANGE DATA NORM	TECH	GM
	UPRIGHT PIANO			
	Upright Piano	2 (0)	2 (32)	—
	MODERN PIANO			
	Modern E.Piano 1	*4 (0)*	*6 (0)*	*6*
	FLUTE/REED			
1	Jazz Flute	9 (0)	65 (0)	74
2	Oboe	9 (1)	66 (0)	69
3	Jazz Clarinet	9 (2)	68 (0)	72
	SAX			
1	Mellow Alto	10 (0)	77 (16)	—
2	Tenor Sax	10 (1)	78 (48)	—
3	Breathy Tenor	10 (2)	78 (16)	67
	SYNTH			
1	Brass & Synth	11 (0)	56 (48)	—
2	Fantasia	11 (1)	116 (32)	89
3	Dream	11 (2)	108 (32)	—
	KEYBOARD PERC			
1	Rock Kit 1	20 (0)	112 (128)	—
2	Rock Kit 2	20 (1)	115 (128)	—
3	Light Rock Kit	20 (2)	126 (128)	—
4	Soul Kit	20 (3)	121 (128)	—
5	Jazz Kit	20 (4)	113 (128)	—
6	Brush Kit	20 (5)	117 (128)	—
	OTHERS			
1	Bright Piano	12 (0)	1 (0)	2
2	Cembalo	12 (1)	18 (0)	—
3	Synth Clavi	12 (2)	115 (0)	—
4	Marimba	12 (3)	10 (0)	13
5	Clavi	12 (4)	17 (0)	8
6	Celesta	12 (5)	12 (0)	9
7	Xylophone	12 (6)	11 (0)	14
8	Tubular Bells	12 (7)	14 (0)	15
9	*Tinkle Bell*	12 (8)	14 (32)	113
10	Country Guitar	12 (9)	31 (16)	—
11	12 String Guitar	12 (10)	23 (0)	—
12	Mellow Solid Guitar	12 (11)	28 (0)	—
13	Mute Guitar	12 (12)	29 (0)	29
14	Distortion Guitar	12 (13)	30 (0)	31
15	Overdrive Guitar	12 (14)	27 (32)	30
16	Music Box	12 (15)	7 (0)	11
17	Steel Drum	12 (16)	15 (0)	115
18	Orchestra Hit	12 (17)	127 (16)	56
19	Kalimba	12 (18)	39 (0)	109
20	Sitar	12 (19)	38 (0)	105
21	Dulcimer	12 (20)	38 (16)	16
22	Koto	12 (21)	37 (0)	108
23	Shamisen	12 (22)	36 (0)	107
24	Octave Strings	12 (23)	102 (0)	—

SOUND VARIATIONS

	SOUND VARIATIONS	MIDI PROGRAM CHANGE DATA NORM	TECH	GM
	OTHERS			
25	Pizzicato	12 (24)	99 (0)	46
26	Violin	12 (25)	96 (0)	41
27	Country Fiddle	12 (26)	96 (32)	111
28	Slow Strings	12 (27)	101 (0)	50
29	Tremolo String	12 (28)	100 (32)	45
30	Synth Strings	12 (29)	103 (0)	51
31	Viola	12 (30)	97 (32)	42
32	Cello	12 (31)	97 (0)	43
33	Bowed Bass	12 (32)	98 (0)	44
34	Vocal Ooh	12 (33)	104 (32)	—
35	Vocal Doo	12 (34)	109 (0)	54
36	Mellow Ensemble	12 (35)	107 (16)	90
37	Synth Vocal	12 (36)	107 (0)	55
38	Air Vox	12 (37)	106 (16)	86
39	Halo Vox	12 (38)	107 (48)	95
40	Click Vox	12 (39)	106 (48)	103
41	Full Drawbars	12 (40)	89 (0)	17
42	Jazz Drawbars	12 (41)	93 (0)	—
43	Pop Organ	12 (42)	90 (0)	—
44	16' & 1'	12 (43)	91 (0)	—
45	Rock Organ	12 (44)	92 (32)	19
46	Theatre Organ	12 (45)	87 (32)	—
47	Pipe Organ 2	12 (46)	85 (0)	—
48	Octave Brass	12 (47)	56 (16)	—
49	Open French Horn	12 (48)	54 (16)	61
50	Tuba	12 (49)	55 (0)	59
51	Synth Brass	12 (50)	60 (0)	64
52	Synth Brass Ensemble	12 (51)	61 (16)	63
53	Soprano Sax	12 (52)	76 (0)	65
54	Alto Sax	12 (53)	77 (0)	66
55	Baritone Sax	12 (54)	79 (16)	68
56	Classic Clarinet	12 (55)	69 (0)	—
57	English Horn	12 (56)	67 (0)	70
58	Bassoon	12 (57)	70 (0)	71
59	Bright Accordion	12 (58)	80 (0)	22
60	Harmonica	12 (59)	83 (0)	23
61	Bagpipe	12 (60)	73 (0)	110
62	Shanai	12 (61)	73 (16)	112
63	Bandoneon	12 (62)	80 (16)	24
64	Harmonium	12 (63)	86 (32)	21
65	Piccolo	12 (64)	64 (0)	73
66	Classic Flute	12 (65)	65 (16)	—
67	Pan Flute	12 (66)	72 (0)	76
68	Shakuhachi	12 (67)	75 (0)	78
69	Recorder	12 (68)	74 (0)	75
70	Ocarina	12 (69)	74 (16)	80
71	Blown Bottle	12 (70)	72 (32)	77
72	Whistle	12 (71)	111 (0)	78
73	Synth Calliope	12 (72)	72 (48)	83
74	Fretless Bass	12 (73)	40 (32)	36
75	Picked Electric Bass	12 (74)	42 (0)	35
76	Bright Electric Bass	12 (75)	40 (16)	34
77	Synth Chopper	12 (76)	45 (0)	40
78	Slap Bass 2	12 (77)	41 (16)	38
79	Smack Bass	12 (78)	46 (48)	39
80	Bass & Lead	12 (79)	46 (32)	88
81	Square Lead	12 (80)	117 (0)	81
82	Saw Lead	12 (81)	118 (16)	82
83	Chiffer Lead	12 (82)	117 (32)	84
84	Charang	12 (83)	27 (48)	85
85	Guitar Harmonics	12 (84)	27 (16)	32
86	5th Wave	12 (85)	119 (0)	87
87	Synth Glocken	12 (86)	9 (32)	99
88	Polysynth	12 (87)	102 (32)	91
89	Spacy Pad	12 (88)	107 (32)	92
90	Crystal Ensemble	12 (89)	120 (0)	93
91	Metal Pad	12 (90)	106 (32)	94
92	Sweep Pad	12 (91)	62 (32)	96
93	Mist	12 (92)	108 (48)	101
94	Star Theme	12 (93)	120 (16)	104
95	String Pad	12 (94)	103 (16)	52
96	Ice Rain	12 (95)	121 (48)	97
97	Soundtrack	12 (96)	119 (16)	98
98	Goblins	12 (97)	106 (0)	102
99	Atmosphere	12 (98)	21 (48)	100
100	Seashore	12 (99)	124 (48)	123
101	Bird Tweet	12 (100)	125 (32)	124
102	Telephone	12 (101)	123 (0)	125
103	Helicopter	12 (102)	123 (16)	126
104	Applause	12 (103)	125 (48)	127
105	Gun Shot	12 (104)	123 (32)	128
106	Agogo	12 (105)	122 (0)	114
107	Wood Block	12 (106)	122 (16)	116
108	Taiko Drum	12 (107)	123 (48)	117
109	Melodic Tom	12 (108)	122 (32)	118
110	Synth Drum	12 (109)	124 (0)	119
111	Reverse Cymbal	12 (110)	122 (48)	120
112	Fret Noise	12 (111)	124 (16)	121
113	Breath Noise	12 (112)	124 (32)	122

