

Technics

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E	N	S	E	M	B	L	E



SX-PR305/K
SX-PR307/K



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  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

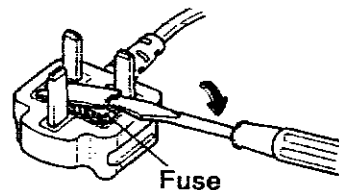
As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

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 93.

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



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



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

Before you play

For long and pleasurable use of this instrument, and to gain a thorough understanding of your PR Series Digital Ensemble, 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, Function Setting and MIDI.

REFERENCE GUIDE (separate booklet)

Reference guide for the contents of the **SOUND SELECT** and **RHYTHM SELECT** etc.

Contents

Before you play	1
Controls and functions	4
BASIC FUNCTIONS	
Getting started	6
Listen to the demonstration	7
• Listen to a particular sound or rhythm demonstration	7
• Listen to the style demonstration performance	8
Playing the piano	9
Selecting other sounds	10
Playing automatic rhythms	11
• Listen to preset rhythms	11
• Control the rhythm	12
Automatic accompaniment	14
PRACTICAL APPLICATIONS	
About the display (LCD screen)	16
Part I Sounds and effects	20
Play Style	20
Selecting sounds	21
Pedals	22
Effects	23
Mixing two sounds	24
Keyboard Split	25
Transpose	26
Techni-Chord	27
Part II Playing the rhythm	28
Selecting rhythms	28
Playing the rhythm	30
Auto Play Chord	32
Dynamic Accomp	35
One Touch Play	36
Music Style Select	37
Panel Memory	38
Part III Sequencer	39
Outline of the Sequencer	39
Easy Record	41
Sequencer parts	42
Realtime Record	43
Step Record	46
Track Assign	50
Playback from a specific measure	51
Editing the recorded performance	52
Punch Record	55
Sequencer Medley	57

Part IV Composer	58
Outline of the Composer	58
Setting up to create a rhythm pattern	59
Record your rhythm pattern	62
Playback	63
Creating intro and fill-in patterns	64
Part V Disk Drive	65
Outline of the Disk Drive function	65
Loading data	67
Formatting a disk	68
Saving data	69
Part VI Adjusting the functions	71
Outline of procedure	71
Tune & Touch functions	72
Sound functions	74
Set the pedal functions	77
Part VII MIDI	78
What is MIDI?	78
Setting the MIDI Presets	80
Outline of MIDI functions	81
Setting the MIDI functions	82
Initialize	86
Connections	87
Assembly	88
Symptoms which appear to be signs of trouble	90
Error messages	92
Cautions for safest use of this unit	93
Index	94
Specifications	96

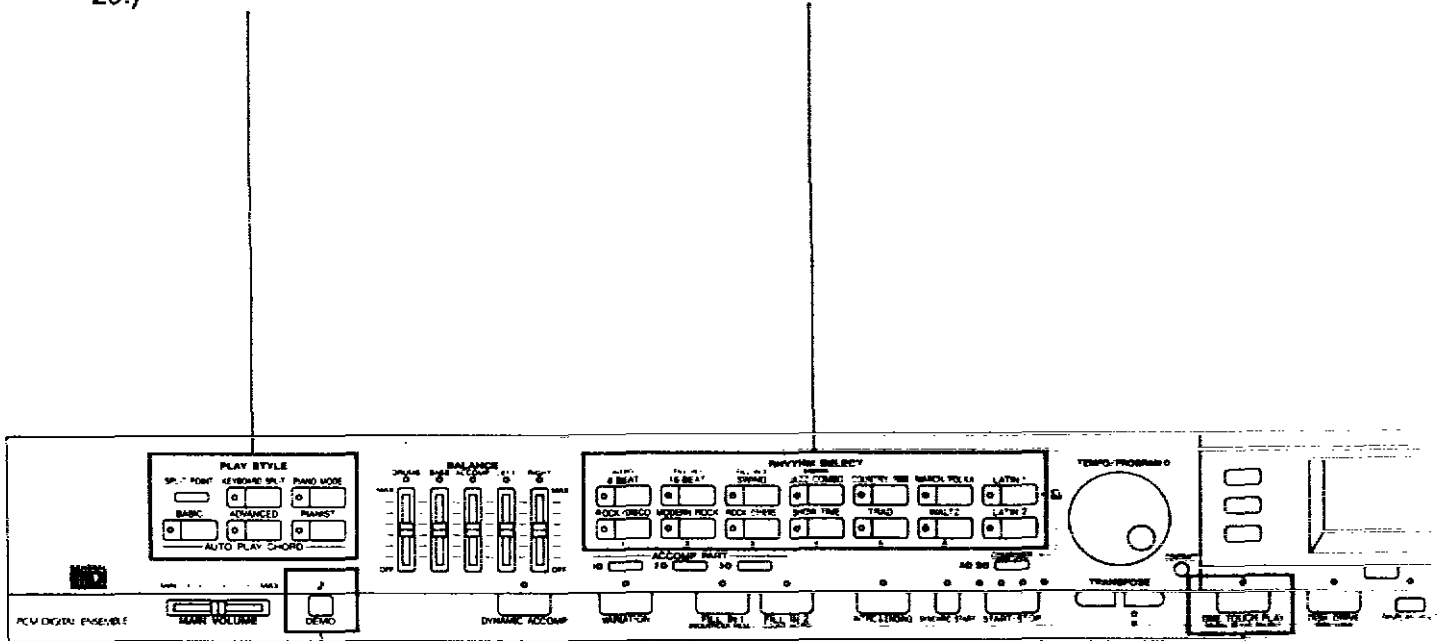
Controls and functions

PLAY STYLE

Select standard piano or one of various other performance styles. (Refer to page 20.)

RHYTHM SELECT

Choose preset automatic rhythm patterns. (Refer to page 28.)



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 36.)

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 72.)

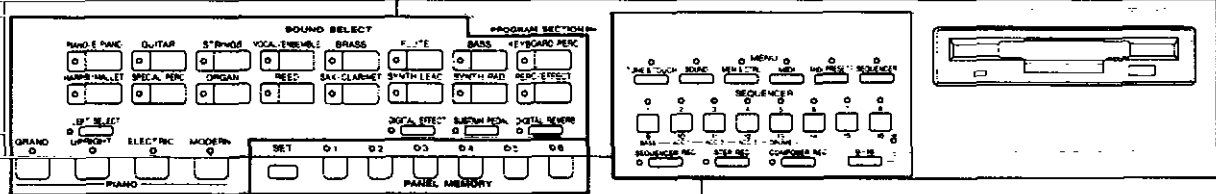
DISPLAY (LCD screen)

Displays performance information, function settings and other messages. (Refer to page 16.)

- Use the **CONTRAST** button to adjust the display so that it is easy to read. (Refer to page 19.)

SOUND SELECT

You can select from four piano-type sounds. Or choose the sounds of various instruments. (Refer to page 21.)



PANEL MEMORY

Store the current panel settings for instant recall. (Refer to page 38.)

PROGRAM SECTION

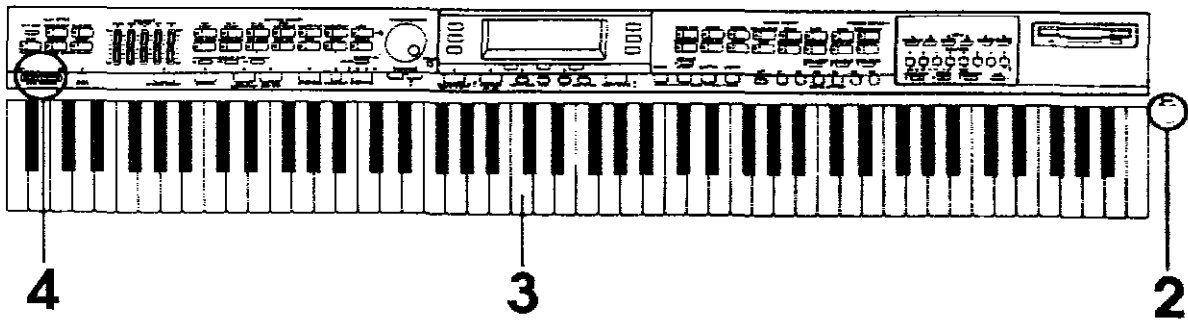
Several buttons are located beneath the cover. These buttons are used when setting the functions for the **SEQUENCER**, **COMPOSER** or **MIDI**, and when custom-setting any of the programmable functions.

■ 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.

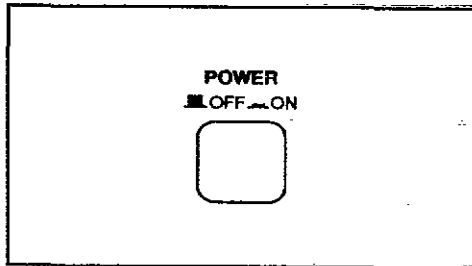
- The back-up memory does not function unless the power has been on for about 10 minutes.
- When you quit the operating mode, a warning display may appear to remind you to save the data. If this occurs, after checking the reminder, press the **OK** button.

Getting started



1 Plug the power cord into an outlet.

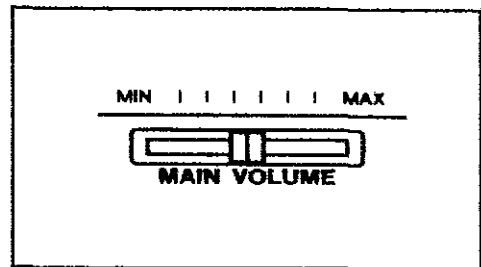
2 Press the **POWER** button to turn it on.



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

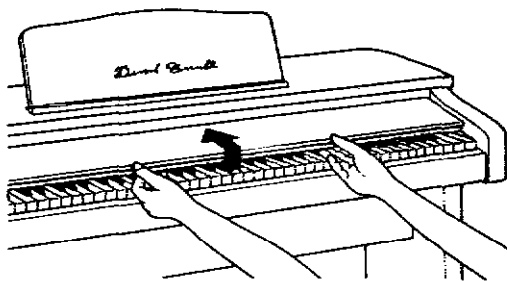
- Your piano features Touch Response. You control the volume by playing the keys harder or softer.

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



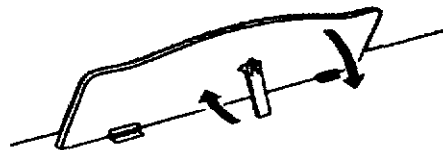
Keyboard cover

Open and close the cover slowly.



Music Stand

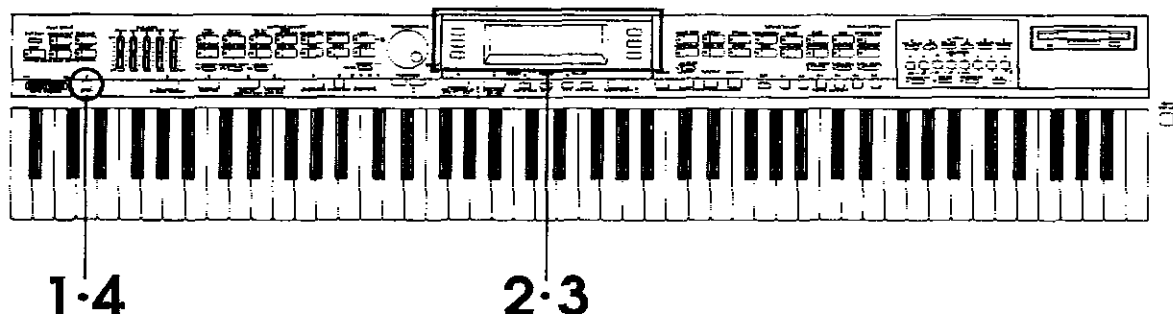
To set up the music stand, gently raise it from its folded down position. To lower the music stand, first fold in the metal support at the rear of the stand, and then lower the stand gently.



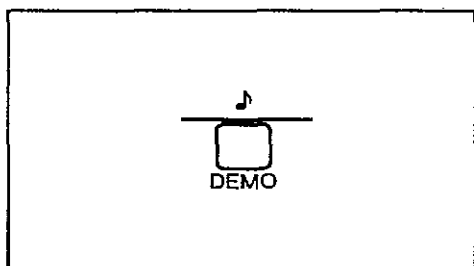
Listen to the demonstration

Listen to a particular sound or rhythm demonstration.

There are 6 songs to introduce the piano sounds, 6 for the other sounds and 6 for the rhythms, totalling 18 demonstration songs stored in this piano.

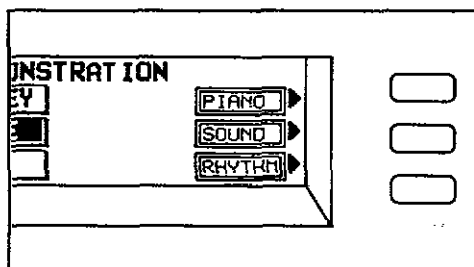


1 Press the **DEMO** button.



- The display changes to the **DEMONSTRATION** display.

2 Use the buttons to the right of the display to select **PIANO**, **SOUND** or **RHYTHM**.



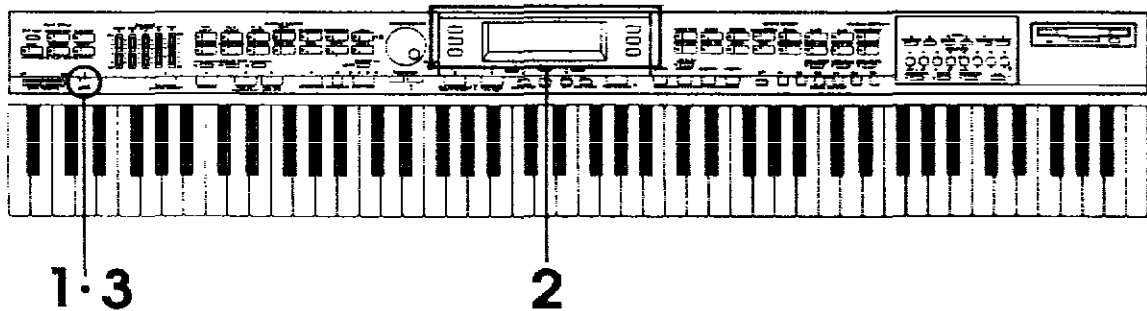
3 Use the buttons next to the display to select the sound or rhythm demonstration performance you wish to hear.

- The demonstration performance corresponding to your selection begins, and the name of the sound or rhythm which is being demonstrated is highlighted (shown in reverse video) on the display.
- 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.
- To change from a **SOUND** demonstration to a **PIANO** demonstration, for example, press the **EXIT** button below the display to return to the **DEMONSTRATION** display, and then proceed from step 2.

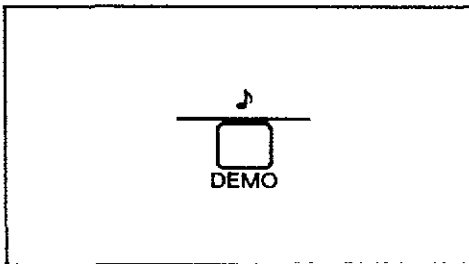
4 When you are finished listening to the demonstration tunes, press the **DEMO** button again.

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.



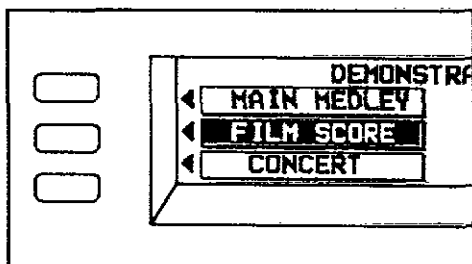
1 Press the **DEMO** button.



- The display changes to the DEMONSTRATION display.

- 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.

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



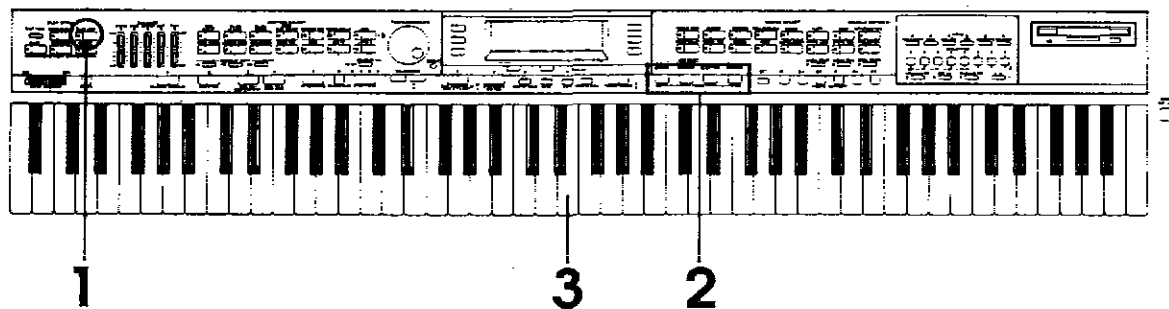
3 When you are finished listening to the demonstration tunes, press the **DEMO** button again.

- 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.

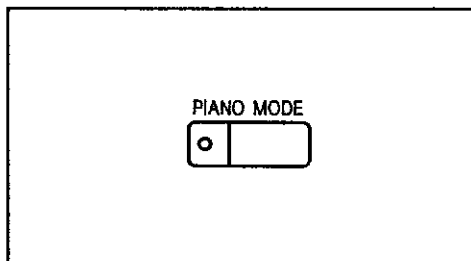
- During the medley performance, if you wish to skip from the current song to the next song, press the button for the highlighted song.
- Some of the buttons do not function while the demonstration performances are being played.

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.

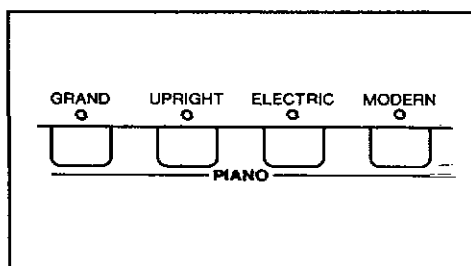


1 In the **PLAY STYLE** section, press the **PIANO MODE** button to turn it on.



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

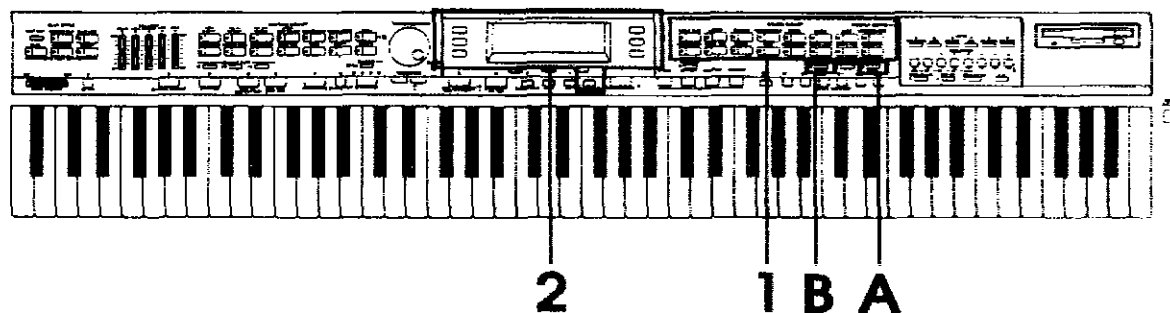
2 Select one of the four **PIANO** sounds by pressing the corresponding button.



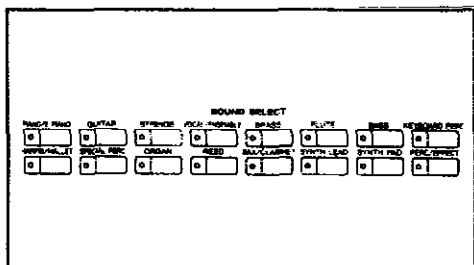
3 Play anywhere on the keyboard.