・The numbers in parentheses ( ) are bank data.
Program change number = Program change data+1 / Bank number = Bank data+1

RHYTHM VARIATIONS

	RHYTHM VARIATIONS	MIDI PROGRAM CHANGE DATA NORM		MIDI PROGRAM CHANGE DATA TECH	
	8BEAT				
1	8 Beat Standard	10	(0)	90	(96)
2	8 Beat Ballad	10	(1)	91	(32)
3	Country Rock	10	(2)	85	(32)
	ROCK/DISCO				
1	Rock'n'Roll 1	3	(0)	80	(64)
2	8 Beat Soul	3	(1)	87	(32)
3	Disco Pop	3	(2)	123	(48)
	16BEAT				
1	16 Beat Standard 1	11	(0)	96	(64)
2	16 Beat Pop	11	(1)	107	(48)
3	Piano Pop	11	(2)	101	(0)
	ROCK (OTHERS)				
1	Shuffle R&R	4	(0)	76	(48)
2	Rock Ballad	4	(1)	74	(80)
3	Soul Rock Ballad	4	(2)	75	(32)
	SWING				
1	Standard Swing	12	(0)	25	(0)
2	Big Band Mid	12	(1)	36	(48)
3	Dixie	12	(2)	24	(32)
	JAZZ COMBO				
1	Jazz Combo	5	(0)	34	(16)
2	Jazz Ballad 1	5	(1)	44	(16)
3	Jazz Waltz	5	(2)	46	(48)
	COUNTRY/R&B				
1	Country 2step	13	(0)	17	(112)
2	Bluegrass	13	(1)	20	(48)
3	R&B 8 Beat	13	(2)	81	(16)
	SHOW TIME				
1	Broadway Show	6	(0)	15	(32)
2	Hollywood	6	(1)	30	(16)
3	Soft Shoe	6	(2)	24	(80)
	MARCH/POLKA				
1	U.S.March 2/4	14	(0)	0	(32)
2	U.S.March 6/8	14	(1)	2	(16)
3	Polka 2/4	14	(2)	4	(32)
	TRAD				
1	Foxtrot	7	(0)	29	(96)
2	Gospel Shuffle	7	(1)	77	(64)
3	Hawiian	7	(2)	22	(16)
	LATIN 1				
1	Rhumba	15	(0)	58	(32)
2	Beguine	15	(1)	59	(32)
3	Cha Cha	15	(2)	57	(48)

	RHYTHM VARIATIONS	MIDI PROGRAM CHANGE DATA NORM		MIDI PROGRAM CHANGE DATA TECH	
	WALTZ				
1	Simple Waltz	8	(0)	13	(0)
2	Swingy Waltz	8	(1)	12	(16)
3	Vienna Waltz	8	(2)	9	(32)
	LATIN 2				
1	Bossanova 1	16	(0)	48	(96)
2	Samba	16	(1)	51	(48)
3	Tango Continental	16	(2)	53	(64)
	OTHERS				
1	8 Beat Soft Rock	9	(0)	90	(48)
2	Folk Rock	9	(1)	85	(0)
3	Rock'n'Roll 2	9	(2)	80	(32)
4	Disco	9	(3)	123	(64)
5	16 Beat Standard 2	9	(4)	96	(48)
6	16 Beat Ballad	9	(5)	99	(96)
7	Jazz Rock	9	(6)	113	(80)
8	Soul Ballad	9	(7)	103	(32)
9	Caribbean Rock	9	(8)	118	(48)
10	Samba Rock	9	(9)	117	(16)
11	Salsa	9	(10)	68	(48)
12	Shuffle Boogie	9	(11)	77	(32)
13	Swing Rock	9	(12)	73	(16)
14	Big Band Fast	9	(13)	36	(32)
15	Big Band Slow	9	(14)	38	(80)
16	Jazz Ballad 2	9	(15)	35	(16)
17	Modern Jazz Fast	9	(16)	40	(80)
18	Country Folk	9	(17)	16	(16)
19	Country Waltz	9	(18)	19	(0)
20	R&B Ballad	9	(19)	75	(64)
21	Cabaret	9	(20)	15	(48)
22	Vaudeville	9	(21)	24	(64)
23	Paris Ballad	9	(22)	74	(96)
24	German March 2/4	9	(23)	1	(48)
25	Polka 6/8	9	(24)	5	(32)
26	Modern Fox	9	(25)	30	(0)
27	Standard Waltz	9	(26)	11	(16)
28	Chanson Waltz	9	(27)	11	(32)
29	Mambo	9	(28)	56	(32)
30	Swingy Reggae	9	(29)	71	(32)
31	Bossanova 2	9	(30)	48	(64)

•The numbers in parentheses ( ) are bank data.
Program change number = Program change data+1 / Bank number = Bank data+1

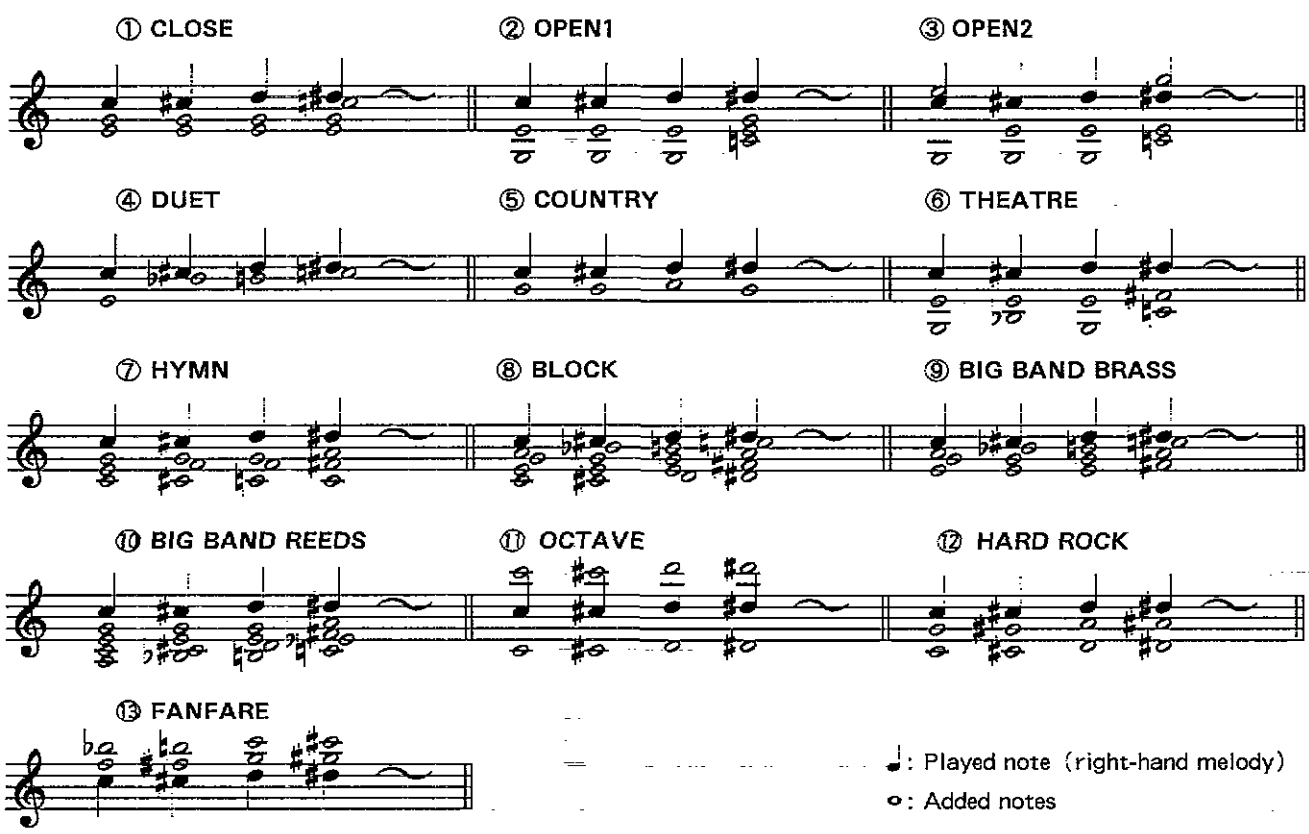
KEYBOARD PERCUSSION

		Other kits	MIDI NOTE NUMBER		General MIDI	MIDI NOTE NUMBER
			NORM	TECH		
		—	—	—	Bass Drum 2*	35
		Bass Drum	36	36	Bass Drum 1	36
		Rim Shot	37	47	Rim Shot	37
		Snare Drum 1	38	38	Snare Drum 1	38
		Special Snare Drum	39	31	Hand Clap	39
		Snare Drum 2	40	32	Electric Snare	40
		Floor Tom	41	95	Floor Tom Low	41
		Splash Cymbal	42	24	Hi Hat Close	42
		Tom Low	43	41	Floor Tom High	43
		Crash Cymbal Low	44	51	Hi Hat Pedal	44
		Tom Mid	45	43	Tom Low	45
		Crash Cymbal High	46	25	Hi Hat Open	46
		Tom High	47	45	Tom Mid	47
		Hi Hat Close 1	48	48	Tom High 1	48
		Hi Hat Close 2	49	49	Crash Cymbal 1	49
		Hi Hat Open	50	50	Tom High 2	50
		Ride Bell	51	28	Ride Cymbal 1	51
		Ride Cymbal	52	52	Chinese Cymbal	52
		Conga Low	53	53	Ride Bell	53
		Small Conga Low	54	54	Tambourine	54
		Conga High	55	55	Splash Cymbal	55
		Small Conga High	56	56	Cowbell	56
		Conga Crash	57	57	Crash Cymbal 2	57
		Metal Cabasa	58	58	Vibraslap	58
		Timbales Low	59	99	Ride Cymbal 2	59
		Timbales High	60	100	Bongo High	60
		Cowbell Low	61	66	Bongo Low	61
		Cowbell High	62	62	Conga Mute Crash	62
		Agogo Low	63	102	Conga High	63
		Agogo High	64	101	Conga Low	64
		Samba Whistle Low	65	65	Timbales High	65
		Samba Whistle High	66	66	Timbales Low	66
		Claves	67	67	Agogo High	67
		Slap	68	68	Agogo Low	68
		Hand Clap	69	69	Cabasa	69
		Tambourine	70	74	Maracas	70
		Shaker	71	96	Samba Whistle Short	71
		Triangle Mute	72	108	Samba Whistle Long	72
		Maracas	73	105	Guiro Short	73
		Triangle Open	74	107	Guiro Long	74
		Guiro Short	75	77	Claves	75
		Guiro Long	76	76	Wood Block Mid	76
		Orchestral Bass Drum	77	85	Wood Block Low	77
		Orchestral Snare Drum	78	86	Cuica High	78
		Orchestral Cymbal	79	87	Cuica Low	79
		Wind Chime	80	29	Triangle Mute	80
		—	—	—	Triangle Open*	81

* Sounds in SEQUENCER and MIDI function.

TECHNI-CHORD TYPE

<Example: C major chord>



MIDI Implementation Chart

Digital Ensemble [SX-PR303] (Transmitted)

Function		RIGHT, PART2, PART4~15	LEFT	PART16	ACMP1	ACMP 2,3	BASS	DRUMS	CHORD	CONTROL	Remarks
Basic Channel	Default	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	memorized
	Changed	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	
Mode	Default	3	3	3	3	3	3	3	3	3	OMNI OFF,POLY MODE
	Messages	×	×	×	×	×	×	×	×	×	
	Altered	—	×	—	—	—	—	—	—	—	
Note Number		0-119	0-119	0-119	0-119	0-119	0-119	0-119	0-119	—	Changes depending on the position of the transpose control,octave shift,and drums type.
	True voice	—	—	—	—	—	—	—	—	—	
Velocity	Note ON	○	○	○	○	○	○	○	○	—	
	Note OFF	×	×	×	×	×	×	×	×	—	
After Touch	Key's	×	×	×	×	×	×	×	×	—	
	Ch's	×	×	×	×	×	×	×	×	—	
Pitch Bender		○*	○*	×	○*	○*	○*	×	○*	×	
Control Change	0,32	○	○	○	○**	○**	○**	○	○	×	bank select MSB, LSB
	1	○*	○*	×	○*	○*	○*	×	○*	×	modulation
	6,38	○	○	×	×	×	×	×	×	×	data entry MSB, LSB
	7	○	○	○	○	○	○	○	○	×	volume
	10	○	○	×	×	×	×	×	×	×	panpot
	11	○*	○*	○*	×	×	×	×	×	×	expression
	64	○	○	×	○**	○**	○**	×	×	×	sustain
	66	○	○	×	×	×	×	×	×	×	sostenuto pedal
	67	○	○	×	×	×	×	×	×	×	soft pedal
	80	×	○	×	×	×	×	×	×	×	auto play chord
	82	×	×	×	×	×	×	○	×	×	intro, fill in, ending
	91	○	○	○	○	○	○	○	○	○	reverb
	93	○	○	×	○**	○**	○**	×	○	×	digital effect
	100,101	○	○	×	×	×	×	×	×	×	RPN LSB, MSB
	120	○*	○*	○*	×	×	×	×	×	×	all sound off
	121	○*	○*	○*	×	×	×	×	×	×	reset all cotrollers
Prog Change		○	○	○	○**	○**	○**	○	○	×	Changes depending on program change mode and prog.cng to p.mem.
	True #	—	—	—	—	—	—	—	—	—	
System exclusive		○									
System common	Song Pos	○×*									
	Song Sel	○×*									0-19
	Tune	×									
System Real Time	Clock	○									
	Commands	○×*									start/stop,continue
Aux Messages	Local ON/ OFF	×	×	×	×	×	×	×	×	—	
	All notes OFF	×	×	×	×	×	×	×	×	—	
	Active Sense	○									
	Reset	×									

Notes

○×*·····Whether or not the data for each of these items is transmitted can be set.