Selecting other sounds

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



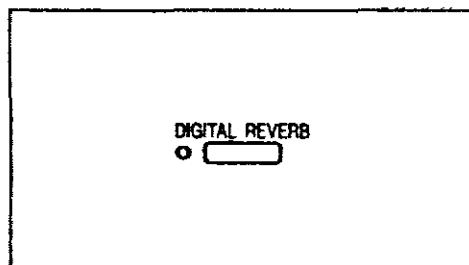
1 In the **SOUND SELECT** section, select a sound group.



- The display changes.

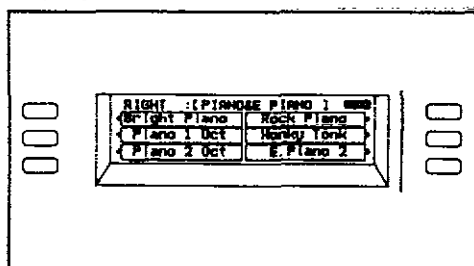
Add reverb to the sound.

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



- The indicator lights.

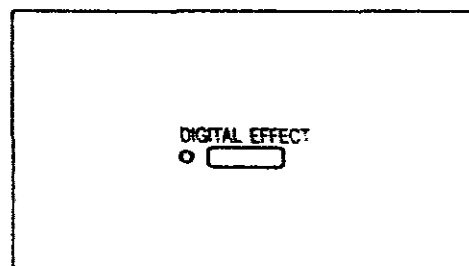
2 Select a sound from the list on the display.



- To view a different part of the list, press the **MORE/RETURN** button.
- After a few seconds, the display returns to the previous display.

Add a feeling of spaciousness to the sound.

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

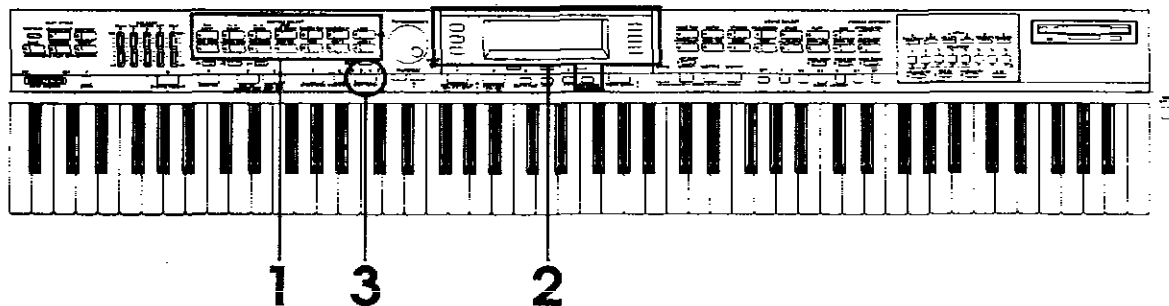


- The indicator lights.

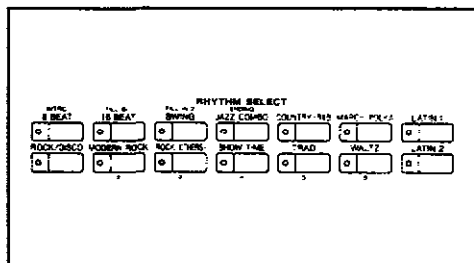
- When one of these sounds is selected, the **PIANO MODE** indicator in the **PLAY STYLE** section automatically turns off.
- Other things you can do are mixing sounds and playing different sounds on the left and right areas of the keyboard. (Refer to pages 24 and 25.)

Playing automatic rhythms

Listen to preset rhythms.

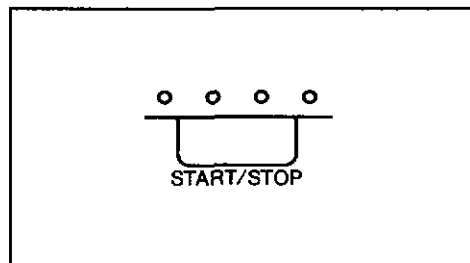


1 In the **RHYTHM SELECT** section, select a rhythm group.



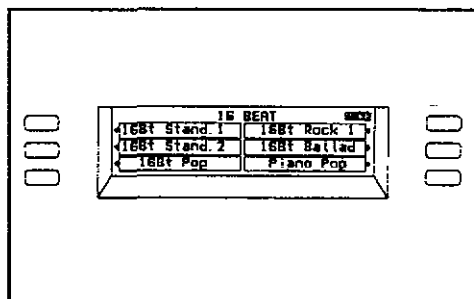
- The display changes.

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



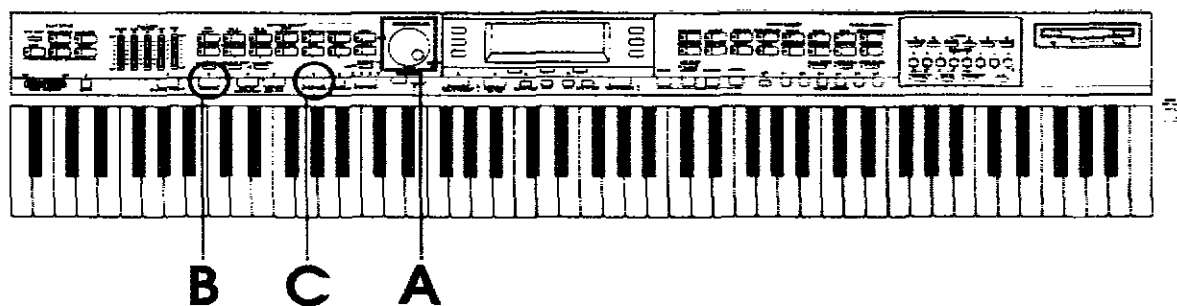
- Stop the rhythm by pressing the **START/STOP** button again.

2 Select a rhythm from the display.



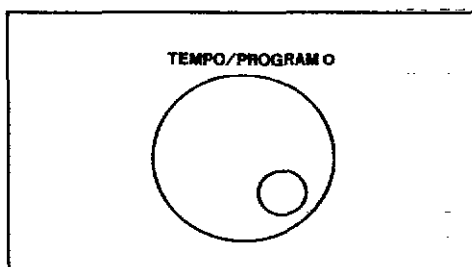
- To view a different part of the list, press the **MORE/RETURN** button.
- The display returns to the previous display after a few seconds.

Control the rhythm.



Adjust the tempo.

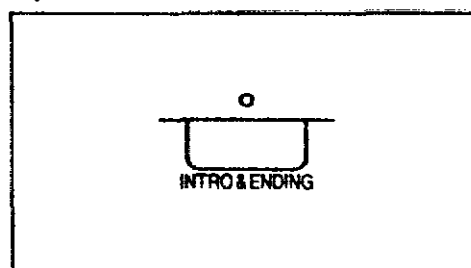
A Adjust the tempo with the **TEMPO/PROGRAM** dial.



- The tempo is shown in the display as "♩ = ".

Insert an intro pattern.

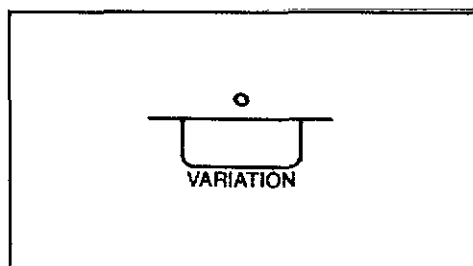
C To start your performance with an introduction, press the **INTRO & ENDING** button before starting the rhythm.



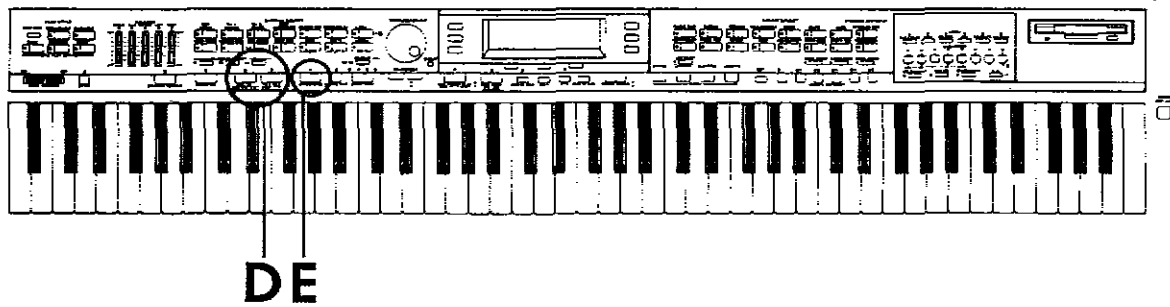
- An intro is played, after which the regular rhythm starts.

Select a variation pattern.

B During the rhythm performance, press the **VARIATION** button to turn it on.

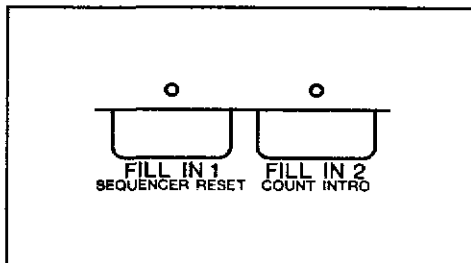


- The rhythm pattern changes to a flashier pattern.



Insert a fill-in pattern.

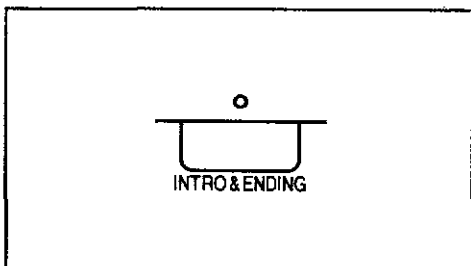
D While the preset rhythm pattern is playing, press either the **FILL IN 1** or **FILL IN 2** button.



- A fill-in pattern immediately starts to play.

Insert an ending pattern.

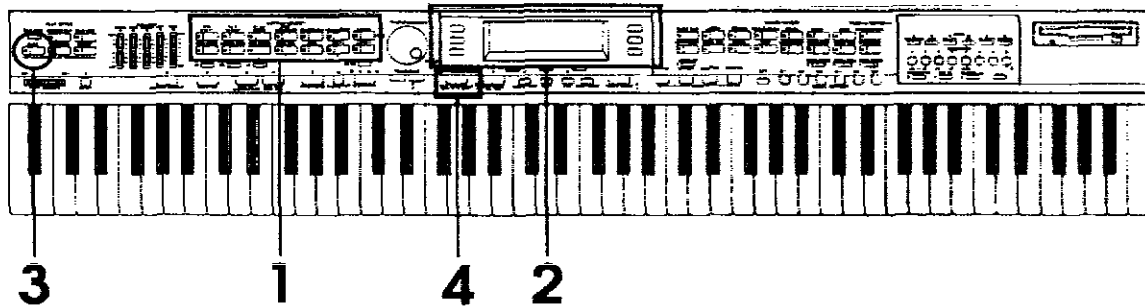
E While the rhythm is playing, press the **INTRO & ENDING** button.



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

Automatic accompaniment

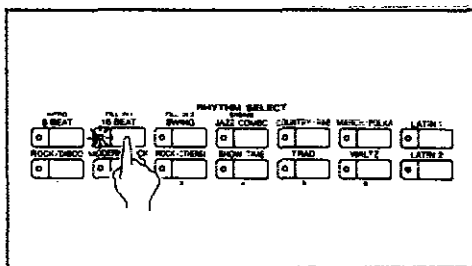
Just by specifying a chord on the keyboard, an accompaniment pattern which matches the selected rhythm is automatically played.



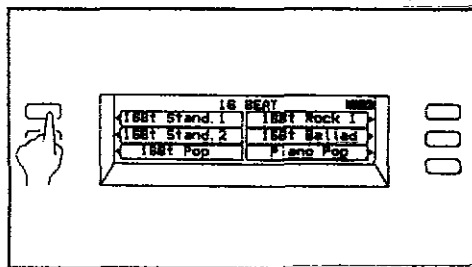
Use the **AUTO PLAY CHORD** with the following tune.



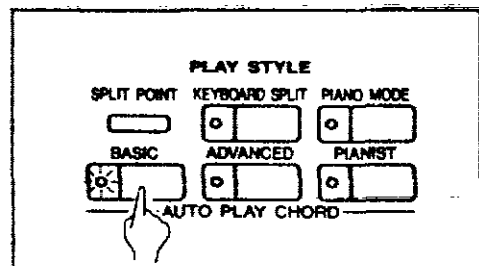
1 In the **RHYTHM SELECT** section, press the **16 BEAT** button.



2 Select "16Bt Stand. 1" from the list of rhythms shown on the display.

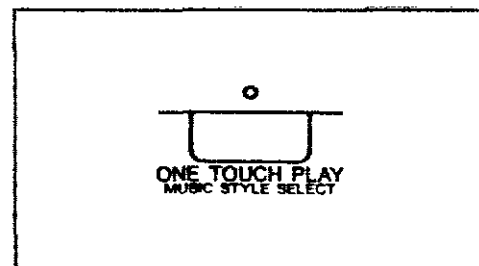


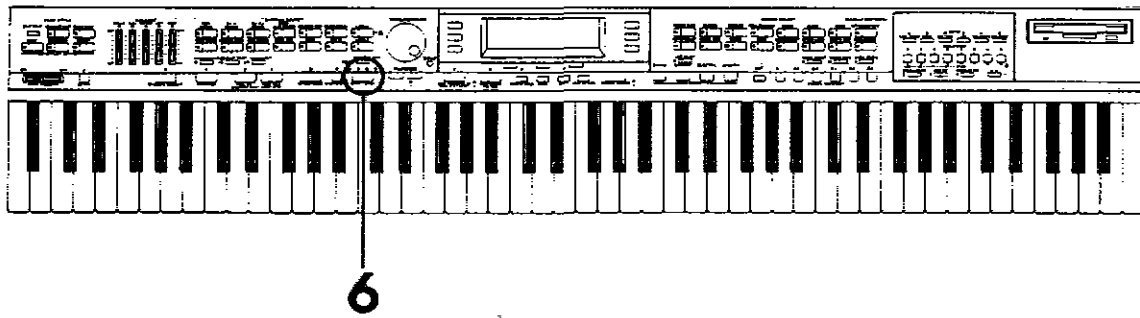
3 In the **PLAY STYLE** section, press the **BASIC** button to turn it on.



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

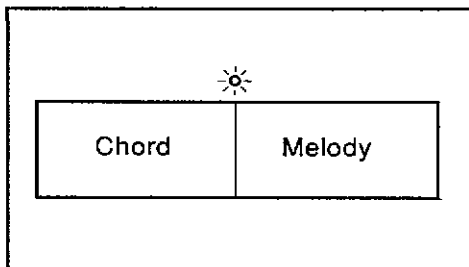
4 Press and hold the **ONE TOUCH PLAY** button until the indicator goes out.





5

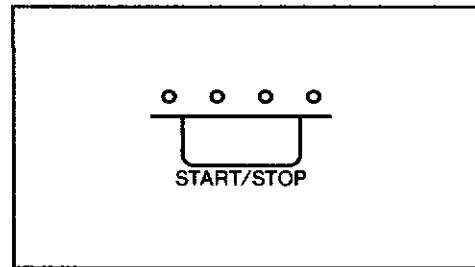
Use your left hand to play the chords and your right hand to play the melody.



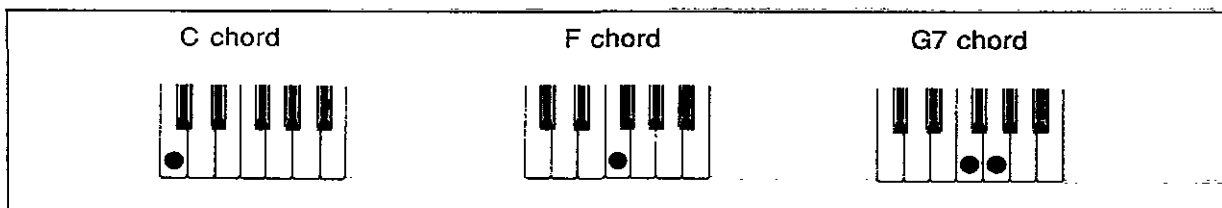
- Pressing a key on the left area of the keyboard will cause the automatic rhythm pattern to start playing (synchro start).
- When the C key is pressed on the left area of the keyboard, an accompaniment begins to play in the C major key.
- Playing the chord key (root note) and the white key to its left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

6

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



- The automatic accompaniment stops.



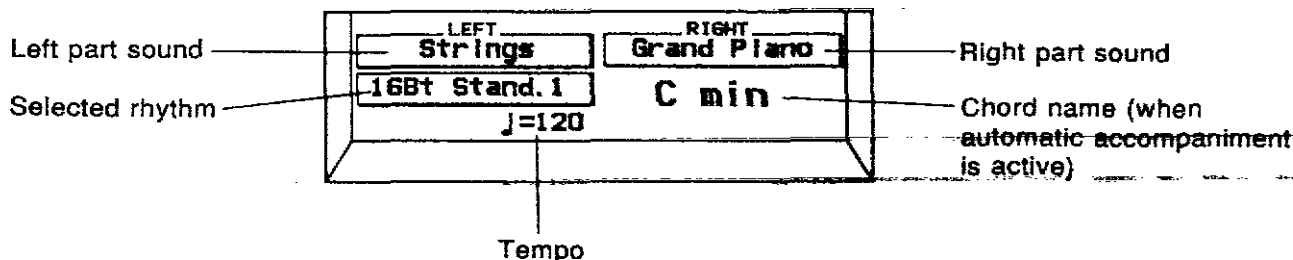
- In this example you played chords by pressing the keys for the "root notes" (one-finger chords). But you can also specify the chord by playing all the notes in the chord. (Refer to page 33.)

About the display (LCD screen)

The display shows various information and is used for most of this instrument's operations.

Normal display

This illustration shows the kind of information you see on the display during a normal performance.



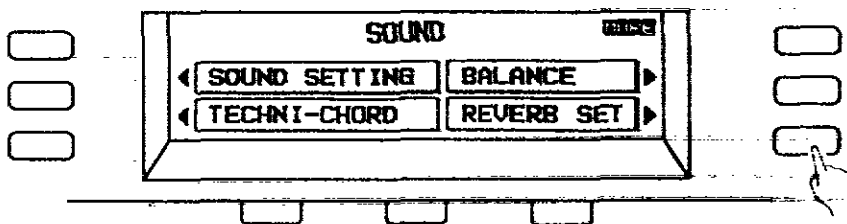
Menu display

The **MENU** buttons in the **PROGRAM SECTION** (under the cover on the right side of the panel) are used to control multiple functions. Pressing one of the buttons will access the corresponding menu display.



■ Example of menu display: SOUND

Select a function from the menu display by pressing the corresponding button to the left or right of the display indicated by the ◀ and ▶ arrows.

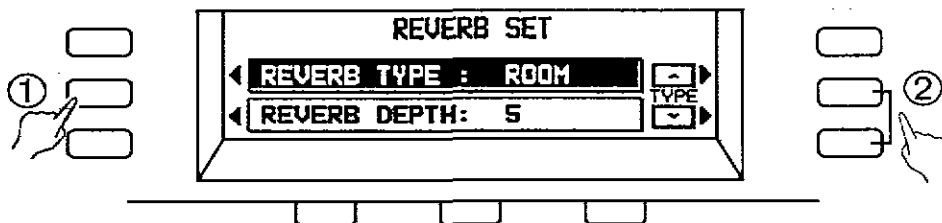


- In this manual, the steps describing how to select a function from a menu display are generally abbreviated as follows, for example: "On the **SOUND** menu display, select REVERB SET."

Setting display

When setting various functions, the available options are shown on the display. The buttons to the right, left and/or directly below the display are used to select and adjust the settings.