○* ·····Transmitted during SEQUENCER playback and during rhythm performance.

○**·····Transmitted during COMPOSER recording.

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO ○:Yes

Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO ×:No

MIDI Implementation Chart

Digital Ensemble [SX-PR303] (Recognized)

Function		RIGHT, PART2, PART4～15	LEFT	PART16	ACMP1	ACMP2,3	BASS	DRUMS	CHORD	CONTROL	Remarks
Basic Channel	Default	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	memorized
	Changed	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	
Mode	Default	3	3	3	3	3	3	3	3	3	OMNI OFF,POLY MODE
	Messages	×	×	×	×	×	×	×	×	×	
	Altered	—	—	—	—	—	—	—	—	—	
Note Number		0-127	0-127	0-127	0-127	0-127	0-127	0-127	0-127	—	Changes depending on the position of the transpose control,octave shift, and drums type.
	True voice	0-127	0-127	0-127	0-127	0-127	0-127	0-127	0-127	—	
Velocity	Note ON	○	○	○	○	○	○	○	○	—	
	Note OFF	×	×	×	×	×	×	×	×	—	
After Touch	Key's	×	×	×	×	×	×	×	×	—	
	Ch's	×	×	×	×	×	×	×	×	—	
Pitch Bender		○	○	×	○	○	○	×	○	—	
Control Change	0,32	○	○	○	○**	○**	○**	○	○	×	bank select MSB, LSB
	1	○	○	×	○	○	○	×	○	×	modulation
	6,38	○	○	×	×	×	×	×	×	×	data entry MSB, LSB
	7	○	○	○	○	○	○	○	○	×	volume
	10	○	○	×	×	×	×	×	×	×	panpot
	11	○	○	○	×	×	×	×	×	×	expression
	64	○	○	×	○**	○**	○**	×	×	×	sustain
	66	○	○	×	×	×	×	×	×	×	sostenute pedal
	67	○	○	×	×	×	×	×	×	×	soft pedal
	80	×	○	×	×	×	×	×	×	×	auto play chord
	82	×	×	×	×	×	×	○	×	×	intro, fill in, ending
	91	○	○	○	○	○	○	○	○	○	reverb
	93	○	○	×	○**	○**	○**	×	○	×	digital effect
	100,101	○	○	×	×	×	×	×	×	×	RPN LSB, MSB
	120	○	○	○	○	○	○	○	○	×	all sound off
	121	○	○	○	○	○	○	○	○	×	reset all cotrollers
Prog Change		○	○	○	○**	○**	○**	○	○	×	Changes depending on program change mode and prog.cng to p.mem.
	True #	0-127	0-127	0-127	0-127	0-127	0-127	0-127	0-127	—	
System exclusive		○									
System common	Song Pos	○×									
	Song Sel	○×									0-19
	Tune	×									
System Real Time	Clock	○									
	Commands	○×									start/stop,continue
Aux Messages	Local ON/ OFF	×	×	×	×	×	×	×	×	—	
	All notes OFF	○	○	○	○	○	○	○	○	—	
	Active Sense	○									
	Reset	×									
Notes		○×*……Whether or not the data for each of these items is received can be set. ○** ……Recognized during COMPOSER recording.									

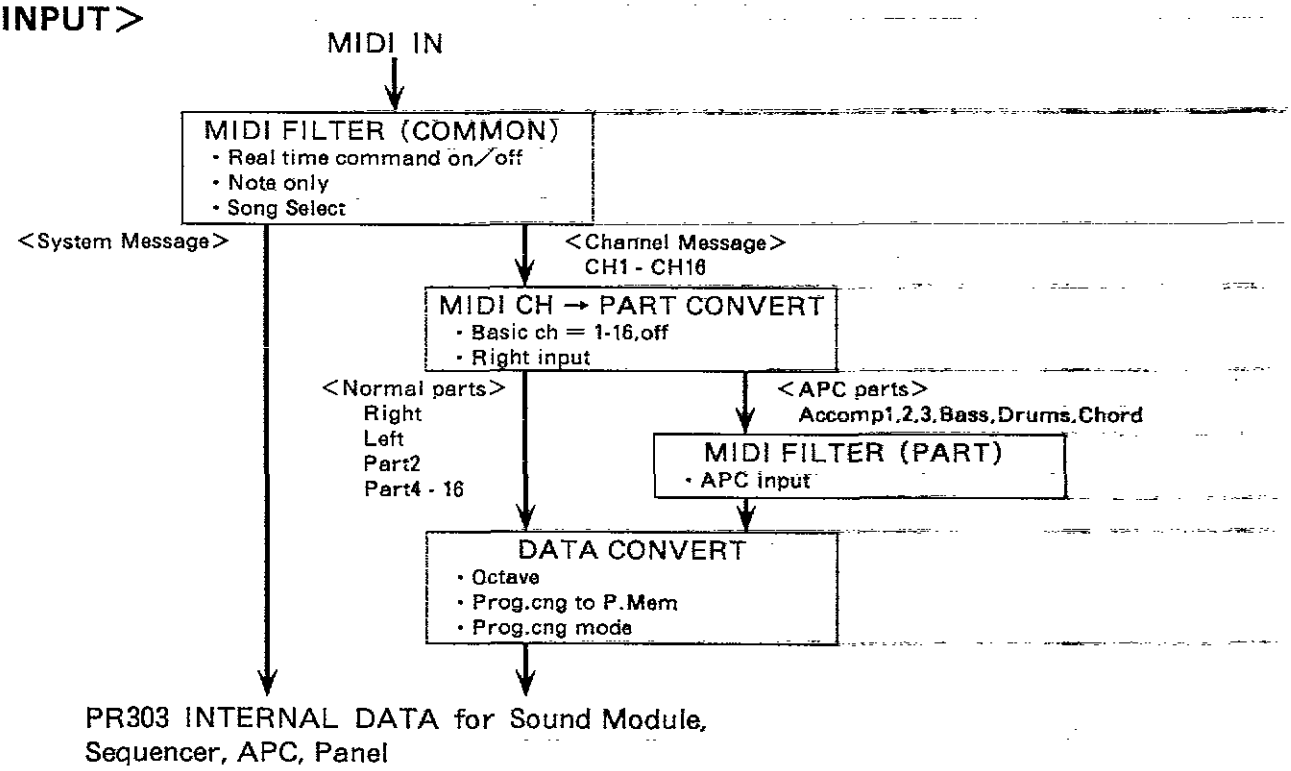
Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO ○:Yes

Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO ×:No

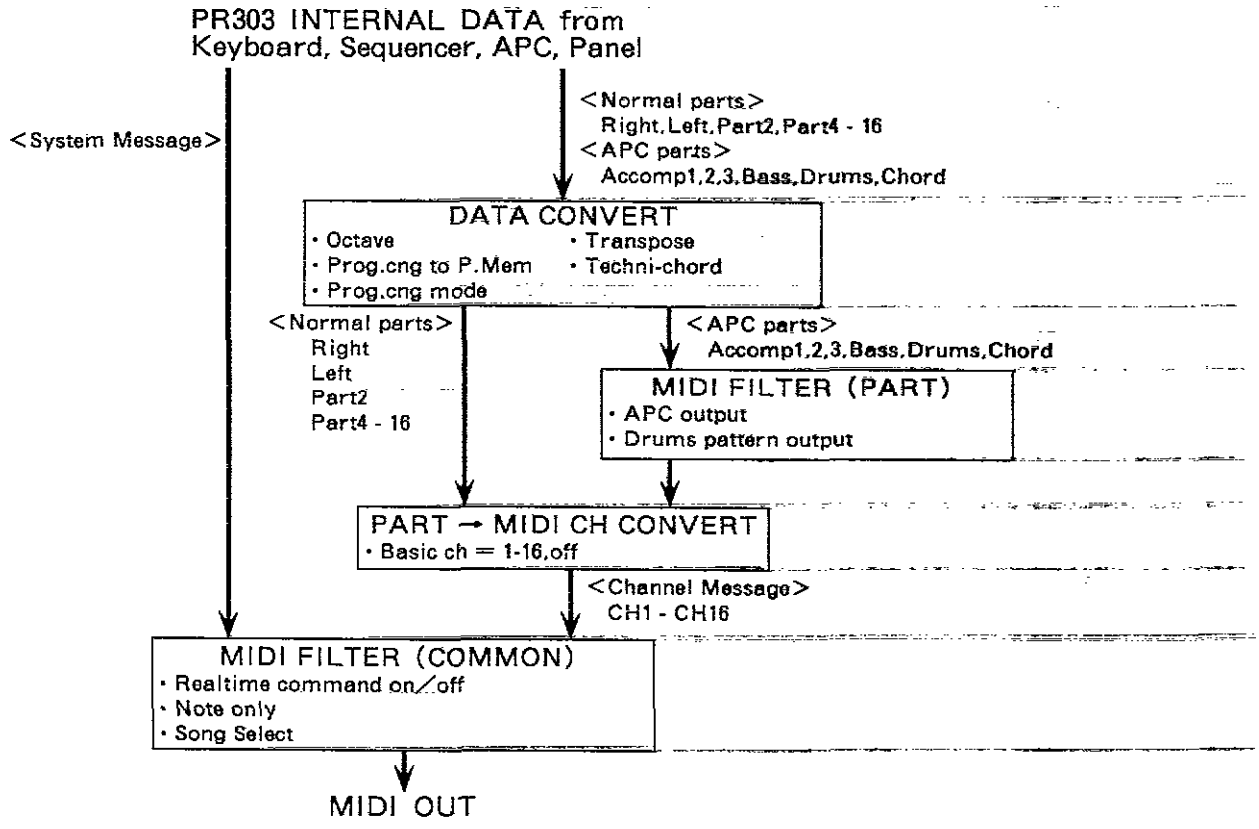
MIDI DATA FORMAT

MIDI DATA FLOWCHART

<MIDI INPUT>



<MIDI OUTPUT>



Message format

■ Channel voice message

Note off

8nH	Note off status
kk	Note number
vv	Velocity

n: 0—F Basic channel
kk: 00H—7FH Note number
vv: 00H—7FH Velocity
・This status is not used during transmission; rather, velocity=0 is transmitted with the note on status.

Note on

9nH	Note on status
kk	Note number
vv	Velocity

n: 0—F Basic channel
kk: 00H—7FH Note number
vv: 01H—7FH Velocity
00H Note off

Control change

Bank select

BnH	Control change status
00H	Bank select (MSB)
mm	Bank select value (MSB)
(BnH)	Control change status
20H	Bank select (LSB)
11	Bank select value (LSB)

n: 0—F Basic channel
mm,11: 00H—7FH
・Indicates program change bank. Used when program Change mode is set to Normal mode or Technics mode.
・Transmission/reception of ACCOMP 1,2,3,and BASS bank select is possible only during COMPOSER record.

Modulation

BnH	Control change status
01H	Modulation
vv	Modulation depth value

n: 0—F Basic channel
vv: 00H—7FH
・Transmission of ACCOMP 1,2,3 BASS and DRUMS modulation is possible only when the rhythm is on, and transmission/reception only during COMPOSER record.

Data entry

BnH	Control change status
06H	Data entry (MSB)
mm	Data entry value (MSB)
(BnH)	Control change status
26H	Data entry (LSB)
11	Data entry value (LSB)

n: 0—F Basic channel
mm,11: Values conform to the parameters specified for the RPN.

Volume

BnH	Control change status
07H	Part volume
vv	Part volume value

n: 0—F Basic channel
vv: 00H—7FH

Panpot

BnH	Control change status
0AH	Panpot
vv	Panpot value

n: 0—F Basic channel
vv: 00H(Left)—40H(Center)—7FH(Right)

Expression

BnH	Control change status
0BH	Expression
vv	Expression value

n: 0—F Basic channel
vv: 00H—7FH

Sustain

BnH	Control change status
40H	Sustain
vv	Sustain on/off

n: 0—F Basic channel
vv: 00H—7FH
・Transmission of ACCOMP 1,2,3 and BASS sustain is possible only when the rhythm is on, and transmission/reception only during COMPOSER record.

Sostenute pedal

BnH	Control change status
42H	Sustain
vv	Sustain on/off

n: 0−F Basic channel
vv: 00H−3FH (00H) Off
40H−7FH (7FH) On
・Transmitted data is indicated by parentheses( ).

Soft pedal

BnH	Control change status
43H	Sustain
vv	Sustain on/off

n: 0−F Basic channel
vv: 00H−3FH (00H) Off
40H−7FH (7FH) On
・Transmitted data is indicated by parentheses( ).

Auto Play Chord

BnH	Control change status
50H	APC message
vv	APC message value

n: 0−F Basic channel
vv: 00H =Off
01H =ADVANCED1
02H =BASIC
03H =PIANIST
04H =ADVANCED2
・Transmitted /received on the basic channel for the LEFT part.

Rhythm control

BnH	Control change status
52H	Rhythm control message
vv	Rhythm control data

n: 0−F Basic channel
vv: 00H =off
01H =FILL IN 1
02H =ENDING
03H =INTRO
05H =FILL IN 2
07H =COUNT INTRO
・Transmitted /received on the basic channel for the DRUMS part.

Reverb

BnH	Control change status
5BH	Reverb
vv	Reverb on/off

n: 0−F Basic channel
vv: 00H−3FH (00H) Off
40H−7FH (7FH) On
・Transmitted data is indicated by parentheses( ).
・The Reverb for the CONTROL part is the total reverb.