■ Example of setting display: REVERB SET



<Example of procedure to set a function>

- ① In the illustration above, two functions are shown on the setting display: REVERB TYPE and REVERB DEPTH. First, select one of the functions by pressing the corresponding button indicated by the ◀ arrow. (The currently selected function is highlighted.)
- In this manual, the procedure to indicate that you should press a button to select an item from the display is generally written simply as follows: "Select REVERB TYPE."

- ② The ^ and v buttons on the display are operated by pressing the corresponding buttons indicated by the ▶ arrows. These buttons are used to change the type.
- In this manual, this procedure is written as follows: "Use the ^ and v buttons to select the type."

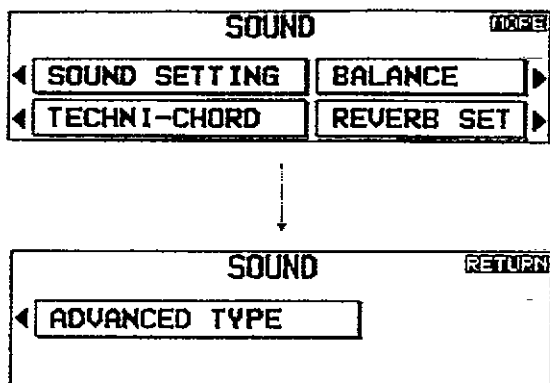
MORE/RETURN

When there are additional parts to the current menu (for example, when a list of sounds is too long to be shown on one screen), a MORE indication is highlighted in the upper right corner of the display. Press the MORE/RETURN button below the display to view the next section of the menu.



- When RETURN is shown in the upper right corner of the display, press the MORE/RETURN button again to view the first section of the menu.

■ Example of MORE display: SOUND



EXIT button

While the setting display is shown, press this button to go back to the previous display.



DISPLAY HOLD button

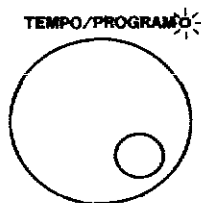
Press this button to turn it on when you wish to maintain the current display. For example, even during a performance, you can monitor information which is not shown on the normal display.



- If any of the **MENU** buttons is pressed, the **DISPLAY HOLD** mode is canceled.

TEMPO/PROGRAM dial

If the green **TEMPO/PROGRAM** indicator is lit while you are using the display to adjust a setting, it indicates that the dial may be used to change the displayed value or setting.



CONTRAST

Adjust the contrast of the display.

1. Press the **CONTRAST** button.



- The following display appears.



2. Use the \wedge and \vee buttons to adjust the setting (1 to 10).
 - The higher the number, the lighter the display characters.
 - A few seconds after adjusting the setting, the display returns to the previous display.

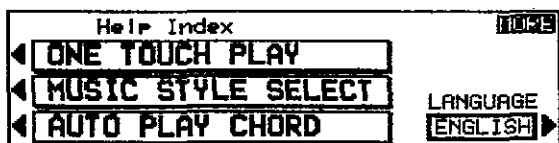
HELP display

You can find an explanation of most of the piano functions right on the display.

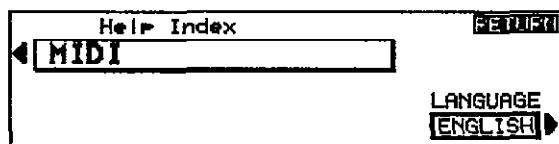
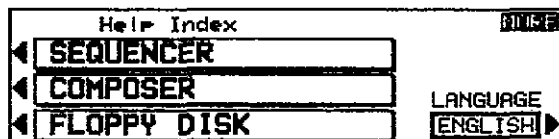
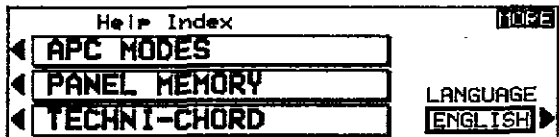
1. Press the **HELP** button.



- The following display appears.



- Each time the **MORE/RETURN** button is pressed, a different function is displayed.



- Use the **LANGUAGE** button to select the language in which the messages are displayed.
- The **HELP** display messages and error messages are shown in the selected language.
- The appearance of the display on your instrument and the illustrated display in this manual may differ depending on the region in which your instrument was purchased and the selected display language.

2. Select a function.
 - Information about the selected function will appear on the display. There may be several "pages" of information, which you can get by following the instructions on the display.
 - If you press the **HELP** button while you are in the process of setting a function, the display may change directly to the **HELP** mode.
 - For a detailed explanation of each function, please refer to the relevant pages in this manual.

ONE TOUCH PLAY	page 36
MUSIC STYLE SELECT	page 37
AUTO PLAY CHORD	page 32
APC MODES	page 32
PANEL MEMORY	page 38
TECHNI-CHORD	page 27
SEQUENCER	page 39
COMPOSER	page 58
FLOPPY DISK	page 65
MIDI	page 78

3. When you have finished reading the message, press the **EXIT** button.

Part I Sounds and effects

Play Style

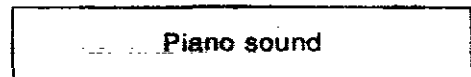


In addition to a standard piano performance, this instrument can be used to play various different performance styles. The type of keyboard is centrally controlled by the **PLAY STYLE** section.

Normal Play

■ PIANO MODE

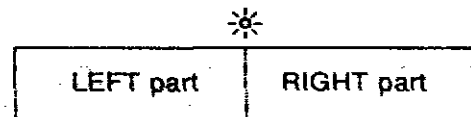
When this button is on, this instrument can be played as a standard piano.



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

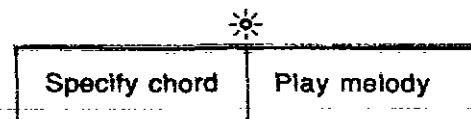
■ KEYBOARD SPLIT

The keyboard divides into two playing areas, each with a different sound. (Refer to page 25.)



AUTO PLAY CHORD

These buttons are used when you perform with the automatic accompaniment. (Refer to page 32.)



Selecting sounds



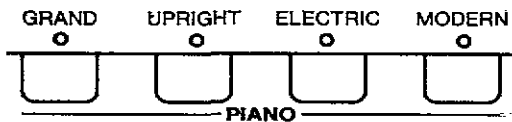
Enjoy trying the sounds of many different instruments.

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.

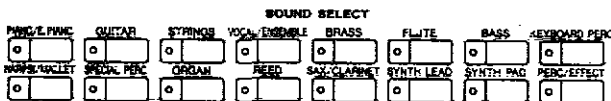


- When the piano is first turned on (initialized mode), the **PIANO MODE** is on and the default sound is **GRAND PIANO**.
- When this button is pressed, the entire keyboard will return instantaneously to the **PIANO MODE**, regardless of the mode which is currently selected, the **KEYBOARD SPLIT** status (refer to page 25) or the **AUTO PLAY CHORD** status (refer to page 32). 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.

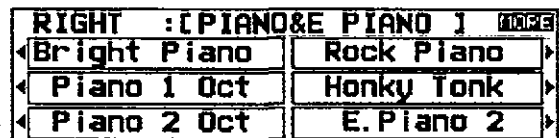
SOUND SELECT

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

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



2. Select the desired sound from the list on the display.



- Use the **MORE/RETURN** button to view different parts of the list of sounds.
- A few seconds after you make your selection, the display returns to the normal display. The name of the selected sound is shown in the **RIGHT** part of the display.
- The selected sound is memorized independently for each sound group, so that whenever a **SOUND SELECT** button is pressed, the sound you chose is automatically available.

■ Percussion sounds

You can create a percussion performance on your keyboard.

1. In the **SOUND SELECT** section, press the **KEYBOARD PERC** button.
2. Select the type of percussion sounds from the list on the display.
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. PR307: The arrangement of percussion instruments is different in the "Orche Kit."

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 25.)
- PR307: This pedal is an eight-stage pedal, and the length of the sustain is controlled by the degree to which the pedal is depressed.

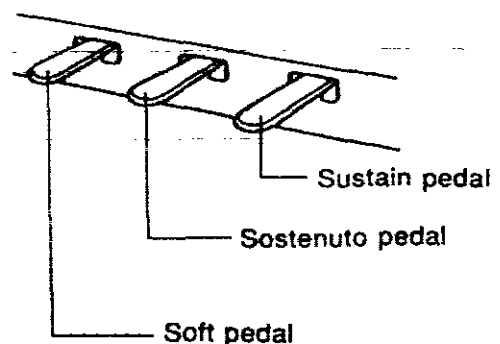
■ Sostenuto pedal

If this pedal is pressed while the keys are pressed, the sustain effect is applied to those notes only. If the pedal is pressed first and the keys are then pressed, the sustain effect does not work for those notes.

- For continuous-type sounds, such as **ORGAN**, the notes sound as long as the pedal is pressed.

■ Soft pedal

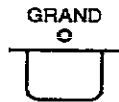
When this pedal is depressed, the sound is softer and the volume is slightly lower.



String resonance

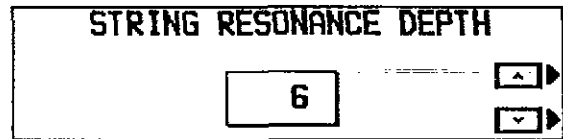
String resonance is the sound heard in an acoustic piano when the struck strings produce a sympathetic resonance of the other unstruck strings. For the **GRAND PIANO** and **UPRIGHT PIANO** sounds, string resonance is produced as long as the sustain pedal is depressed. The amount of string resonance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

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



- The indicator flashes slowly, and **STRING RESONANCE DEPTH** is shown on the display.

2. Use the \wedge and \vee buttons to adjust the amount of resonance (OFF, 1 to 7).



- The higher the number, the greater the amount of resonance.
 - When set to OFF, 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.

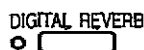


- The on or off status of the **DIGITAL EFFECT** is preset for each sound, so that **DIGITAL EFFECT** turns on when certain sounds are selected.
- This effect differs depending on the selected sound.

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 76.)
- The display can also be used to set this effect to on or off for each part separately (effective when the **DIGITAL REVERB** button is on). (Refer to page 75.)

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 sound selected for the **SOUND SELECT** buttons 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 changes to the **DUAL BALANCE** display.
2. Use the \wedge and \vee buttons to adjust the volume.
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 86.)



- 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.

Keyboard Split

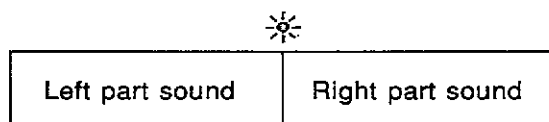


The keyboard can be divided into left and right playing sections, and a different sound played in each section.

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.



- The name of the selected sound is shown in the **LEFT** part of the normal performance display.
- You can now play a different sound for each of the left and right keyboard sections.



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.

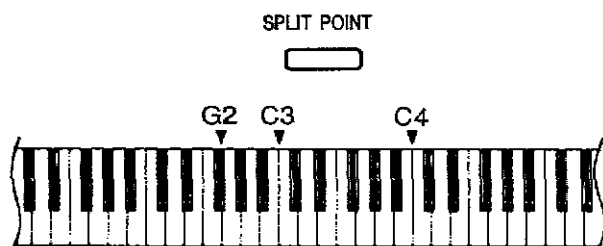


- A few seconds after making the selection, the **LEFT SELECT** button turns off.

- If you select the same sound for the left part again, you can turn off the left part. In this case, the left part of the split keyboard does not produce any sound.

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.

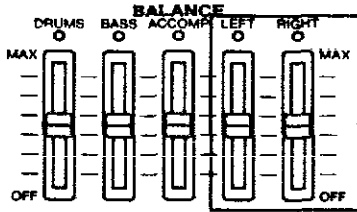
■ Custom split point

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 **SPLIT POINT SETTING** display.
 2. Press a key on the keyboard to specify the desired split point.
 - A split point is set at the location of the pressed key, and is also indicated on the display.
 - 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 sliding **LEFT** and **RIGHT** controls in the **BALANCE** section.



- When a volume is set to **OFF**, the corresponding **BALANCE** indicator goes out.
- In some cases, the actual volume is not in accordance with the position of the sliding control (for example, when using the **PANEL MEMORY** to recall stored panel settings [refer to page 38]).

Transpose



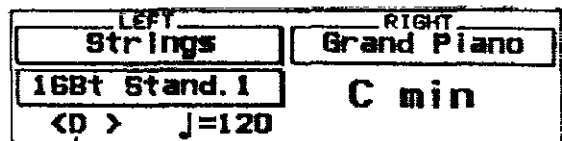
The **TRANSPOSE** buttons are used to change the key of the entire instrument in semitone steps across an entire octave.

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

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



- Each press of the right button changes the key as follows: D[♯] → D → E[♯] → E → F → F[♯]. Each press of the left button changes the key as follows: B → B[♯] → A → A[♯] → G.
- If the two buttons are pressed at the same time, the key returns to C.
- When the **TRANSPOSE** function is active, the transposed key is shown on the display.



<Example: transposed to D>

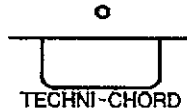
Played keys	Notes that sound
C major	D major

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 25.)
2. Press the **TECHNI-CHORD** button to turn it on.



3. Play the keyboard.
 - The melody you play with your right hand is automatically played in chords which are based on the chords you play with your left hand.
 - The **TECHNI-CHORD** 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 76.)

Example:

Left hand (chord)

Right hand (melody)



Part II Playing the rhythm

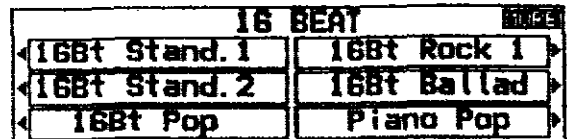
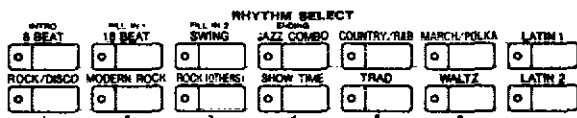
Selecting rhythms



Select various rhythms and hear how they sound.

Select a rhythm.

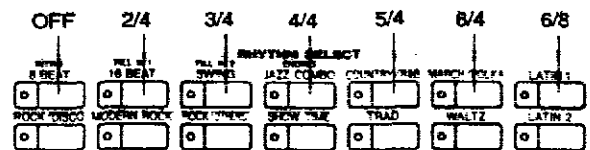
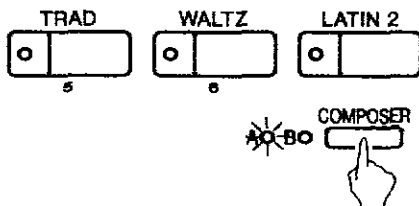
1. In the **RHYTHM SELECT** section, select a rhythm group.
2. Select the desired rhythm from the list on the display.



- Use the **MORE/RETURN** button to view different parts of the list of rhythms.
- A few seconds after you make your selection, the display returns to the normal display. The name of the selected rhythm is shown on the display.
- The selected rhythm is memorized independently for each rhythm group, so that whenever a **RHYTHM SELECT** button is pressed, the rhythm you chose is automatically available.

Metronome

1. Press the **COMPOSER** button to turn it on (A or B).
2. Use the upper horizontal row of buttons in the **RHYTHM SELECT** section to specify the time signature.



- The indicator of the selected metronome lights.
- When a button is pressed to specify a time signature, the list of time signatures is shown on the display. You can then use the display to change the time signature, if desired. A few seconds after making your selection, the display returns to the previous display.
- To turn off the accented beat of the metronome, select "OFF." (If you are using the display to select the time signature, select "Metronome Off.")
- 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.

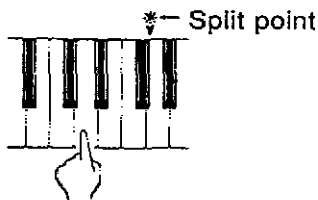
SYNCHRO START

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.



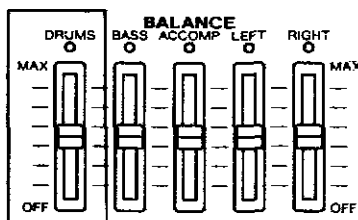
3. Press a key to the left of the keyboard split point.



- 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 while the **SPLIT POINT** button is depressed. 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 25.)

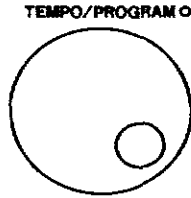
BALANCE

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



Adjust the tempo

The tempo of the rhythm pattern is adjusted with the **TEMPO/PROGRAM** dial.



- The tempo is shown on the display as a numerical value (♩ = 40 to 300).
- When the **TEMPO/PROGRAM** indicator is lit, it means that one of the various function-setting modes is active and the **TEMPO/PROGRAM** dial is not currently available for adjusting the tempo.

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.

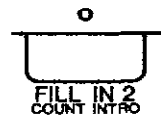


- An intro pattern is played, after which the normal rhythm pattern begins.

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.

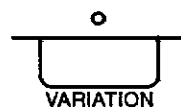
VARIATION

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

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



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



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

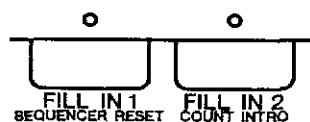
FILL IN

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

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



2. Press the **FILL IN 1** or **FILL IN 2** button.



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

ENDING

Finish the rhythm performance with an ending pattern.

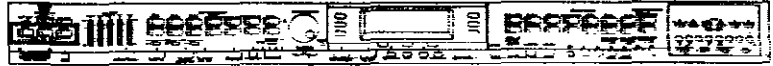
1. Select a rhythm and press the **START/STOP** button.
2. Press the **INTRO & ENDING** button to turn it on.



- 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.

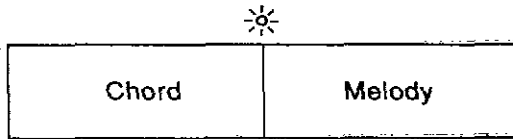
- An ending pattern is produced, and then the rhythm performance stops.

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...



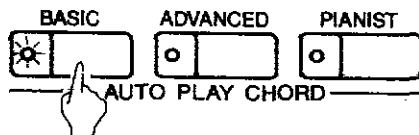
When an **AUTO PLAY CHORD** mode is selected, an automatic accompaniment which matches the rhythm you have chosen is played in the chord which you specify with your left hand. The melody is played with your right hand.

- 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 **VARIATION, FILL IN, INTRO** and **ENDING**, the automatic accompaniment is also used in these patterns.
- When the rhythm is off, if the **BASIC** mode is on and a chord is specified, the specified root note (**ROOT BASS**) and chord notes (**CHORD**) are produced.

BASIC mode

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

Left hand

Play the melody with your right hand.

■ **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.

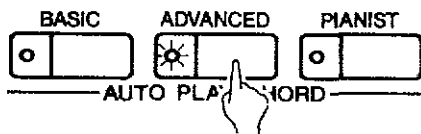


- The piano can distinguish the following played chords for each key (C is given as an example): C, C7, CM7, Caug, Caug7, Cm, Cm7, Cdim, Cm7^{b5}, CmM7, C^{sus}4, C7^{sus}4, C^{b5}, C7^{b5}, Cm^{b5}, C6, Cm6, CM7^{b5}, CM7^{#5}, CmM7^{b5}.
- If a chord other than these is played, the chord in this group which is most closely related is used.

ADVANCED mode

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.

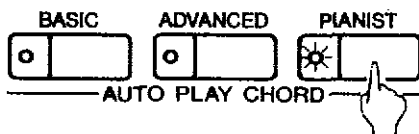
3. Play the chord on the left keyboard.

- The sound selected for the left section of the keyboard is heard.
- You can turn off the left part. (Refer to page 25.)
- 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 77.)

PIANIST mode

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.

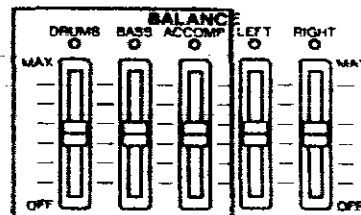
3. Play the chord.

- 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 sliding controls in the **BALANCE** section.

- The **ACCOMP** control adjusts the total volume of all the accompaniment parts (**ACCOMP PART 1, 2 and 3**).



Modifying the ACCOMP

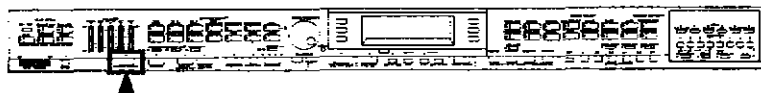
The **ACCOMP** part of the **AUTO PLAY CHORD** is comprised of three separate accompaniment parts.

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 75.)

Dynamic Accomp



DYNAMIC ACCOMP is a function which changes each accompaniment pattern of the **AUTO PLAY CHORD**.

1. Turn on the **DYNAMIC ACCOMP** button.



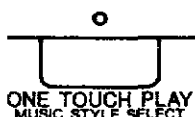
2. Play the keyboard in one of the **AUTO PLAY CHORD** modes.
 - Depending on the condition of the performance, each accompaniment part changes.

One Touch Play

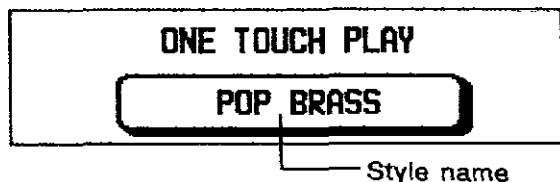


With the **ONE TOUCH PLAY** feature, the sounds and effects, etc. matching the selected rhythm are easily set in seconds and you are ready to play immediately.

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

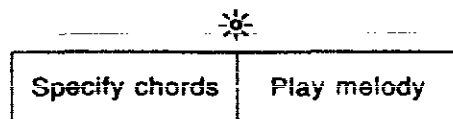


- The display looks similar to the following.



- 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 38.)

Music Style Select

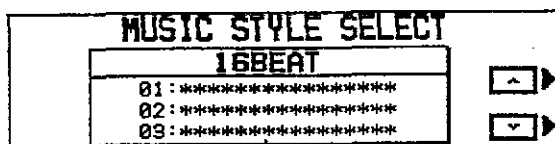


With this feature, the panel settings are set according to the selected music style.

1. Select the **PLAY STYLE (AUTO PLAY CHORD)**.
 - Select from **BASIC**, **ADVANCED** and **PIANIST**.
2. Press the **MUSIC STYLE SELECT (ONE TOUCH PLAY)** button momentarily.
 - If the **PLAY STYLE (AUTO PLAY CHORD)** was not selected in step 1, the message "Please select APC mode!" appears on the display. At this point you should turn on one of the three **AUTO PLAY CHORD** buttons.
3. In the **RHYTHM SELECT** section, select a rhythm group.
4. Use the \wedge and \vee buttons to select a music style.
5. Play the keyboard.
 - When a key on the left section of the keyboard is pressed, the automatic rhythm begins to play immediately (**SYNCHRO START**). Play the melody with your right hand.

Suggestions for using MUSIC STYLE SELECT

Press the **INTRO & ENDING** button before you play for a professional-sounding introduction. Use the **MUSIC STYLE SELECT** 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 38.)



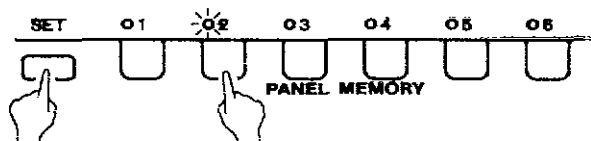
— Style name

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**.

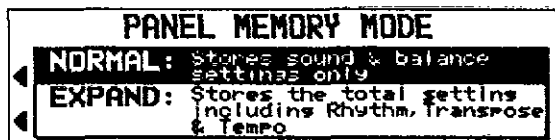


- The panel settings are stored in the selected number button. You can recall these panel settings any time during your performance just by pressing the same number button.

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. Select the mode.

NORMAL mode

Stores sound and volume balance settings only.

EXPAND mode

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 86.) 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 77.)

Part III Sequencer

Outline of the Sequencer



A sequencer records your performance in a similar way to a tape recorder. This instrument'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 the **AUTO PLAY CHORD** to provide the accompaniment), or to build up a complex arrangement with several different parts playing together, like an orchestral score. This instrument'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. This instrument's **SEQUENCER** enables you to edit your recorded performance. Unlike a tape recorder you can change the sound or the tempo during playback, or correct wrong notes or timing errors.

SEQUENCER features

■ You can change the tempo without changing the pitch

When you record your performance at a slow tempo and play it back at a faster tempo, the pitch stays the same.

■ Consistent sound

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

■ Edit your recorded performance

Comprehensive editing functions allow you to modify your recorded performance. Data can easily be erased, corrected or copied, providing an especially convenient tool for creating your original tunes.

■ Instant search

A recorded tape has to be rewound, but digital action means you can return to the beginning of your performance, or find any measure, instantly.

■ Save your performances on disks

All the data of your recorded performances can be stored on disks. The built-in Disk Drive also allows you to play commercially sold disks on your own piano.

- Features and operation of the built-in Disk Drive are explained in Part V: Disk Drive.

Recording modes

■ EASY RECORD (Refer to page 41.)

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 (Refer to page 43.)

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

■ STEP RECORD (Refer to page 46.)

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 **SEQUENCER** tracks is about 19,000. The remaining memory available for recording is shown on the display (LCD screen) as a percentage (MEM= %).

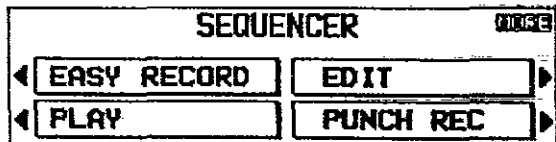
- When "Memory full" appears on the display, no more data can be stored in the **SEQUENCER**.
- The recorded contents can be saved on a disk for recall at a later time. (Refer to page 69.)

SEQUENCER menu

In the **PROGRAM SECTION**, press the **SEQUENCER** button to turn it on.



- The display changes to the following.



- Press the **MORE/RETURN** button to view the next section of the menu.



EASY RECORD (page 41)

This mode allows you to begin recording quickly without complicated set-up procedures.

PLAY (page 51)

Adjust the settings related to playback operation.

EDIT (page 52)

The following editing features are available.

- **SONG CLEAR**: Erase the recorded contents of all tracks.
- **TRACK CLEAR**: Erase the contents of a specific track.
- **QUANTIZE**: Correct the timing of the recorded performance.
- **TRACK MERGE**: Merge the recorded contents of two tracks and store in a third track.
- **MEASURE ERASE**: Erase the contents of specific measures.
- **MEASURE COPY**: Copy the contents of specific measures.

PUNCH REC (page 55)

Record your performance just as you play it on the keyboard.

TRACK ASSIGN (page 50)

Assign parts to up to 16 different tracks.

MEDLEY (page 57)

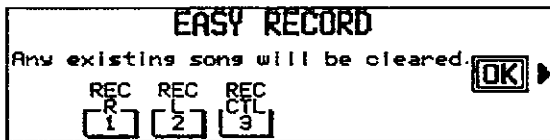
Specify medley playback of songs recorded on a disk.

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 **SEQUENCER** button to turn it on.
3. On the **SEQUENCER** menu display, select **EASY RECORD**.
 - The display changes to the following.
4. Press the OK button.
 - The display changes to the **REAL RECORD** display.
5. Play the keyboard.
 - Recording begins as soon as you start the rhythm or play the keyboard.
6. When you have finished recording, press the **SEQUENCER REC** button to turn it off.



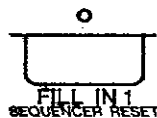
Here is what happens when you select the **EASY RECORD** mode.

- 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

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.

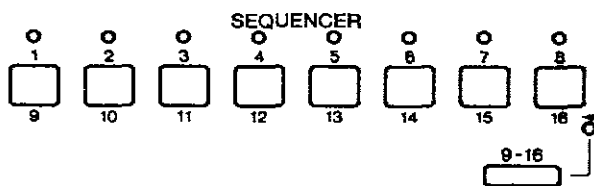
Sequencer parts

The **SEQUENCER** has 16 recording tracks to which the various parts are assigned. The table below explains what kind of performance data can be recorded in each part.

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)	<ul style="list-style-type: none"> • 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)	<ul style="list-style-type: none"> • 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/STEP)	<ul style="list-style-type: none"> • Sound and rhythm changes, volume settings • DIGITAL EFFECT, SUSTAIN PEDAL on/off • DIGITAL REVERB on/off • AUTO PLAY CHORD status • DYNAMIC ACCOMP on/off • VARIATION, FILL IN 1, 2, INTRO & ENDING on • SPLIT status • PANEL MEMORY selection changes • TRANPOSE status • TEMPO setting, START/STOP on/off • Pedal operation etc.
CHORD [CHD]	Recording a chord progression for the AUTO PLAY CHORD (STEP)	<ul style="list-style-type: none"> • Rhythm settings and selection changes • VARIATION, FILL IN 1, 2, INTRO & ENDING on • TEMPO setting, TRANPOSE status • PANEL MEMORY selection changes • Volume of ACCOMP, BASS and DRUMS parts
RHYTHM [RHY]	Settings related to rhythm (STEP)	<ul style="list-style-type: none"> • Rhythm settings and selection changes • VARIATION, 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 50.)
- During recording, the **MEASURE** count on the display (M=) corresponds to the time signature of the selected rhythm. However, if rhythm data is stored in the **RHYTHM** part and that part is played back, the measure count on the display corresponds to the stored rhythm data.
- **PR307**: In some cases, the recorded sustain pedal effect may have a different nuance during playback.

■ Factory-preset track assignment



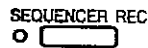
- | | |
|------------|------------|
| 1: RIGHT | 9: PART5 |
| 2: PART2 | 10: PART6 |
| 3: LEFT | 11: PART7 |
| 4: CHORD | 12: PART8 |
| 5: CONTROL | 13: PART9 |
| 6: RHYTHM | 14: PART10 |
| 7: DRUM | 15: PART11 |
| 8: PART4 | 16: PART12 |

Realtime Record

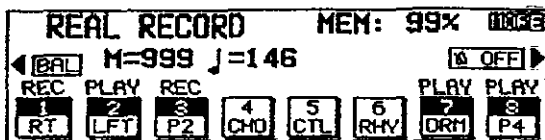
With REALTIME RECORD, your performance is recorded with the timing exactly as you played it on the keyboard.

Recording

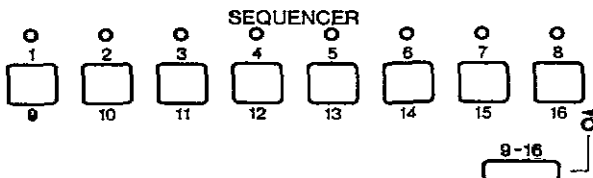
1. Set the sounds, effects, volumes, etc. for the parts you are going to record.
2. Press the **SEQUENCER REC** button to turn it on.



- The display looks similar to the following.



3. Use the **SEQUENCER** track buttons (1 to 16) to specify the track for the part you are going to record. (For details about track assignment, refer to pages 42 and 50.)
- To select tracks 9 to 16, make your selection while pressing the 9-16 button.



- The selected track button indicator flashes.
- The selected track numbers are highlighted on the display. Press the **MORE/RETURN** button to view tracks 9 to 16. In this case, the **SEQUENCER** track buttons 1 to 8 become track buttons 9 to 16.
- You can select two or more tracks to record at one time.
- When you select a track, the panel settings in effect at that time are stored.

4. Use the **TEMPO/PROGRAM** dial to adjust the tempo.

- The tempo is shown on the display as a numerical value (♩=).

5. Turn the metronome on or off as desired with **ON** or **OFF** button.

- The metronome selection alternates between **ON** and **OFF** each time the button is pressed.
- The metronome sound is not recorded.

6. Play the keyboard.

- Recording begins. You can also press the **START/STOP** button to start the rhythm and begin recording.

- On the display, "M=" indicates the current measure number, and "MEM=" indicates the remaining memory (%) available for recording.

- If you make a mistake in recording, you can erase the recording. (Refer to page 52.)

- You can also correct a specific portion of your performance without having to redo the whole part. (Refer to page 55.)

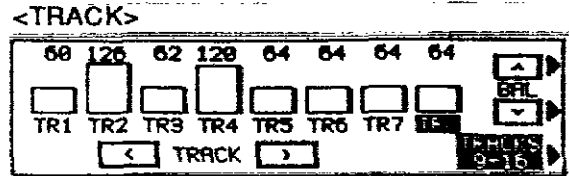
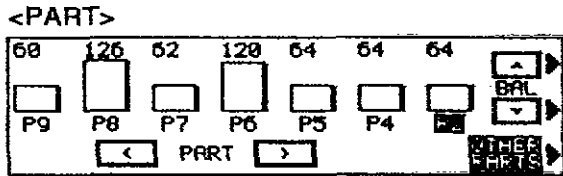
7. When you have finished recording, press the **SEQUENCER REC** button to turn it off.

Volume adjustment

The volume of each part and track can be adjusted during recording.

On the REAL RECORD display, press the BAL button.

- The display looks similar to the following.
- There are several pages of balance display. Press the button at the lower right to show other balance displays.

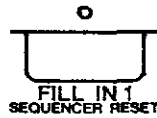


- Specify the part with the PART < and > buttons, and adjust the volumes with the BAL ^ and v buttons.

- Specify the track with the TRACK < and > buttons, and adjust the volumes with the BAL ^ and v buttons.

Playback

1. Turn on the track buttons for the parts you wish to play back.
 - Tracks whose indicators are not lit will not be played back.
2. Press the SEQUENCER RESET (FILL IN 1) button.



3. Press the START/STOP button.



- The recorded panel settings are recalled.

- 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.
 - On the display "REC" indicates tracks which are being recorded, and "PLAY" indicates tracks which are being played back.
3. Repeat steps 1 and 2 to record all the desired parts.

RHYTHM = 16 BEAT ♩ = 120

RIGHT (GRAND PIANO)
PART 2 (MODERN PIANO)
LEFT (ORGAN)
PART 4 (BASS)

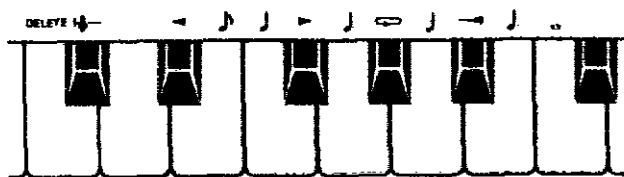
RIGHT (GRAND PIANO)
PART 2 (MODERN PIANO)
LEFT (ORGAN)
PART 4 (BASS)

Step Record

The step record mode can be used to store both the chord progression for the automatic accompaniment and the rhythm changes. During playback the chords and rhythms change at exactly the right time.

Store a chord progression

Store the chord progression and panel settings for the **AUTO PLAY CHORD** in the track for the **CHORD** part. Then, when the **AUTO PLAY CHORD** is used during playback, even if you do not specify the chords with your left hand, the chords change automatically.



- The chord length is specified with the **CHORD STEP RECORD** keys on the keyboard.

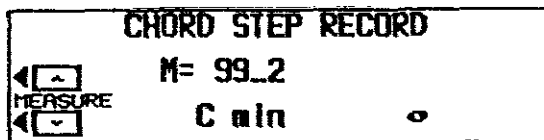
<p>Note value keys</p> <ul style="list-style-type: none"> ◦ Whole note ◡ Dotted half-note ◡ Half-note ◡ Dotted quarter-note ◡ Quarter-note ◡ Eighth-note <p>Reset key Press to begin storing from the beginning.</p> <p>Correction keys</p> <ul style="list-style-type: none"> ◀ Move back one chord. ▶ Move forward one chord. <p>DELETE Press to erase recorded data.</p>	<p>Repeat key Press to end the chord-storing procedure and to specify automatic repeat playback of the stored progression.</p> <p>End key Press after the whole chord progression has been stored.</p> <ul style="list-style-type: none"> • 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
◦	◦	◡	◡	◡	◡

2. Use the **SEQUENCER** track buttons to select the track to which the **CHORD** part is assigned (the factory preset is 4).
- The display changes to the following.

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



- The display looks similar to the following.

STEP RECORD PART SELECT

Press the flashing Sequencer Track button on the control panel for the part that you want to do the STEP RECORD.

3. Store the chords.

<Measure 1, measure 2>

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



- A C major chord of whole-note length is stored.
- The chord name is shown on the display.

<Measure 3>

(1) While playing an F chord, press the \downarrow key one time.



(2) While playing a G7 chord, press the \downarrow key one time.



<Measure 4>

- (1) While playing a C chord, press the \downarrow key one time.
- (2) While playing an Am chord, press the \downarrow key one time.

- You can press the **INTRO & ENDING** button or a **FILL IN** button on the panel to store the desired pattern at the current position. (An intro can be stored only at the beginning.)
- 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 (—H).

- 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 (\curvearrowright) instead of the End key (—H).
- If you press the **INTRO & ENDING** button instead of the End key (—H), 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. Follow the procedure to select the **CHORD STEP RECORD** display.
2. Use the **MEASURE** buttons to go to the measure you wish to modify. Use the \blacktriangleleft and \blacktriangleright Correction keys to move to the point you wish to edit.
 - The measure number, beat number, chord name and length as well as the stored function (INTRO, FILL, etc.) are shown on the display.
 - To go to the end of the chord progression, while pressing the Reset key ($\text{t} \frac{1}{2}$ —), press the \blacktriangleleft key.
 - The lengths of rests are indicated as follows.

Example:

t 1-beat rest (quarter rest)
 γ 1/2-beat rest (eighth rest)
 $\text{t} \times 10 + \gamma$ 10-1/2-beat rest

3. You can press the **DELETE** key to erase the data which is displayed.

- The data which is displayed at that place 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 (—H).
- Rests can also be erased. Each time the **DELETE** key is pressed, the rest is erased in units of $\text{t} \times 1$. The γ rest is erased last.

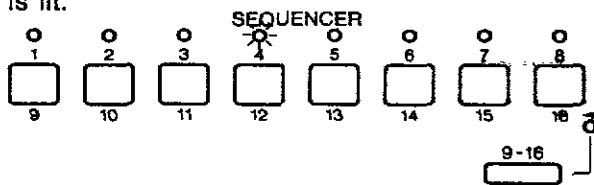
4. Store new chords.

- 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.

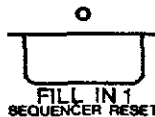
■ Playing back your stored chord progression with the AUTO PLAY CHORD

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



- If the indicator is not lit, press the button to turn it on.

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 variation>

To store a variation at the desired position, before storing the chord, press the **VARIATION** 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.

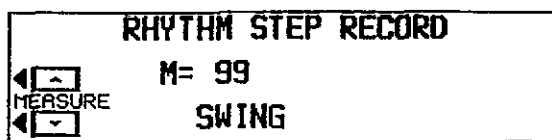
<Other settings which are stored in the **SEQUENCER**>

- **ACCOMP PART** button on/off status
- Balance settings for the **DRUMS, BASS** and **ACCOMP** parts
- **TEMPO** setting, **TRANSPOSE** setting
- **TECHNI-CHORD** button on/off status
- **DYNAMIC ACCOMP** button on/off status
- **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).
 - The display changes to the following.



3. Use the **MEASURE** \wedge and \vee buttons to go to the measure you wish to record.

4. Store the rhythm data.

- Data which can be stored:

START/STOP

Changes in the rhythm selection

COUNT INTRO, INTRO, FILL IN,

VARIATION, 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 Repeat key or the End key.

Repeat key ()

During playback, the recorded rhythm progression is repeated.