Digital effect

BnH	Control change status
5DH	Digital effect
vv	Digital effect on/off

n: 0−F Basic channel
vv: 00H−3FH (00H) Off
40H−7FH (7FH) On
・Transmitted data is indicated by parentheses( ).
・Transmission/reception of the DIGITAL EFFECT for ACCOMP 1,2,3 and BASS is possible only during COMPOSER record.

RPN

BnH	Control change status
65H	RPN (MSB)
mm	RPN data number (MSB)
(BnH)	Control change status
64H	RPN (LSB)
11	RPN data number (LSB)

n: 0−F Basic channel
mm,11:The most significant byte (MSB) and least significant byte (LSB) of the parameter number specified for the RPN.

The RPN which can be transmitted/received are Pitch Bend Sensitivity, Coarse Tuning (corresponding respectively to the Pitch bend Range and Key Shift of the PR305/307), Fine Tuning, and RPN reset.

RPN		Data Entry		
MSB	LSB	MSB	LSB	
00H	00H	mm	—	Pitch Bend Sensitivity mm:00H - 0CH (0 - 12semi-tones) 11:igored ・Up to 1 octave can be specified in semi-tone increments.
00H	01H	mm	11	Fine Tuning mm,11:00H,00H - 40H,00H -7FH,7FH (−128＊100/128-0-127＊100/128cents) ・11:00H or40H (lower 6 bits ignored) ・Can be specified in 100/128 cent
00H	02H	mm	—	Coarse Tuning mm, 28H - 40H - 58CH (−24 - 0 - +24 semi-tones) 11:ignored ・Up to 2 octave can be specified insemi-tone increments.
7FH	7FH	—	—	RPN Reset mm,11:ignored ・For when the RPN number is not specified. ・The internal set value does not change.

Program change

CnH	Program change status
pp	Program change value

n: 0—F Basic channel
pp: 00H—7FH Program change value
Normal mode: Numbers are correspond to the SW of the SOUND GROUP(the variation is indicated by the Bank Select).
Technics mode: Numbers are standardized among Technics modes(Bank Select also used).
GM:GM program change numbers.
·The Program Change for the Drums part is recognized as a change in the rhythm pattern select.
·Transmission/reception of ACCOMP 1,2,3,and BASS program change is possible only during COMPOSER record.
·When PROG.CNG TO P.MEM is ON, the PANEL MEMORY numbers are transmitted/received on the basic channel for the RIGHT part.

Pitch bend change

EnH	Pitch bend status
11	Pitch bend value (LSB)
mm	Pitch bend value (MSB)

n: 0—F Basic channel
11,mm: 00H—7FH Pitch bend data
·The Pitch Bend Range is determined by the Pitch Bend Range(Pitch Bend Sensitivity)of each part.
·Transmission of ACCOMP 1,2,3 and BASS Pitch bend change is possible only when the rhythm is on, and transmission/reception only during COMPOSER record.

■ Channel mode message

All sound off

BnH	Channel mode status
78H	All sound off
00H	Dummy data

n: 0—F Basic channel

Reset all controllers

BnH	Channel mode status
79H	Reset all controllers
00H	Dummy data

n: 0—F Basic channel

All note off

BnH	Channel mode status
7BH	All note off
00H	Dummy data

n: 0—F Basic channel
Receive only

OMNI off

BnH	Channel mode status
7CH	OMNI off
00H	Dummy data

n: 0—F Basic channel
·Processed in same manner as when ALL Note off is received.

OMNI on

BnH	Channel mode status
7DH	OMNI on
00H	Dummy data

n: 0—F Basic channel
·Processed in same manner as when ALL Note off is received. Does not change to OMNI on.

MONO

BnH	Channel mode status
7EH	MONO
00H	Dummy data

n: 0—F Basic channel
·Processed in same manner as when ALL Note off is received. Does not change to MONO.

POLY

BnH	Channel mode status
7FH	POLY
00H	Dummy data

n: 0—F Basic channel
·Processed in same manner as when ALL Note off is received.

■ System common message

Song position pointer

F2H	Song position pointer
11	Least significant
mm	Most significant

11,mm: 00H - 7FH

Song select

F3H	Song select
ss	Song number

ss: 0—39

■ System real time message

Timing Clock

F8H	Timing clock

Start

FAH	Start

Continue

FBH	Continue

Stop

FCH	Stop

Active Sense

FEH	Active sense

System exclusive

F0H	System exclusive status
ii	ID number
dd	data
:	:
dd	data
F7H	End of exclusive status

ii: 7EH(universal non-real time ID),
50H(Technics ID)
dd: 00H−7FH

About the PR303 MIDI exclusive

Outline of PR303 MIDI exclusive

MIDI exclusive
- Universal system exclusive
  - GM on
  - GM off
- Technics MIDI exclusive — trnsmission/reception of tempo data

Universal system exclusive Message format

Turn General MIDI System On:

F0H	Exclusive status
7EH	Universal Non-Real Time SysEx
7FH	ID of target device (7F:Broadcast)
09H	sub-ID # 1 = General MIDI message
01H	sub-ID # 2 = General MIDI on
F7H	EOX

Turn General MIDI System Off:

F0H	Exclusive status
7EH	Universal Non-Real Time SysEx
7FH	ID of target device (7F:Broadcast)
09H	sub-ID # 1 = General MIDI message
02H	sub-ID # 2 = General MIDI off
F7H	EOX

Technics MIDI exclusive Message format

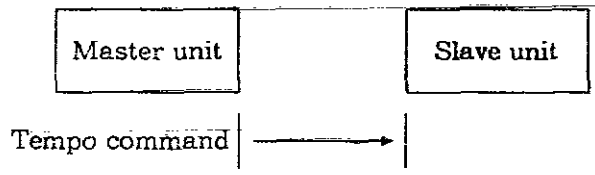
Tempo data:

F0H	Exclusive status
50H	Technics ID number
25H	Command ID (TMP=Tempo data ID)
DT1	Tempo data LSB
DT2	Tempo data MSB
F7H	End of exclusive

・[data] for Tempo.

DT1	Data LSB
DT2	Data MSB

DT2, DT1 : 02H, 08H - 12H,0Ch
(♩ =40-300)
Tempo data is 9bit Binary (= 101000 ~ 100101100)
The lower 4 bits is expressed as DT1, and the remaining upper 5 bits as DT2. DT1 is sent first followed by DT2.



・Transmission/reception of TEMPO exclusive data can be enabled or disabled by the NOTE ONLY setting of the MIDI settings.

GENERAL MIDI SETTINGS

■ SOUND

P.CNG#	SOUND NAME		P.CNG#	SOUND NAME		P.CNG#	SOUND NAME		P.CNG#	SOUND NAME	
1	Grand Piano	(2*)	33	Acoustic Bass	(1)	65	Soprano Sax	(1*)	97	Ice Rain	(2)
2	Bright Piano	(2*)	34	Bright E.Bass	(1)	66	Alto Sax	(1*)	98	Soundtrack	(2)
3	E.Grand	(1*)	35	Picked E.Bass	(1)	67	Breathy Tenor	(1*)	99	Synth Glocken	(2*)
4	Honky Tonk	(2*)	36	Fretless Bass	(2)	68	Baritone Sax	(1*)	100	Atmosphere	(2*)
5	E.Piano 1	(2)	37	Slap Bass 1	(1)	69	Oboe	(1)	101	Mist	(2*)
6	Modern E.P.1	(2*)	38	Slap Bass 2	(2)	70	English Horn	(1)	102	Goblins	(2*)
7	Harpsichord	(1*)	39	Smack Bass	(1)	71	Bassoon	(1)	103	Click Vox	(2*)
8	Clavi	(1)	40	Synth Chopper	(1)	72	Jazz Clarinet	(1*)	104	Star Theme	(2*)
9	Celesta	(2*)	41	Violin	(1)	73	Piccolo	(1)	105	Sitar	(2*)
10	Glockenspiel	(1*)	42	Viola	(1*)	74	Jazz Flute	(1*)	106	Banjo	(1*)
11	Music Box	(1)	43	Cello	(1)	75	Recorder	(1)	107	Shamisen	(1)
12	Vibraphone	(2)	44	Bowed Bass	(1)	76	Pan Flute	(1*)	108	Koto	(1)
13	Marimba	(2)	45	Tremolo String	(2)	77	Blown Bottle	(2*)	109	Kalimba	(1*)
14	Xylophone	(1*)	46	Pizzicato	(2)	78	Shakuhachi	(1*)	110	Bagpipe	(2)
15	Tubular Bells	(2)	47	Harp	(1*)	79	Whistle	(1)	111	Country Fiddle	(2)
16	Dulcimer	(2*)	48	Timpani	(1)	80	Ocarina	(1)	112	Shanai	(2*)
17	Full Drawbars	(2)	49	Strings	(1)	81	Square Lead	(2)	113	Tinkle Bell	(2)
18	Jazz Organ	(2)	50	Slow Strings	(1)	82	Saw Lead	(2)	114	Agogo	(1)
19	Rock Organ	(2*)	51	Synth Strings	(2*)	83	Synth Calliope	(2*)	115	Steel Drum	(1*)
20	Pipe Organ 1	(2)	52	String Pad	(2*)	84	Chiffer Lead	(2*)	116	Wood Block	(1)
21	Harmonium	(2)	53	Choir Ah	(1)	85	Charang	(2*)	117	Taiko Drum	(1)
22	Bri.Accordion	(2)	54	Vocal Doo	(2)	86	Air Vox	(2*)	118	Melodic Tom	(1)
23	Harmonica	(1)	55	Synth Vocal	(1*)	87	5th Wave	(2*)	119	Synth Drum	(1)
24	Bandoneon	(2)	56	Orchestra Hit	(1)	88	Bass & Lead	(2)	120	Reverse Cymbal	(1)
25	Bright Ac.Gtr	(1)	57	Trumpet	(1)	89	Fantasia	(2*)	121	Fret Noise	(1)
26	Folk Guitar	(1*)	58	Trombone	(1)	90	Mellow Ens.	(2*)	122	Breath Noise	(1)
27	Jazz Guitar	(1*)	59	Tuba	(1)	91	Polysynth	(2*)	123	Seashore	(1)
28	Bright Solid	(2*)	60	Mute Trumpet	(1)	92	Spacy Pad	(2)	124	Bird Tweet	(2)
29	Mute Guitar	(2*)	61	Open Fr.Horn	(1)	93	Crystal Ens.	(2*)	125	Telephone	(1)
30	Overdrive Gtr	(1*)	62	Brass	(1)	94	Metal Pad	(2)	126	Helicopter	(2)
31	Distortion Gtr	(2*)	63	Syn.BrassEns.	(2)	95	Halo Vox	(2*)	127	Applause	(1)
32	Gtr Harmonics	(2*)	64	Synth Brass	(2*)	96	Sweep Pad	(2*)	128	Gun Shot	(1)

( )=Number of Tones
* =SUB Tone is used. Depending on the sound output status of the instrument, it may be generated.

■ Parts

MIDI CHANNEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PART	R	P2	L	P4	P5	P6	P7	P8	P9	P16	P10	P11	P12	P13	P14	P15
SEQUENCER TRACK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

■ Non-working Function

ONE TOUCH PLAY, PANEL MEMORY, TECHNI-CHORD, AUTO PLAY CHORD, COMPOSER, DEMO

MIDI PRESET DATA

		Without APC								With APC							
Preset No.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Master ↓ Slave		PR series: Keyboard type1	PR series: Keyboard type2	PR series: Organ type1	PR series: Organ type2	Sound module	Ext SEQ	Kbd type2 / Ext SEQ: PR series		PR series: Keyboard type1	PR series: Keyboard type2	PR series: Organ type1	PR series: Organ type2	Sound module	Ext SEQ	Kbd type2 / Ext SEQ: PR series	
Basic channel	R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	3	3	2	2	2	2	2	2	3	3	2	2	2	2
	L	4	3	2	2	3	3	3	3	4	3	2	2	3	3	3	3
	4	3	4	4	4	4	4	4	4	3	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	off	off	off	off	5	off	off	off
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	12	12	12	12	12	12	12	12	12	12	12	12	12	off	12	12	12
	13	13	13	13	13	13	13	13	13	13	13	13	13	off	13	13	13
	14	14	14	14	14	14	14	14	14	14	14	14	14	off	14	14	14
	15	16	15	16	15	15	15	15	16	off	16	off	16	off	16	16	16
	16	16	16	15	16	16	16	16	16	16	off	16	off	off	off	off	off
	Control	off	off	off	off	off	off	off	off	off	off	off	off	off	off	off	off
	Accomp1	off	off	off	off	off	off	off	off	off	off	off	off	12	off	off	off
	Accomp2	off	off	off	off	off	off	off	off	off	off	off	off	13	off	off	off
	Accomp3	off	off	off	off	off	off	off	off	off	off	off	off	14	off	off	off
	Bass	off	off	off	off	off	off	off	off	off	off	off	off	15	off	off	off
	Drums	off	off	off	off	off	off	off	off	15	16	15	16	16	16	16	16
	Chord	off	off	off	off	off	off	off	off	5	5	5	5	off	5	5	5
Octave shift	all ch.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local setting	L	on	on	on	on	on	on	on	on	on	on	on	on	on	on	on	on
	R	on	on	on	on	on	on	on	on	on	on	on	on	on	on	on	on
Realtime message		on	on	on	on	on	on	on	off	on	on	on	on	on	on	on	off
Clock		int	int	int	int	int	int	ext	ext	int	int	int	int	int	int	ext	ext
Note only		off	off	off	off	off	off	off	off	off	off	off	off	off	off	off	off
Transpose out		off	off	off	off	off	off	off	off	off	off	off	off	off	off	off	off
Program cng mode (tone&drum)		TECH	TECH	TECH	TECH	GM	TECH	TECH	TECH	TECH	TECH	TECH	TECH	GM	TECH	TECH	TECH
Song select		on	on	on	on	on	on	on	on	on	on	on	on	on	on	on	on
Right input mode (direct or single)		dir	dir	dir	dir	dir	dir	dir	dir	dir	dir	dir	dir	dir	dir	dir	dir
APC input		off	off	off	off	off	off	off	off	on	on	on	on	on	on	on	on
Techni-chord out		off	off	off	off	off	off	off	off	off	off	off	off	on	off	off	off
Drums out		off	off	off	off	off	off	off	off	off	off	off	off	on	off	off	off
APC out		off	off	off	off	off	off	off	off	on	on	on	on	on	on	on	on
Panel mem.to P.cng		off	off	off	off	off	off	off	off	off	off	off	off	off	off	off	off

type1 : Setting used when the connected equipment does not have the MIDI PRESETS capability.

type2 : Setting used when the connected equipment has the MIDI PRESETS capability, and the MIDI PRESETS are specified both on this instrument and on the connected equipment.