End key ()

During playback, playback of the recorded rhythm progression stops at this point.

- The instrument exits the recording mode.
- 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.

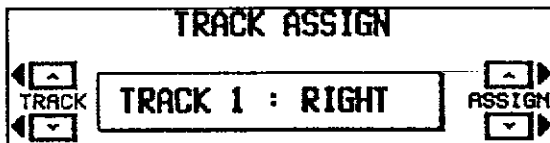
■ **Correct the recorded rhythm progression**

1. Follow the procedure to select the RHYTHM STEP RECORD display.
2. Use the MEASURE ^ and v buttons, or ◀ and ▶ keys to go to the measure you wish to modify.
 - To go to the end of the rhythm progression, while pressing the Reset key (F6-), press the ◀ key.
3. Press the DELETE key to erase data.
 - To erase all the data from the current track, while pressing the DELETE key, press the End key (—H).
4. Store the new rhythm, etc.
 - If you select a rhythm with a different time signature, the time signature of all subsequent measures will also change.
 - If data has already been recorded in other tracks, you cannot select a rhythm with a different time signature.
5. When you have completed making corrections, turn off the STEP REC button.

Track Assign

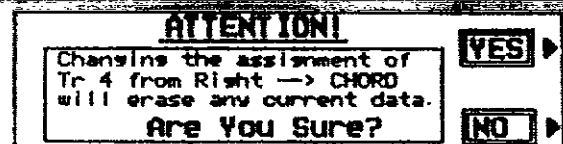
Each SEQUENCER part is already assigned to a track number. However, you can use the TRACK ASSIGN function to assign parts to tracks as you wish. This function is also used to designate the tracks used for the rhythm data and chord progression data.

1. On the SEQUENCER menu display, select TRACK ASSIGN.
 - The display looks similar to the following.



2. Use the TRACK ^ and v buttons to select the track.
3. Use the ASSIGN ^ and v buttons to select the part for the specified track.
 - Select one of the following parts: RIGHT, LEFT, PART2, PART4 to PART15, DRUM, CONTROL, CHORD, RHYTHM. (For an explanation of each SEQUENCER part, refer to page 42.)
 - When a part other than the CONTROL, CHORD or RHYTHM part is assigned, the track assign procedure is completed at this point.
 - The RHYTHM, CONTROL and CHORD parts cannot be assigned to more than one track.

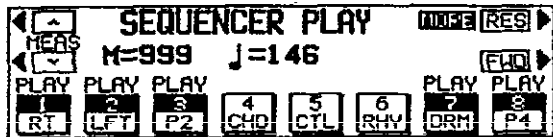
4. When assigning the CONTROL, CHORD or RHYTHM part, press the OK button.
 - The following confirmation display appears to warn you that currently stored data in the tracks concerned will be erased. Press the YES button to confirm that you wish to execute the specified track assignment. Or press NO to stop the track assignment.



Playback from a specific measure

You can specify the measure from which you wish playback to begin.

1. On the **SEQUENCER** menu display, select **PLAY**.
 - The display looks similar to the following.



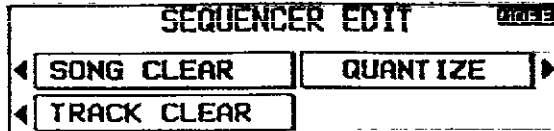
2. Turn on the buttons for the tracks you wish to have played back.
 - The numbers of the selected tracks are highlighted on the display. (To view the display for tracks 9 to 16, press the **MORE/RETURN** button.)
3. Use the **MEAS** \wedge and \vee buttons to specify the beginning measure of playback.
 - "M=" indicates the current measure number.
 - You can quick-search for the desired measure while listening to the recorded performance by holding down the **FWD** button. (This button does not work during normal playback.)
 - You can press the **RES** button to return to the beginning of the first measure and recall the panel status which was in effect at the beginning of recording. (This button does not work during normal playback.)
4. Press the **START/STOP** button.
 - The recorded performance is played back from the specified measure.
 - When playback is begun from a measure in which an **INTRO**, **COUNT INTRO**, **FILL IN** or **ENDING** is recorded, the corresponding function does not work.
5. To stop playback, press the **START/STOP** button again.
 - If the **START/STOP** button is pressed again, playback will continue from the point it was interrupted.

Editing the recorded performance

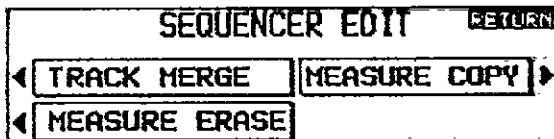
The edit feature allows you to erase or change portions of your performance after it has been recorded.

Select the edit function

- On the **SEQUENCER** menu display, select **EDIT**.
 - An edit menu similar to the following appears.
- Select the edit function.
 - The display changes in accordance with your selection.
- Perform the editing procedures (explained in the following sections).
 - During the editing procedure, you can press the **EXIT** button to go back to the **SEQUENCER EDIT** display.
 - During the editing procedure, if the indicator for the **TEMPO/PROGRAM** dial is lit, you can use the dial for the editing function.

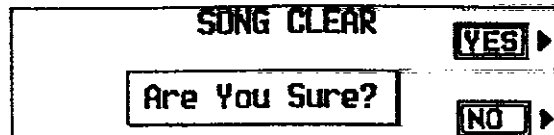


- Press the **MORE/RETURN** button to view the next part of the edit menu.



SONG CLEAR

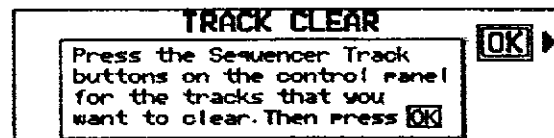
Erase the recorded contents of all tracks.



- Press the **YES** button to execute the function, or press the **NO** button to cancel the function.
- When the data has been erased, "Completed!" appears on the display, and the instrument returns to the normal performance mode.

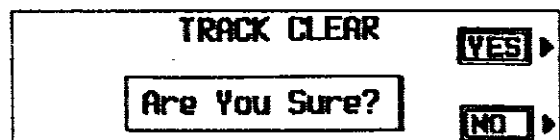
TRACK CLEAR

Erase the contents of a specific track.



- Use the **SEQUENCER** track buttons to select the track or tracks you wish to clear.

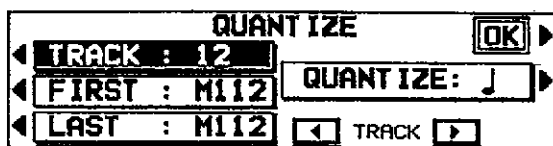
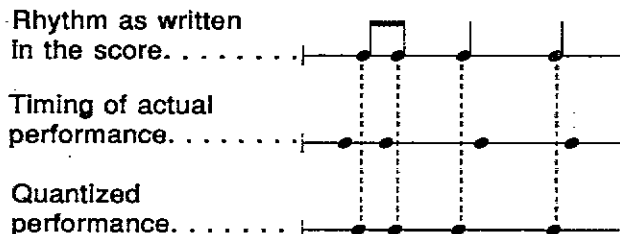
- Press the **OK** button.
- The following confirmation display appears. Press the **YES** button to execute the function, or press the **NO** button to cancel the function.



- When the data has been erased, "Completed!" appears on the display.

QUANTIZE

The QUANTIZE function can correct the timing of your performance after it has been recorded. If the rhythm is slightly out of sync or inexact, it will automatically be corrected to the specified quantize level.

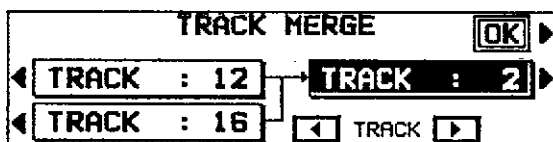


1. Select TRACK. Use the < and > buttons to specify the track number.
 - This function does not work for the CONTROL, RHYTHM and CHORD tracks.
2. Select FIRST. Use the < and > buttons to specify the start point (measure number).
3. Select LAST. Use the < and > buttons to specify the end point (measure number).
4. Select QUANTIZE. Use the < and > buttons to specify the quantize level.
 - Select from ♩, ♪, ♫, ♮, ♯, ♭, ♮, ♯, ♭, ♮, ♯, ♭. (A 3 denotes a triplet-type note.)
5. Press the OK button.
 - The confirmation display appears. Press the YES button to execute the function, or press the NO button to cancel the function.

TRACK MERGE

Merge the recorded contents of two tracks (source tracks) and store the merged contents in a third track (destination track).

- When the TRACK MERGE function is executed, the data is erased from the two source tracks.

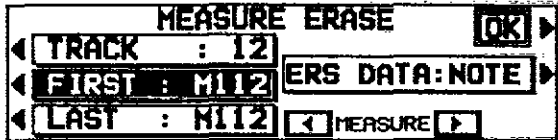


2. Select the destination track (right half of the display).
 - Press the button on the right side of the display to select the destination track, and use the < and > buttons to specify the track number.
3. Press the OK button.
 - The confirmation display appears. Press the YES button to execute the function, or press the NO button to cancel the function.

1. Select the two source tracks (left half of the display).
 - Use the buttons on the left side of the display to select one of the source tracks, and use the < and > buttons to specify the track number. Repeat for the other source track.
 - This function does not work for the CONTROL, RHYTHM and CHORD tracks.
 - If the part assigned to the upper source track ("upper" meaning its position on the TRACK MERGE display) is different from the part assigned to the lower source track, when the parts are merged in the destination track, the new track is assigned the same part as the upper track.

MEASURE ERASE

Erase the recorded contents of specific measures. You can also specify which type of data is to be erased.



1. Select TRACK. Use the < and > buttons to specify the track number.
 - You cannot select the track for the RHYTHM part or CHORD part in which a repeat command has been stored.
 - If ALL is selected, data is erased from the specified measures of all the tracks at one time.

2. Select FIRST. Use the < and > buttons to specify the start point (measure number).
3. Select LAST. Use the < and > buttons to specify the end point (measure number).
4. Select ERS DATA. Use the < and > buttons to specify the type of data to be erased.

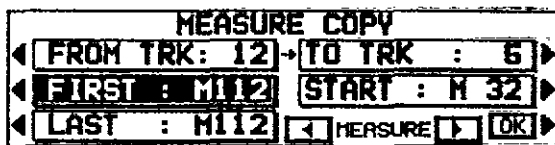
ALL: All data is erased.
 NOTE: Only note data is erased.
 CONTROL: Only control data (volume, effect and other panel settings and selection changes) is erased.

5. Press the OK button.
 - The confirmation display appears. Press the YES button to execute the function, or press the NO button to cancel the function.

MEASURE COPY

Copy measures from one track (source track) to another track (destination track).

- On the destination track, the new data replaces the current measure contents.



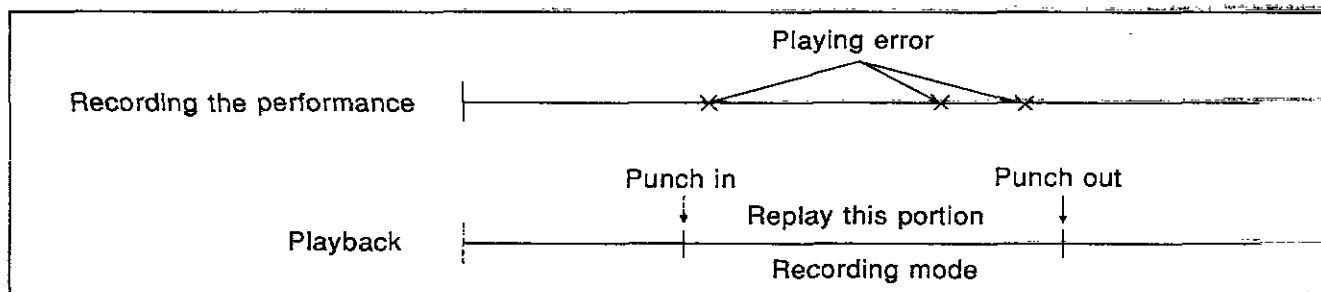
1. Select FROM TRK. Use the < and > buttons to specify the source track.
 - You cannot select the track for the RHYTHM part or CHORD part in which a repeat command has been stored.
 - If ALL is selected, the specified measures are copied to all tracks at the same time.
2. Select FIRST. Use the < and > buttons to specify the start point (measure number) on the source track.

3. Select LAST. Use the < and > buttons to specify the end point (measure number) on the source track.
4. Select TO TRK. Use the < and > buttons to specify the destination track.
 - Measures in a track for the CONTROL, RHYTHM or CHORD part can be copied only to the same track.
5. Select START. Use the < and > buttons to specify the start point (measure number) on the destination track.
6. Press the OK button.
 - The confirmation display appears. Press the YES button to execute the function, or press the NO button to cancel the function.

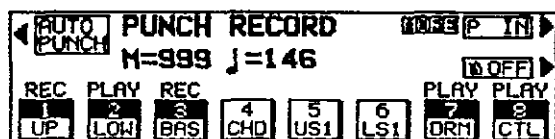
Punch Record

If you make a playing error during REALTIME RECORD or would like to change the recording for some other reason, you can correct a selected portion of the performance without having to redo the whole part.

“Punch in” means to enter the recording mode, and “punch out” means to exit it.



1. In addition to the part(s) you are going to correct, you can also listen to other parts during punch recording. Turn on the track buttons for the parts you wish to play back.
2. On the **SEQUENCER** menu display, select **PUNCH REC.**
 - The display looks similar to the following.



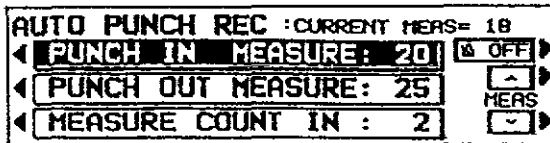
3. Select the track which contains the portion you want to correct.
 - On the display “REC” indicates tracks which are being recorded, and “PLAY” indicates tracks which are being played back.
 - To view the display for tracks 9 to 16, press the **MORE/RETURN** button.
 - Set the metronome to on or off with the **ON** or **OFF** button.
4. Press the **START/STOP** button to begin playback of the specified track.

5. During playback, press the **P IN** button at the point you want to begin recording.
 - Recording begins as soon as the **P IN** button is pressed. Begin playing at this point.
 - The **P IN** button switches to the **P OUT** button.
6. Press the **P OUT** button at the point you want to stop recording.
 - Recording stops immediately.
7. When you have finished correcting the performance, press the **SEQUENCER** button to turn it off.
 - You can also begin punch-in recording by playing the keyboard. You can specify the punch-in/punch-out points with a pedal. (Refer to page 77.)

■ AUTO PUNCH RECORD

You can set the punch-in and punch-out points beforehand, so that recording automatically begins and ends at the specified points.

1. On the **SEQUENCER** menu display, select **PUNCH REC**. Specify the track you wish to correct.
 - The display looks similar to the following.



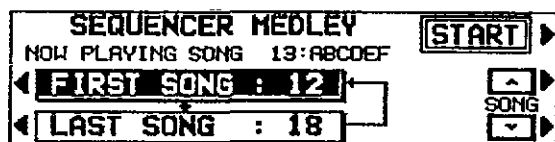
3. Select **PUNCH IN MEASURE**. Use the **MEAS** \wedge and \vee buttons to specify the number of the punch-in measure.
 - The number of the **PUNCH OUT MEASURE** must be higher than the number of the **PUNCH IN MEASURE**.
 - The specified **PUNCH OUT MEASURE** is not recorded.
4. Select **PUNCH OUT MEASURE**. Use the **MEAS** \wedge and \vee buttons to specify the number of the punch-out measure.
 - The number of the **PUNCH OUT MEASURE** must be higher than the number of the **PUNCH IN MEASURE**.
 - The specified **PUNCH OUT MEASURE** is not recorded.
5. Select **MEASURE COUNT IN**. Use the **MEAS** \wedge and \vee buttons to specify the number of lead-in measures you wish to have played back before the punch-in measure.
 - Playback will begin from the measure indicated by **CURRENT MEAS** on the display.
 - Set the metronome to on or off with the **ON** or **OFF** button.

6. Press the **START/STOP** button.
 - Playback begins from the measure specified in step 5.
7. Correct the performance.
 - The mode changes automatically to the recording mode at the specified punch-in measure. Begin playing at this point. The mode automatically changes back to the playback mode at the specified punch-out measure.
 - Note that, even when you have set the punch-in and punch-out measures, you can begin recording before the punch-in measure starts by playing the keyboard or pressing a pedal to which the **PUNCH IN/OUT** function has been assigned.
8. When you have finished correcting the performance, press the **SEQUENCER REC** button to turn it off.

Sequencer Medley

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

1. Insert the disk into the Disk Drive.
2. On the **SEQUENCER** menu display, select **MEDLEY**.
 - The display changes to the following.



3. Select **FIRST SONG**. Use the \wedge and \vee buttons to specify the number of the first song you wish to have played.
4. Select **LAST SONG**. Use the \wedge and \vee buttons to specify the number of the last song you wish to have played.

5. Press the **START** button.
 - The songs from the specified range are repeatedly played back in order.
 - 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.

6. To stop medley play, press the **STOP** button.

7. Press the **SEQUENCER** button to turn it off.
 - The procedure for saving your **SEQUENCER** performances on a disk is explained in Part V: Disk Drive (page 65).
 - Performances which have been saved in the Standard MIDI File format are not played back in this mode.

Part IV Composer

Outline of the Composer



The **COMPOSER** enables you to create your own accompaniment patterns or to edit preset accompaniment patterns. A pattern is comprised of five parts: **DRUMS**, **BASS** and 3 **ACCOMP** parts. These parts would form the backing of a song, for example: Drums, Acoustic Bass, Piano, Jazz Guitar and Vibes. You may find it useful at first to copy and edit a preset pattern.

ACCOMP 1

ACCOMP 2

ACCOMP 3

BASS

DRUMS

Rhythm components which can be stored

In the **NORMAL** mode, you can store up to 12 different rhythms (6 in each memory bank, **A** and **B**).

- When you set the **COMPOSER** mode to the **EXPAND** mode, you can also create **INTRO**, **FILL IN** and **ENDING** patterns. (Refer to page 64.)
- The recorded contents can be saved on a disk for recall at a later time. (Refer to page 69.)

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. The remaining memory available for recording is shown on the **RECORD** display as a percentage (**MEM= %**).

- When "Memory full!" appears on the display no more data can be stored in the **COMPOSER**.
- It is a good practice to save your completed rhythm patterns on disks before clearing any of the **COMPOSER** memories. (Refer to page 69.)

Two ways to record in the COMPOSER

There are two ways to create and record a rhythm.

■ Edit a preset rhythm

Use this method to easily create a new rhythm by modifying part of a preset rhythm.

■ Create a completely new rhythm

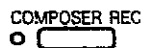
Clear the memories and compose a completely new rhythm from scratch.

Setting up to create a rhythm pattern

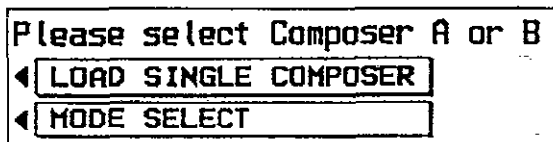
First decide whether you are going to "Edit a preset rhythm pattern" or "Create a completely new rhythm." Below are the instructions for preparing to edit a preset rhythm pattern. If you are going to create a completely new rhythm pattern, follow the instructions on page 60.

Edit a preset rhythm pattern

1. Select a preset rhythm using the **RHYTHM SELECT**.
 - Do not select a metronome rhythm.
2. In the **PROGRAM SECTION**, press the **COMPOSER REC** button to turn it on.

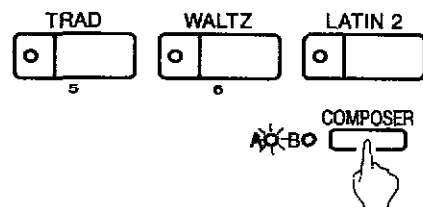


- The display looks similar to the following.

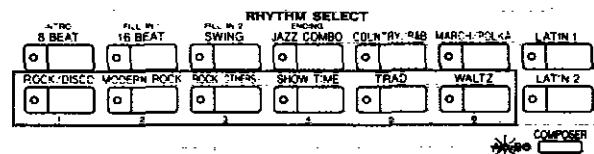


- The **LOAD SINGLE COMPOSER** option allows you to load recorded **COMPOSER** data from a disk into your Instrument's memory. (Refer to page 68.)
- The **MODE SELECT** option is used when you are also going to create fill-in and intro patterns. (Refer to page 64.)

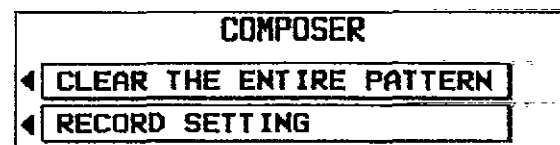
3. Press the **COMPOSER** button to select a bank in which to record the rhythm (A or B).



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.

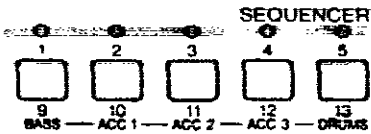


- Select one of the six buttons with the flashing indicators.
- "COPY COMPLETED!" appears on the display, and the rhythm you specified in step 1 is copied to the specified number button.
- The display looks similar to the following.



- If necessary, select RECORD SETTING, and make the various recording settings. (Refer to page 61.)
- The TIME SIG. and MEASURE settings can be adjusted only when the pattern has been cleared by the CLEAR THE ENTIRE PATTERN function.

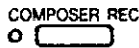
6. Press the button for the part of the pattern you want to change first.



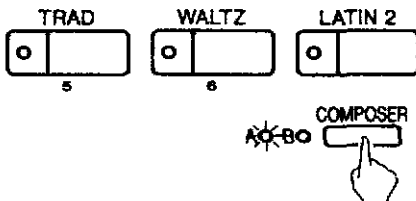
- The indicator flashes.
- The rhythm you selected in step 1 and the metronome start, and recording begins. (Refer to page 62.)

Create a completely new rhythm

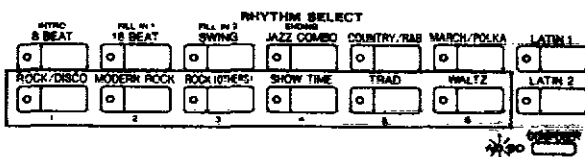
1. Press the COMPOSER REC button to turn it on.



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



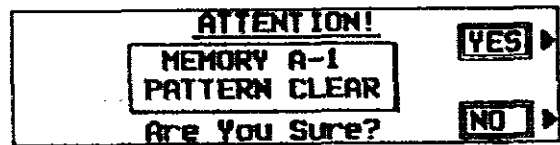
3. In the lower row of the RHYTHM SELECT section, press one of the numbered buttons (1 to 6) in which to record the rhythm.



- Select one of the six buttons with the flashing indicators.
- After "COPY COMPLETED!" is shown, the display changes to the following.

4. Press the CLEAR THE ENTIRE PATTERN button.

- The following confirmation display appears. Press the YES button to execute the function, or press the NO button to cancel the function.



- When you press the YES button, "Completed!" is shown, and then the display returns to the COMPOSER display.

5. Press the RECORD SETTING button and make the various recording settings.

- The display of recording settings changes in order as follows (the MORE/RETURN button is used to view the different pages of the display):



■ Time signature, number of measures

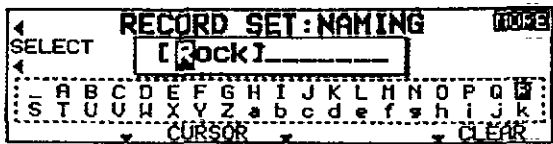


TIME SIG.
Select TIME SIG. and use the ^ and v buttons to specify the time signature (from 1/4 to 8/4).

MEASURE
Select MEASURE and use the ^ and v buttons to specify the number of measures in your repeating rhythm pattern (from 1 to 8).

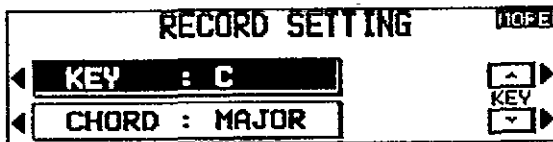
- These settings can be adjusted only when the pattern has been cleared by the CLEAR THE ENTIRE PATTERN function.

■ Naming your rhythm pattern



- Use the CURSOR buttons to highlight the character position in the name box. Use the SELECT buttons to select the character. Repeat these steps to type the whole name (up to 13 characters).
- To erase the name, press the CLEAR button.

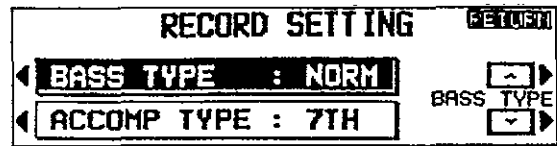
■ Key, chord type



KEY
Select KEY and use the ^ and v buttons to specify the root note of the chords you wish to record.

CHORD
Select CHORD and use the ^ and v buttons to specify the type of chord you wish to record (MINOR or MAJOR).

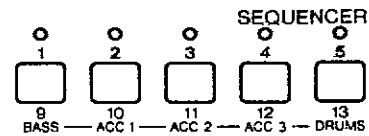
■ Bass and accomp phrase progression



BASS TYPE
Select BASS TYPE and use the ^ and v buttons to specify the type of phrase progression for the BASS part (NORMAL or 7TH).

ACCOMP TYPE
Select ACCOMP TYPE and use the ^ and v buttons to specify the type of phrase progression for the ACCOMP parts (NORMAL or 7TH).

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

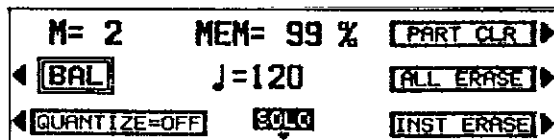


- The indicator flashes.
- The metronome sound starts and recording begins. (Refer to page 62.)

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 groups 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 as "M=".
- Record the performance in C major for correct chord progressions during playback. To record the performance in a different scale, follow the **RECORD SETTING** procedure to specify a **KEY** and **CHORD**. (Refer to page 61.)

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.

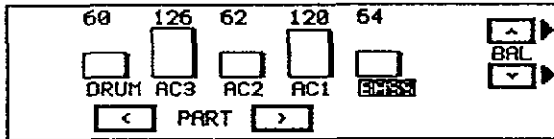
■ Maximum simultaneous tones

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.

The display during recording

BAL

Press this button during recording to access the following display if you wish to adjust the volume of each part during recording. (These settings are not recorded).



- Use the PART < and > buttons to select the part, and the BAL ^ and v buttons to adjust the volume (0 to 127).
- If you press the EXIT button, the display returns to the previous 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. The quantize level is shown as "QUANTIZE=". Select from ♩₃, ♪₃, ♩₃, OFF, ♪₃, ♩₃, ♪₃. (A 3 denotes a triplet-type note.)

SOLO

When you press this button while you are recording, only the part which is currently being recorded is played back.

- To turn off the SOLO function, press this button again.

PART CLR

Press this button if you wish to erase all recorded contents of the currently selected part.

ALL ERASE

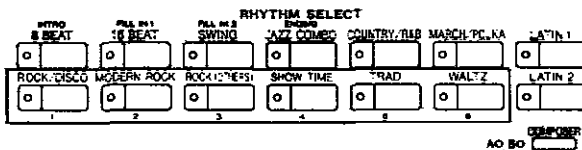
The performance recorded in the selected part is erased for as long as this button is pressed.

INST ERASE

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

Playback

1. Press the **COMPOSER** button to select the bank in which the rhythm pattern is stored (A or B).
2. In the **RHYTHM SELECT** section, press the button in which the rhythm is recorded.



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

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



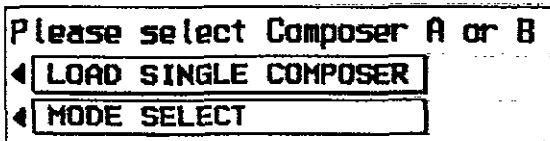
- The DRUMS part begins to play back.
- The BASS and ACCOMP parts are played back when you use the AUTO PLAY CHORD.
- The ACCOMP PART 1, 2 and 3 buttons should be on.

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 **MODE SELECT** button.
 - The display looks similar to the following.



3. Select the mode.

NORMAL mode

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 mode

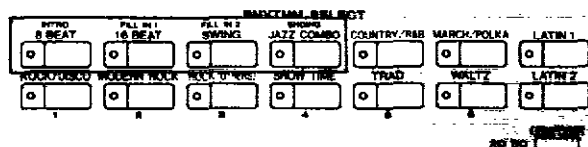
When a **FILL IN** button or the **INTRO & ENDING** button is pressed during playback, the corresponding pattern you created is played back.

- Select the **EXPAND** mode when you wish to create your own fill-ins and intros, etc.

Recording

After setting the **MODE SELECT**, perform the following procedure.

1. Press the **EXIT** button.
2. Press the **COMPOSER** button to select the bank into which to record the pattern (**A** or **B**).
3. Select one of the four leftmost buttons in the upper row of the **RHYTHM SELECT** in which to record your pattern.

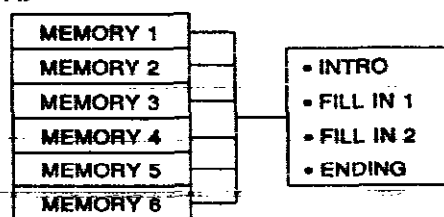


- The indicators for the **INTRO**, **FILL IN 1**, **FILL IN 2** and **ENDING** buttons flash. Select the one corresponding to the pattern you are going to record.
4. Make the appropriate recording settings. (Refer to page 61.)
 - The pattern cannot be named.

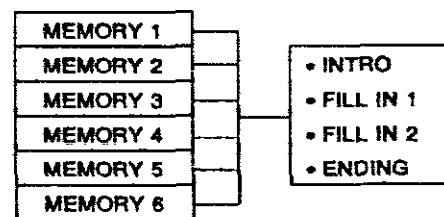
5. Record the pattern. (Refer to page 62.)

- 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

Outline of the Disk Drive function

The Disk Drive enables you to store **COMPOSER** memories and **SEQUENCER** data etc. for future use. You can save (and load) the entire setup of the piano or Individual sections. You can also save and load in Standard MIDI File format, which is the international standard format for **SEQUENCER** data.

Internal memory and Disk Drive

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.

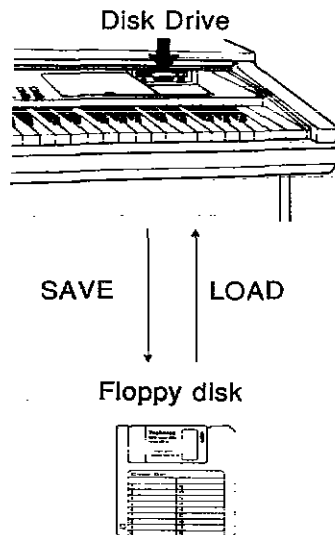
■ Playback of commercial software

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

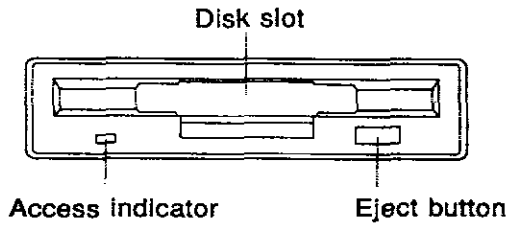
"Standard MIDI File" is a standardized data format which makes it possible for music data to be exchanged among different sequencers. Data stored in this format on sequencers of different models can be played back on this instrument, and vice versa.

- 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

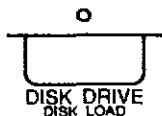
Lights when data is being loaded from or saved to a disk.

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

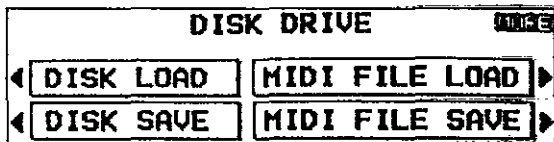
Outline of procedure



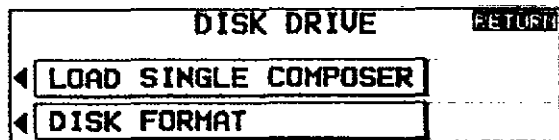
1. Press the **DISK DRIVE** button to turn it on.



- The display changes to the following.



- Press the **MORE/RETURN** button to see the next page of the menu.



DISK LOAD (page 67)

Load data from a disk into your instrument's memory.

DISK SAVE (page 69)

Save data from your instrument's memory to a disk.

MIDI FILE LOAD (page 67)

Load song data which was stored in the Standard MIDI File format into your instrument's memory.

MIDI FILE SAVE (page 70)

Save data from your instrument's memory in the Standard MIDI File format to a disk.

LOAD SINGLE COMPOSER (page 68)

Load **COMPOSER** data from a disk into a specified memory number.

DISK FORMAT (page 68)

Format new disks or erase the contents of recorded disks so they can be used by this instrument.

2. Select the desired menu and follow the procedures on the corresponding display.

- Press the **EXIT** button to go back to the previous display. To go to another menu, use the **EXIT** button to go back to the menu display.
- When the **TEMPO/PROGRAM** indicator is lit, it indicates that the dial is available for setting the current function.

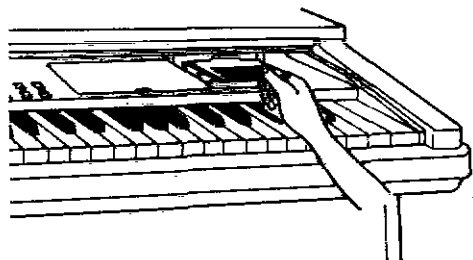
3. When you have finished setting the functions, press the **DISK DRIVE** button to turn it off.

Loading data

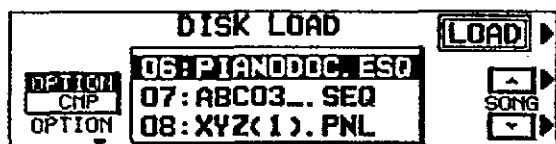
Recall (load) the data from the disk to your Instrument's memories. Please note that the load procedure causes any data which is currently stored in the relevant memories to be erased.

DISK LOAD

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



2. On the **DISK DRIVE** menu display, select **DISK LOAD**.
 - The display looks similar to the following.



3. Use the **SONG** \wedge and \vee buttons to select the number of the song file to load.
 - Files in which data is currently stored are indicated by the file name following the file number.

4. Use the **OPTION** buttons to specify the kind of data you wish to load from the disk to your instrument.

- The **OPTION** which was specified during the **SAVE** procedure is automatically selected. Skip this step if you do not wish to change the selection. (Refer to page 69.)

5. Press the **LOAD** button.

- The **DISK LOAD** operation begins.
- When the operation has been successfully completed, "Completed!" is shown on the display.
- If song data was loaded, you can press the **START/STOP** button to begin playback.

■ Loading data from another manufacturer's disk

Data from another manufacturer's disk can be loaded into your instrument's memory.

- There may be some file data that cannot be loaded.
- Data which has been loaded from another manufacturer's disk cannot be saved to a disk.
- The arrangement of percussion instruments may be different from this instrument, or the settings on this instrument may change.

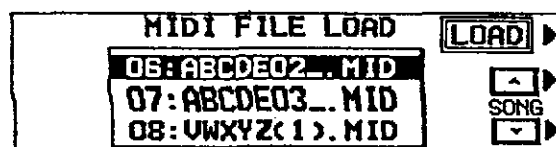
You can also access the **DISK LOAD** display by pressing the **DISK DRIVE (DISK LOAD)** button for a few seconds.

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. On the **DISK DRIVE** menu display, select **MIDI FILE LOAD**.
 - The display looks similar to the following.



3. Use the **SONG** \wedge and \vee buttons to select the name of the file with the desired data.

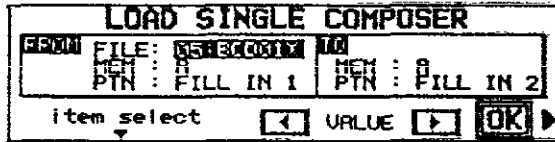
4. Press the **LOAD** button.

- The **MIDI FILE LOAD** operation begins.
- When the operation has been successfully completed, "Completed!" is shown on the display.
- Press the **START/STOP** button to begin playback of the song data.

LOAD SINGLE COMPOSER

Load the desired **COMPOSER** data from a disk into a specific **COMPOSER** memory.

1. Insert the disk with the stored **COMPOSER** data into the Disk Drive.
2. On the **DISK DRIVE** menu display, select **LOAD SINGLE COMPOSER**.
 - The display looks similar to the following.



3. Select a pattern to load from the disk (**FROM**).
 - Use the item select button to specify the type of data.

FILE: Use the < and > buttons to select the number.

MEM: Use the < and > buttons to select the memory name (A or B).

PTN: Use the < and > buttons to select the pattern name.

4. Select the load destination pattern (**TO**).

- Use the item select button to specify the type of data.

MEM: Use the < and > buttons to select the memory name (A or B).

PTN: Use the < and > buttons to select the pattern name.

5. Press the **OK** button.

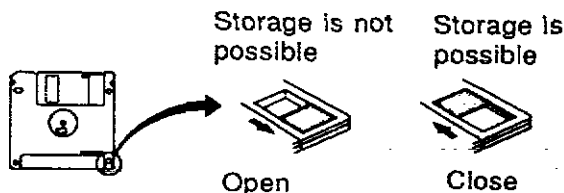
- When the operation has been successfully completed, "Completed!" is shown on the display.
- The **LOAD SINGLE COMPOSER** procedure can also be begun from the **COMPOSER REC** menu display. (Refer to page 59.)

Formatting a disk

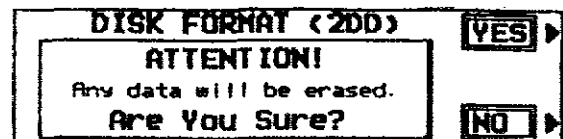
New disks can be used only after they have been formatted. Follow the procedure below to format a new disk or erase the contents of a recorded disk.

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. On the **DISK DRIVE** menu display, select **DISK FORMAT**.
 - The display changes to the following.



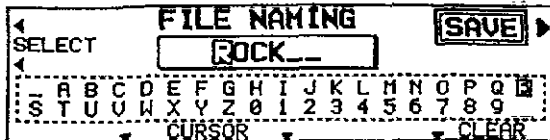
3. Press the **YES** button to format the disk, or press the **NO** button to cancel the format.
 - After about one minute, formatting is completed and "Completed!" is shown on the display.

Saving data

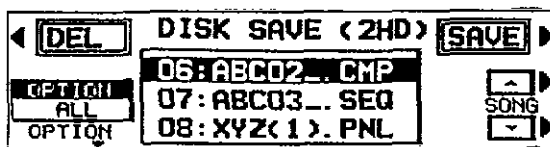
Use the Disk Drive to save the recorded data and panel settings on a disk. A formatted disk should be in place in the Disk Drive.

DISK SAVE

1. On the **DISK DRIVE** menu display, select **DISK SAVE**.
 - The display changes to the following.



2. Type a name for the new data file (up to 6 characters).
 - Use the **CURSOR** buttons to highlight the character position in the name box. Use the **SELECT** buttons to select the alphanumeric character. Repeat these steps to type the whole name.
 - To erase the name, press the **CLEAR** button.
3. Press the **SAVE** button.
 - The display looks similar to the following.