QQCG0195A
Se0394F0

RHYTHM VARIATIONS

	8BEAT		WALTZ
1	8 Beat Standard	1	Simple Waltz
2	8 Beat Ballad	2	Swingy Waltz
3	Country Rock	3	Vienna Waltz
	ROCK / DISCO		LATIN 2
1	Rock'n' Roll 1	1	Bossanova 1
2	8 Beat Soul	2	Samba
3	Disco Pop	3	Tango Continental
	16BEAT		OTHERS
1	16 Beat Standard 1	1	8 Beat Soft Rock
2	16 Beat Pop	2	Folk Rock
3	Piano Pop	3	Rock'n'Roll 2
	ROCK (OTHERS)	4	Disco
1	Shuffle R & R	5	16 Beat Standard 2
2	Rock Ballad	6	16 Beat Ballad
3	Soul Rock Ballad	7	Jazz Rock
	SWING	8	Soul Ballad
1	Standard Swing	9	Caribbean Rock
2	Big Band Mid	10	Samba Rock
3	Dixie	11	Salsa
	JAZZ COMBO	12	Shuffle Boogie
1	Jazz Combo	13	Swing Rock
2	Jazz Ballad 1	14	Big Band Fast
3	Jazz Waltz	15	Big Band Slow
	COUNTRY / R&B	16	Jazz Ballad 2
1	Country 2step	17	Modern Jazz Fast
2	Bluegrass	18	Country Folk
3	R&B 8 Beat	19	Country Waltz
	SHOW TIME	20	R&B Ballad
1	Broadway Show	21	Cabaret
2	Hollywood	22	Vaudeville
3	Soft Shoe	23	Paris Ballad
	MARCH / POLKA	24	German March 2/4
1	U.S.March 2/4	25	Polka 6/8
2	U.S.March 6/8	26	Modern Fox
3	Polka 2/4	27	Standard Waltz
	TRAD	28	Chanson Waltz
1	Foxtrot	29	Mambo
2	Gospel Shuffle	30	Swingy Reggae
3	Hawiian	31	Bossanova 2
	LATIN 1		
1	Rhumba		
2	Beguine		
3	Cha Cha		

SOUND VARIATIONS

Technics
SX-PR303

GRAND PIANO	UPRIGHT PIANO	ELECTRIC PIANO	MODERN PIANO
Grand Piano	Upright Piano	E.Piano 1	Modern E.Piano 1

	PIANO
1	Piano 1 octave
2	Rock Piano
3	Honky Tonk
	E PIANO
1	E.Piano 2
2	Modern E.Piano 2
3	Electric Grand
	AC GUITAR
1	Classic Guitar
2	Bright Acoustic Guitar
3	Folk Guitar
	E GUITAR
1	Jazz Guitar
2	Bright Solid
3	Hawaiian Guitar
	BRASS
1	Brass
2	Trombone
3	Close French Horn
	TRUMPET
1	Trumpet
2	Mute Trumpet
3	Flugel Horn
	BASS
1	Acoustic Bass
2	Electric Bass
3	Slap Bass 1
	HARPSI / MALLET
1	Harpsichord
2	Glockenspiel
3	Vibraphone
	SPECIAL PERC
1	Banjo
2	Harp
3	Timpani
	STRINGS / VOCAL
1	Strings
2	Soft Strings
3	Choir Ah
	ORG / ACCORDION
1	Jazz Organ
2	Pipe Organ 1
3	Musette

	FLUTE / REED
1	Jazz Flute
2	Oboe
3	Jazz Clarinet
	SAX
1	Mellow alto
2	Tenor Sax
3	Breathy Tenor
	SYNTH
1	Brass & Synth
2	Fantasia
3	Dream
	KEYBOARD PERC
1	Rock Kit 1
2	Rock Kit 2
3	Light Rock Kit
4	Soul Kit
5	Jazz Kit
6	Brush Kit
	OTHERS
1	Bright Piano
2	Cembalo
3	Synth Clavi
4	Marimba
5	Clavi
6	Celesta
7	Xylophone
8	Tubular Bells
9	Tinkle Bell
10	Country Guitar
11	12 String Guitar
12	Mellow Solid Guitar
13	Mute Guitar
14	Distortion Guitar
15	Overdrive Guitar
16	Music Box
17	Steel Drum
18	Orchestra Hit
19	Kalimba
20	Sitar
21	Dulcimer
22	Koto
23	Shamisen
24	Octave Strings
25	Pizzicato

	OTHERS
26	Violin
27	Country Fiddle
28	Slow Strings
29	Tremolo String
30	Synth Strings
31	Viola
32	Cello
33	Bowed Bass
34	Vocal Ooh
35	Vocal Doo
36	Mellow Ensemble
37	Synth Vocal
38	Air Vox
39	Halo Vox
40	Click Vox
41	Full Drawbars
42	Jazz Drawbars
43	Pop Organ
44	16' & 1'
45	Rock Organ
46	Theatre Organ
47	Pipe Organ 2
48	Octave Brass
49	Open French Horn
50	Tuba
51	Synth Brass
52	Synth Brass Ensemble
53	Soprano Sax
54	Alto Sax
55	Baritone Sax
56	Classic Clarinet
57	English Horn
58	Bassoon
59	Bright Accordion
60	Harmonica
61	Bagpipe
62	Shanai
63	Bandoneon
64	Harmonium
65	Piccolo
66	Classic Flute
67	Pan Flute
68	Shakuhachi
69	Recorder

	OTHERS
70	Ocarina
71	Blown Bottle
72	Whistle
73	Synth Calliope
74	Fretless Bass
75	Picked Electric Bass
76	Bright Electric Bass
77	Synth Chopper
78	Slap Bass 2
79	Smack Bass
80	Bass & Lead
81	Square Lead
82	Saw Lead
83	Chiffer Lead
84	Charang
85	Guitar Harmonics
86	5th Wave
87	Synth Glocken
88	Polysynth
89	Spacy Pad
90	Crystal Ensemble
91	Metal Pad
92	Sweep Pad
93	Mist
94	Star Theme
95	String Pad
96	Ice Rain
97	Soundtrack
98	Goblins
99	Atmosphere
100	Seashore
101	Bird Tweet
102	Telephone
103	Helicopter
104	Applause
105	Gun Shot
106	Agogo
107	Wood Block
108	Taiko Drum
109	Melodic Tom
110	Synth Drum
111	Reverse Cymbal
112	Fret Noise
113	Breath Noise