4. Use the **SONG** ^ and v buttons to select the file number in which to save the data (01 to 20).
 - Files in which data is currently stored are indicated by the file name following the file number.
 - 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.
 - The maximum number of songs which can be saved is 10 if you are saving only songs with the **OPTION** set to **ALL**.

5. Use the **OPTION** buttons to specify the kind of data you wish to store in the data file on the disk.

ALL <ALL>

All the data from this instrument.

SEQUENCER <SEQ>

Data from the **SEQUENCER**

COMPOSER <CMP>

Data from the **COMPOSER**

PANEL MEMORY <PNL>

Data stored in the **PANEL MEMORY**

- The abbreviated indication (in < > brackets) for the selected item appears after the file name.

6. Press the **SAVE** button.

- When the operation has been successfully completed, "Completed!" is shown on the display.
- 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.

■ FILE delete

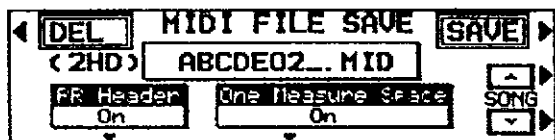
To erase a song from a disk, after selecting the number of the song you wish to erase, press the **DEL** button. The display changes to the confirmation display. Press the **YES** button to erase the song, or press the **NO** button to cancel the procedure.

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 procedure below.

1. On the **DISK DRIVE** menu display, select **MIDI FILE SAVE**.
 - The display changes to the **FILE NAMING** display.
2. Type a name for the new data file (up to 8 characters).
 - Use the **CURSOR** buttons to highlight the character position in the name box. Use the **SELECT** buttons to select the alphanumeric character. Repeat these steps to type the whole name.
 - To erase the name, press the **CLEAR** button.
3. Press the **SAVE** button.
 - The display looks similar to the following.



- At this time, if you use the **SONG** \wedge and \vee buttons to select the name of a different file that was stored previously, you can replace that file with the new file when you save the data.
4. Press the **SAVE** button.
 - When the operation has been successfully completed, "Completed!" is shown on the display.
 - If you attempt to save data to a name of the file name 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.

■ PR Header

You can save the sound, volume and other settings for each part as data at the beginning of the file. Select **YES** to save the data, or **NO** if you do not wish to have the data saved at the file beginning.

■ One Measure Space

When there is various data other than performance data stored at the beginning of a file, the start of playback may be delayed. This can be avoided by inserting a one-measure space before the beginning of the performance. Select **YES** to insert a one-measure space, or **NO** if you do not wish to insert the space.

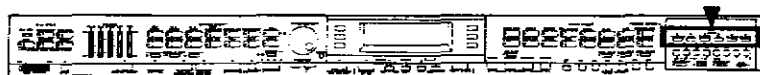
- When set to **YES**, a space is added each time a file is saved. Therefore, if you have already saved a file once with this option set to **YES**, please set it to **NO** each time the file is subsequently saved.

■ FILE delete

To erase a song from a disk, after selecting the name of the file you wish to erase, press the **DEL** button. The display changes to the confirmation display. Press the **YES** button to erase the song, or press the **NO** button to cancel the procedure.

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

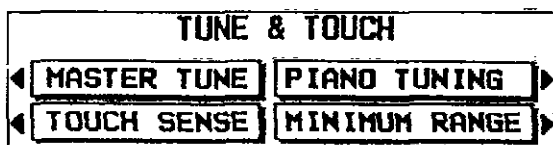
TUNE & TOUCH

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

1. In the **PROGRAM SECTION**, press the **TUNE & TOUCH** button to turn it on.



- The display changes to the following.



MASTER TUNE (page 72)
Fine-tune the pitch of the entire instrument.

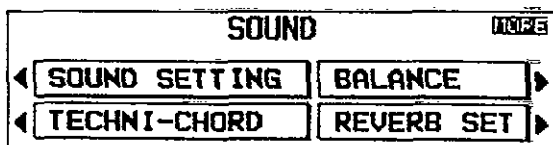
SOUND

Functions related to the sounds can be adjusted.

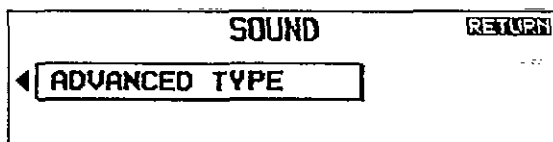
1. In the **PROGRAM SECTION**, press the **SOUND** button to turn it on.



- The display changes to the following.



- Press the **MORE/RETURN** button to view the next page of the menu.



SOUND SETTING (page 74)
Set the various sound attributes for each part.

- **SOUND SELECT**
Select the sound for each part.

PIANO TUNING (page 73)

Select the type of tuning.

TOUCH SENSE (page 73)

Adjust the keyboard touch response.

MINIMUM RANGE (page 73)

Select whether or not sound is generated when the keys are pressed very softly.

2. Select the desired menu and follow the procedures on the corresponding setting display.

- Press the **EXIT** button to go back to the previous display. To go to another menu, use the **EXIT** button to go back to the menu display.

3. When you have finished setting the functions, press the **TUNE & TOUCH** button again to turn it off.

- **KEY SHIFT**

Adjust the key of each part in semitone increments.

- **PAN SETTING**

Adjust the stereo balance of each part.

- **PART REVERB**

Set the reverb to on or off for each part.

- **P. BEND RANGE**

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

BALANCE (page 75)

Adjust the volume of each part.

TECHNI-CHORD (page 76)

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

REVERB SET (page 76)

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

ADVANCED TYPE (page 77)

Specify the type of chord recognition for the **ADVANCED** mode of the **AUTO PLAY CHORD**.

2. Select the desired menu and follow the procedures on the corresponding setting display.
 - Press the **EXIT** button to go back to the previous display. To go to another menu, use the **EXIT** button to go back to the menu display.

3. When you have finished setting the functions, press the **SOUND** button again to turn it off.

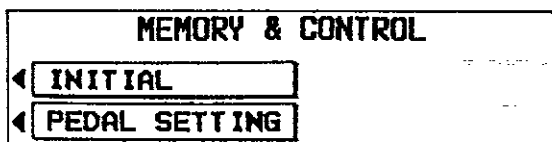
Pedals

You can assign different functions to the pedals.

1. In the **PROGRAM SECTION**, press the **MEM & CTRL** button to turn it on.



- The display changes to the following.



PEDAL SETTING (page 77)
Change the pedal settings to the desired functions.

- For details about the **INITIAL** setting, refer to page 86.
2. Select **PEDAL SETTING**, and follow the procedures on the corresponding setting display.
 3. When you have finished setting the functions, press the **MEM & CTRL** button again to turn it off.

Tune & Touch functions

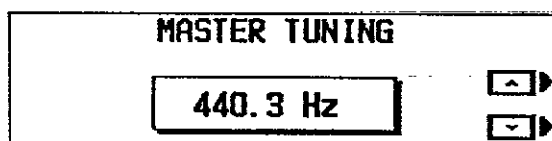
Select the item and perform the setting procedures.

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. On the **TUNE & TOUCH** menu, select **MASTER TUNE**.
 - The display looks similar to the following.

2. Use the **^** and **v** buttons to adjust the pitch within a range of 427.3 to 453.0 Hz.
 - The decimal can be set to 0, 3 or 6.



PIANO TUNING

Select from two types of tuning.

1. On the **TUNE & TOUCH** menu, select **PIANO TUNING**.
 - The display looks similar to the following.



2. Use the **ON** and **OFF** buttons to select the type of tuning.

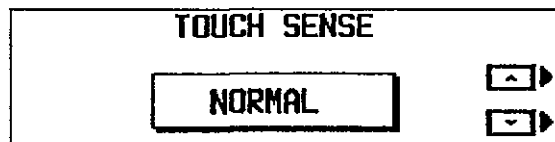
ON: Standard acoustic piano tuning, in which the lower pitches are tuned slightly lower and the higher pitches are tuned slightly higher (default setting).

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

TOUCH SENSE

Adjust the amount of keyboard touch response.

1. On the **TUNE & TOUCH** menu, select **TOUCH SENSE**.
 - The display looks similar to the following.



2. Use the **^** and **v** buttons to select the touch sensitivity.

- Select from **HEAVY 2**, **HEAVY 1**, **NORMAL**, **LIGHT 1** and **LIGHT 2**.

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. On the **TUNE & TOUCH** menu, select **MINIMUM RANGE**.
 - The display looks similar to the following.



2. Use the **ON** and **OFF** buttons 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.

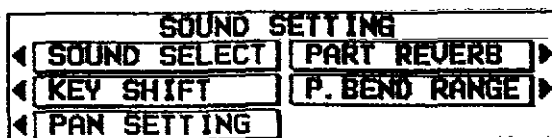
Sound functions

Select the item and perform the setting procedures.

SOUND SETTING

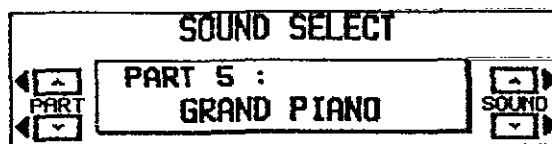
Set the various sound attributes for each part.

1. On the **SOUND** menu, select **SOUND SETTING**.
 - The display looks similar to the following.
2. On the display, select the attribute you wish to adjust.
3. Make each setting (see below).



■ SOUND SELECT

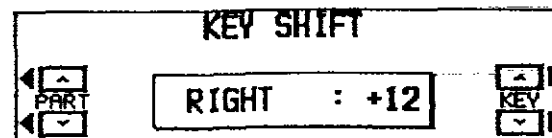
Select the sound for each part.



1. Use the **PART** \wedge and \vee buttons to select the part.
2. Use the **SOUND** \wedge and \vee buttons to select the sound.
 - You can also use the **SOUND SELECT** buttons to select the sound.

■ KEY SHIFT

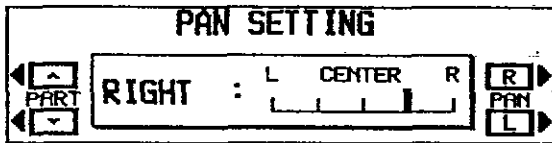
The pitch of the part can be shifted up or down.



1. Use the **PART** \wedge and \vee buttons to select the part.
2. Use the **KEY** \wedge and \vee buttons 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 \vee button is used to lower the pitch, and the \wedge button to raise the pitch.
 - The pitch for **PART 16 (DRUM)** cannot be shifted.

■ PAN SETTING

Adjust the stereo balance of each part.



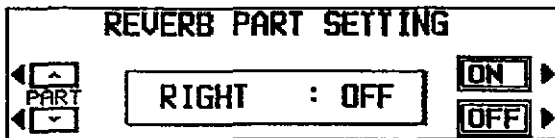
1. Use the PART ^ and v buttons to select the part.

2. Use the PAN R and L buttons to adjust the balance.

- The stereo balance can be set to one of 5 positions, indicated by a thick vertical line on the display.

■ PART REVERB

Set the DIGITAL REVERB to on or off for each part.



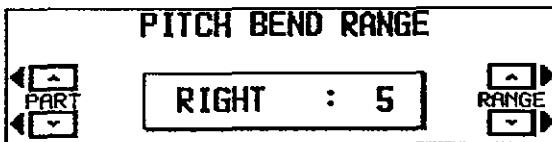
1. Use the PART ^ and v buttons to select the part.

2. Use the ON and OFF buttons to set the reverb to on or off for the part.

- When the reverb is set to OFF for a part, the reverb does not work for the part even when the DIGITAL REVERB button is on.
- When the power is turned on, the PART REVERB is automatically set to on for all parts.

■ P. BEND RANGE

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



1. Use the PART ^ and v buttons to select the part.

2. Use the RANGE ^ and v buttons to specify the range (0 to 12).

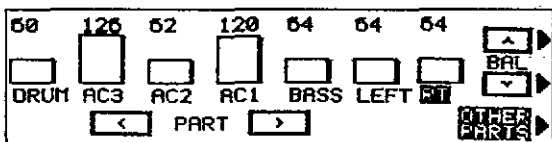
- Increments are in semitones.
- The higher the number, the greater the change in pitch when pitch bend data is received.

BALANCE

Adjust the volume for each part.

1. On the SOUND menu, select BALANCE.

- The display looks similar to the following.



2. Use the PART < and > buttons to select the part.

- Use the button to the lower right of the display to view the next page of the balance-setting display.

3. Use the BAL ^ and v buttons to set the desired volume (0 to 127).

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

REVERB SET

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

- On the **SOUND** menu, select **REVERB SET**.
- The display looks similar to the following.



■ Type

1. Select **REVERB TYPE**.
2. Use the \wedge and \vee buttons to select the type.
 - Select from **ROOM**, **STAGE** and **HALL**.

■ Depth

1. Select **REVERB DEPTH**.
2. Use the \wedge and \vee buttons to adjust the depth of the reverb (1 to 8).
 - The higher the number, the greater the reverb depth.

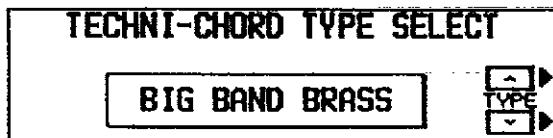
You can also access this display by pressing the **DIGITAL REVERB** button for a few seconds.

- 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.

TECHNI-CHORD

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

1. On the **SOUND** menu display, select **TECHNI-CHORD**.
- The display looks similar to the following.



2. Use the **TYPE** \wedge and \vee buttons to select the harmony style.
 - Select from **CLOSE**, **OPEN 1 and 2**, **DUET**, **COUNTRY**, **THEATER**, **HYMN**, **BLOCK**, **BIG BAND BRASS**, **BIG BAND REEDS**, **OCTAVE**, **HARD ROCK** and **FANFARE**.
 - When the **OCTAVE**, **HARD ROCK** or **FANFARE** style is selected, the **TECHNI-CHORD** functions for right-part sounds 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 and holding the **TECHNI-CHORD** button for a few seconds.

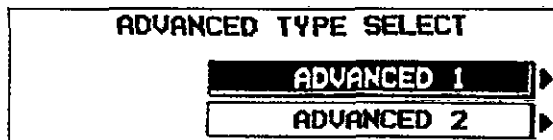
- In this case, the display exits the setting mode a few seconds after you make the setting.

ADVANCED TYPE

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

1. On the **SOUND** menu, select **ADVANCED TYPE**.

- The display looks similar to the following.



2. Select the type on the display.

ADVANCED 1

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

ADVANCED 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 functions

You can assign a different function to the sostenuto pedal and soft pedal. (Note: The function of the right [sustain] pedal cannot be changed.)

PEDAL SETTING

1. On the **MEM & CTRL** menu, select **PEDAL SETTING**.

- The display looks similar to the following.



2. Select the pedal whose function you wish to change (**LEFT** or **CENTER**).

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

3. Use the **SET ▲** and **▼** buttons to select the function.

- Select from the following functions: **SOSTENUTO**, **SOFT**, **INTRO & ENDING on/off**, **FILL IN 1**, **COUNT & FILL 2 on**, **START/STOP on/off**, **GLIDE***, **TECHNI-CHORD on/off**, **P.MEM INCR (PANEL MEMORY increment)****, **SUSTAIN on/off**, **PUNCH IN/OUT**.

* **GLIDE**: When the pedal is depressed, the sound of the entire instrument slides down by approximately one semitone.

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

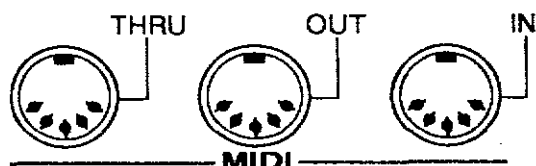
- The function of the pedal you selected in step 2 changes to the function shown on the display.

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.

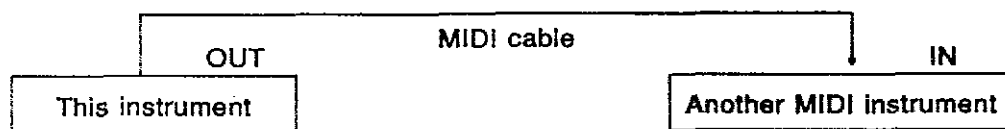
OUT: The terminal that transmits data from this instrument to other equipment.

THRU: The terminal that transfers data from the **IN** terminal directly to other equipment.

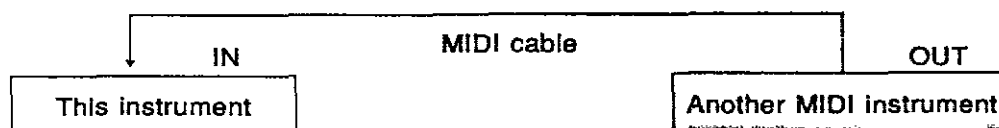
- For these connections, use a commercially available MIDI cable.

Connection examples

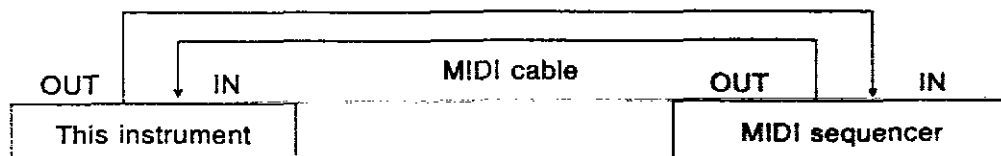
- To generate sound from a connected instrument by playing this instrument



- To generate sound from this Instrument by operating a connected instrument

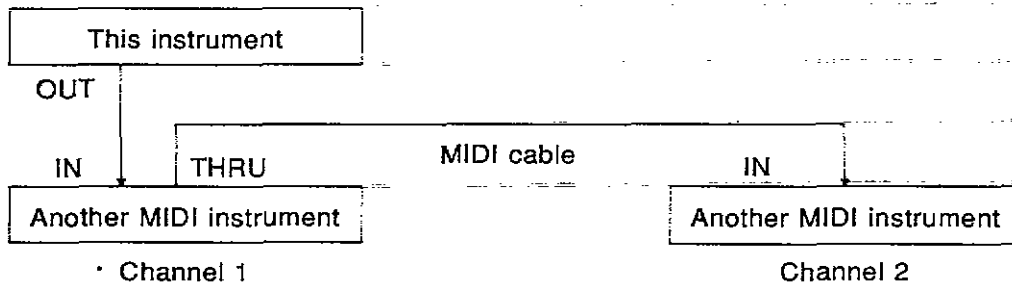


- To connect with a MIDI sequencer or a personal computer



MIDI 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.

- 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) is the standard which enables MIDI data exchange between different models or equipment of different manufacture. Program change numbers and their corresponding sounds, percussion instrument sounds, note numbers, etc. are data-compatible between equipment using this standard.

Song data created on the equipment of one manufacturer can be played back on the equipment of a different manufacturer, as long as both conform to the GENERAL MIDI standard.

This instrument conforms to this standard and can be used as a GENERAL MIDI sound generator.

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



Setting the MIDI presets

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

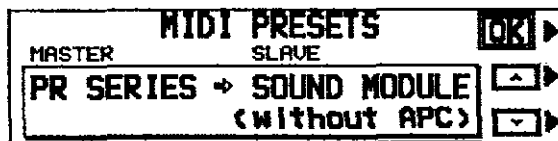
1. In the **PROGRAM SECTION**, press the **MIDI PRESETS** button to turn it on.



3. Press the **OK** button.

- When the settings have been successfully stored, "Completed!" appears on the display.

- The display changes to the following



2. Use the \wedge and \vee buttons to select the setting.

MASTER

This instrument is used as the master (transmit data side).

SLAVE

This instrument is used as the slave (receive data side).

WITH APC

Performance includes **AUTO PLAY CHORD** performance.

WITHOUT APC

AUTO PLAY CHORD is not used.

Outline of MIDI functions

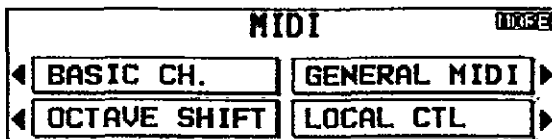


Select the various settings which are used for MIDI operation of this instrument.

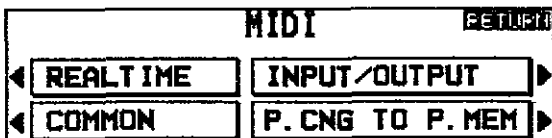
1. In the **PROGRAM SECTION**, press the **MIDI** button to turn it on.



- The display changes to the following.



- Press the **MORE/RETURN** button to view the next page of the menu.



BASIC CH (page 82)

Assign a MIDI channel to each part.

OCTAVE SHIFT (page 82)

Shift the pitch of transmitted sound by octaves.

GENERAL MIDI (page 82)

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

LOCAL CTL (page 83)

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

REALTIME (page 83)

Settings for realtime data, such as tempo, **START/STOP**, etc.

COMMON (page 83)

Functions which are common to all parts.

INPUT/OUTPUT (page 84)

Various settings related to transmission and reception of data.

P.CNG TO P.MEM (page 85)

Specify how **PANEL MEMORY** operation affects program change data.

2. Select the menu and perform the setting procedures.
 - Press the **EXIT** button to go back to the menu display.
 - When the **TEMPO/PROGRAM** indicator is lit, it indicates that the dial is available for setting the current function.
3. When you have finished adjusting the settings, press the **MIDI** button to turn it off.

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.

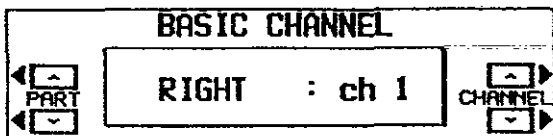
MIDI data format

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 CH

Assign a MIDI channel to each part.

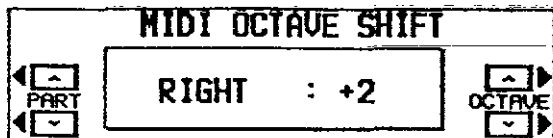


1. Use the PART ^ and v buttons to select the part.

- Use the CHANNEL ^ and v buttons 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.
- Repeat steps 1 and 2 for each part as desired.

OCTAVE SHIFT

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



1. Use the PART ^ and v buttons to select the part.

- Use the OCTAVE ^ and v buttons 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.

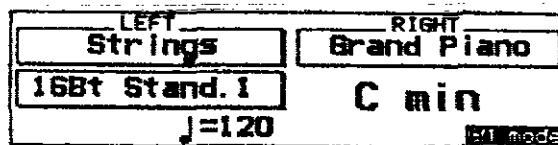
GENERAL MIDI

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



- Use the ON and OFF buttons 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 than 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 equipment, the received data has priority.

- Press the OK button.
 - The confirmation display appears. Press the YES button to execute the function, or press the NO button to cancel the function.
 - When this instrument's GENERAL MIDI mode is set to ON, a "GM mode" indication is shown in the lower right of the display.

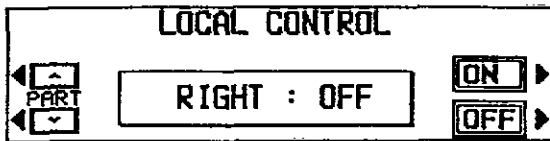


Warning

- 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 CTL

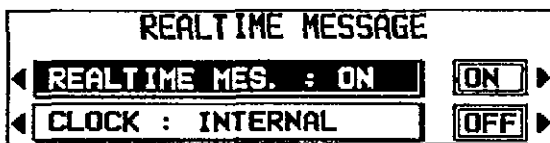
Specify whether sound is generated from this instrument when MIDI data is transmitted.



1. Use the PART \wedge and \vee buttons to select the part.
2. Use the ON and OFF buttons to specify whether the performance from this instrument sounds from this instrument (ON) or not (OFF).
3. Repeat steps 1 and 2 for each part as desired.

REALTIME

Enable or disable the exchange of start/stop data (realtime commands), and select the CLOCK mode.



1. Select the function (REALTIME MES. or CLOCK).
2. Use the \wedge and \vee buttons, or the ON and OFF buttons, to change the setting.

■ REALTIME MES.

ON

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

OFF

This data cannot be transmitted/received.

■ CLOCK

INTERNAL

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 the rhythm and **SEQUENCER** are disabled until the CLOCK signal is received from the connected instrument.

3. Repeat steps 1 and 2 as desired.

COMMON

Set the functions which are common to all parts.



1. Select the function.
 - The display changes to the setting display for the selected function.
2. Make the settings as desired.

■ NOTE ONLY

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

ON: Only note on/off data is exchanged.

OFF: Other data is also exchanged.

■ TRANSPOSE

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

ON: The note number of the transposed note is transmitted/received.

OFF: The note number of the played key is transmitted/received.

■ MIDI SETUP LOAD

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

ON: When disk data is loaded, the MIDI settings stored on the disk are automatically recalled.

OFF: MIDI settings stored on the disk are not recalled.

■ PROG.CNG MODE

Specify how program change numbers are interpreted during data exchange.

NORMAL: The program change numbers follow the order of the sound buttons as they are lined up on the panel.

TECH: 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: 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).

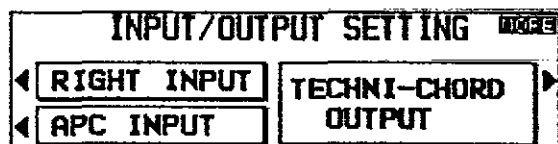
ON: Song number data can be exchanged.

OFF: Song number data cannot be exchanged.

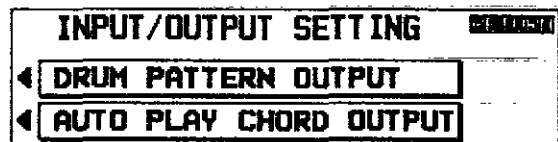
3. Repeat steps 1 and 2 for the other settings as desired.

INPUT/OUTPUT

Make the settings which determine how various performance data is treated during data transmission and reception.



- Use the **MORE/RETURN** button to display more items.



1. Select the function.
 - The display changes to the setting display for the selected function.
2. Make the settings as desired.

■ RIGHT INPUT

Specify how received note data is handled.

SINGLE: Data for the **RIGHT** part channel only is received.

DIRECT: 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.

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

OFF: Data for the above parts is not received.

■ TECHNI-CHORD OUTPUT

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

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.

ON: Data from the **DRUMS** part is transmitted.

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

■ **AUTO PLAY CHORD OUTPUT**

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

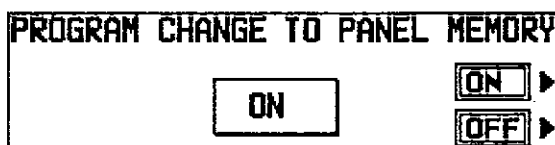
ON: The data for the **ACCOMP 1, 2, 3, BASS** and **CHORD** parts is transmitted.

OFF: Data for the above parts is not transmitted.

3. Repeat steps 1 and 2 for the other functions as desired.

P.CNG TO P.MEM

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



Use the **ON** and **OFF** buttons to enable (**ON**) or disable (**OFF**) transmission/reception of data.



Initialize

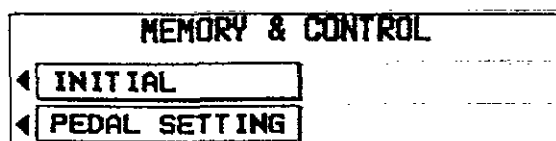
This instrument has many settable functions and storable memories. However, you can return the settings and memories to the factory-preset status.

INITIAL

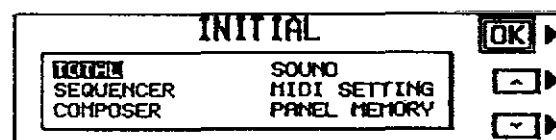
1. Press the **MEM & CTRL** button to turn it on.



- The display changes to the following.

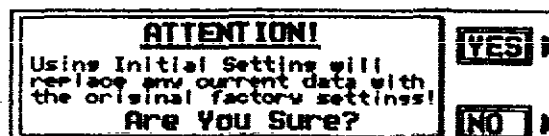


2. Select **INITIAL**.
- The display changes to the following.



3. Use the \wedge and \vee buttons to select the desired type of initialization.

4. Press the **OK** button.
 - The display changes to the confirmation display. Press the **YES** button if you wish to execute the initialization. Press the **NO** button if you wish to cancel the procedure.



- When you press the **YES** button, initialization begins. When initialization is completed, "Completed!" is shown on the display and 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
- When you quit the operating mode, a warning display may appear to remind you to save the data. If this occurs, after checking the reminder, press the **OK** button.

■ Power on settings

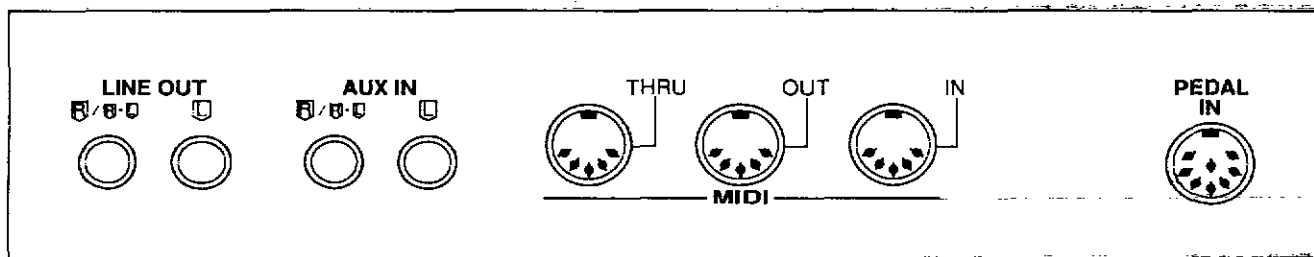
When the **POWER** button of this instrument is turned on, the settings below are automatically set to those suitable for piano performance.

PLAY STYLE: PIANO MODE
Sound: GRAND PIANO
TRANSPOSE: C
SUSTAIN PEDAL: On
DIGITAL EFFECT: Off
SYNCHRO START: Off
MINIMUM RANGE: On
PART REVERB: All parts 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 back of the piano)



MIDI

These terminals are for connection to another MIDI instrument. (Refer to page 78.)

PEDAL IN

Connect the included pedal.

AUX IN (input level 0.5 Vrms, 6 k Ω)

Other instruments such as a rhythm machine or sound module can be connected to the piano so that the sound is output from the piano. To receive monaural sound, connect instruments to the R/R+L terminal.

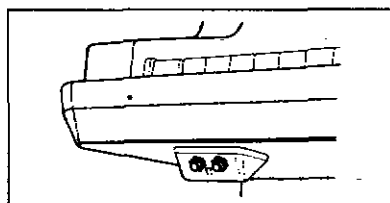
LINE OUT (output level 1.0 Vrms, 600 Ω)

By plugging into a high-power amplifier, the sound can be reproduced at a high volume. (Use the R/R+L terminal when outputting monaural sound.)

PHONES (Ω) \times 2

(Beneath the keyboard, on the left side)

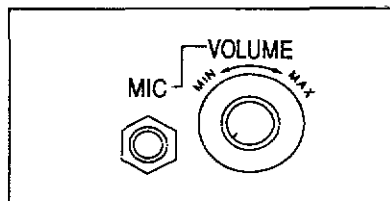
For silent practice, headphones may be used. When plugged in, the speaker system is automatically switched off, and sound is heard only through the headphones.



MIC (PR307) (input level 7.5 mV, 10 k Ω)

(Beneath the keyboard, on the right side)

The piano will accept a microphone of the uni-directional type. This type of microphone reduces feedback to a minimum. **VOLUME** balances instrumental or vocal sounds fed into the microphone with the loudness of the piano.

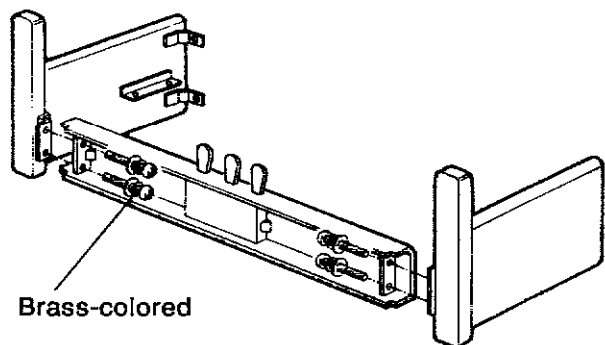


Assembly

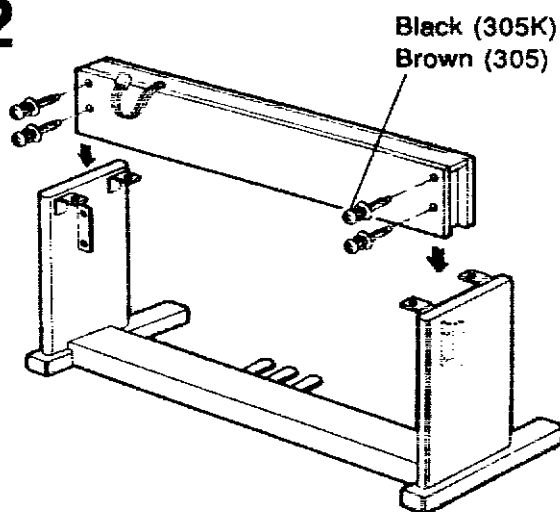
- Assemble your Technics piano as shown in the following diagrams.
- To disassemble the piano, reverse the procedure.
- To prevent the piano from falling off the stand, secure it firmly with the bolts.

PR305/305K

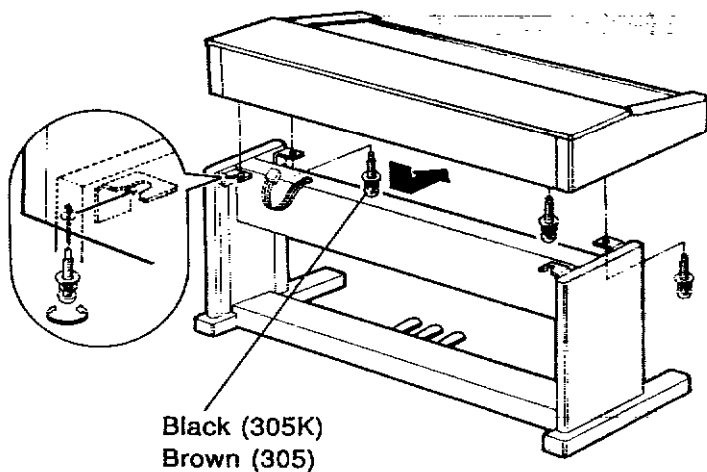
1



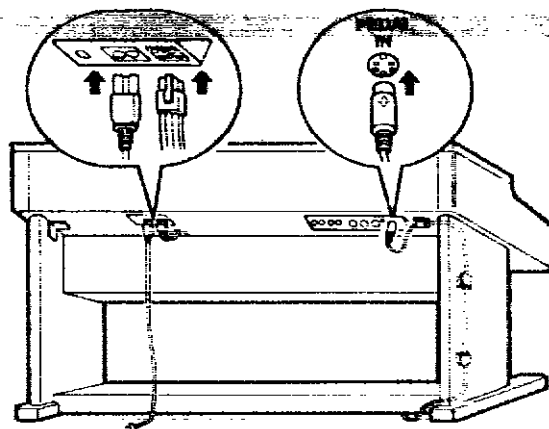
2



3

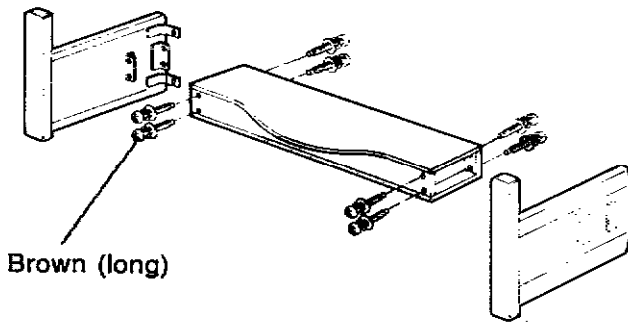


4

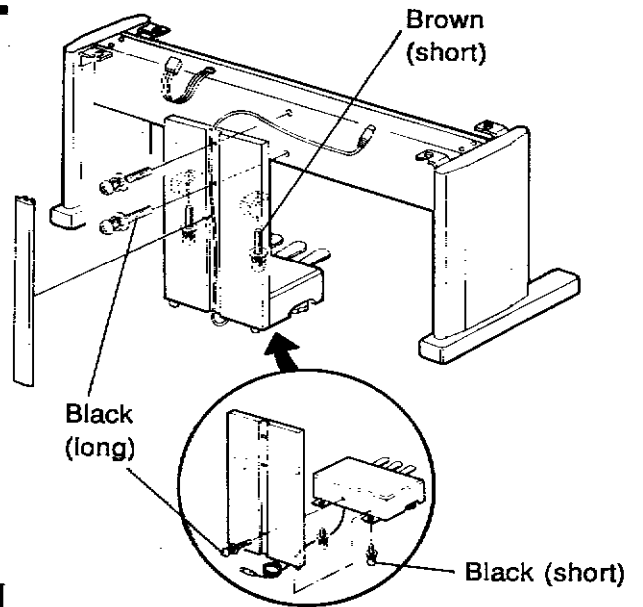


PR307/307K

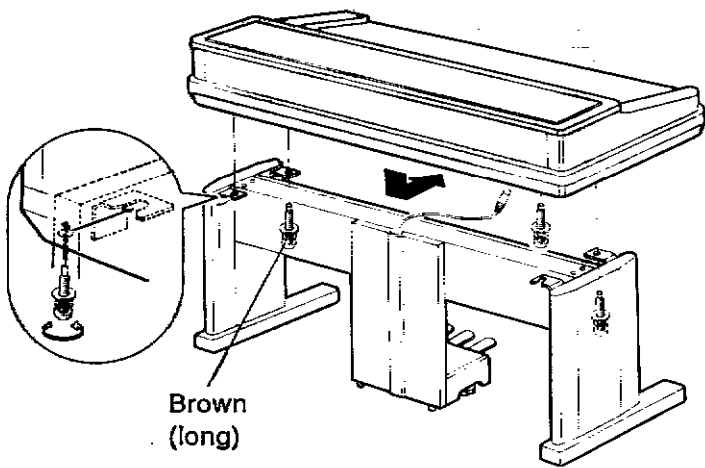
1



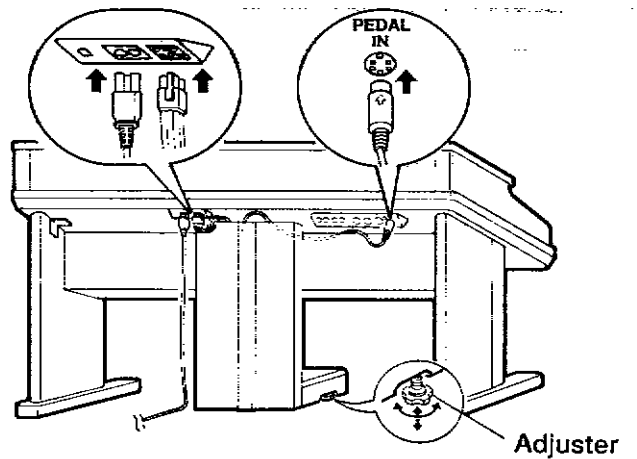
2



3



4



- Use two adjusters to stabilize the pedal box.

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.	<ul style="list-style-type: none"> • 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, MODERN ROCK and ROCK [OTHERS]) 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.	<ul style="list-style-type: none"> • 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 sliding BALANCE control to set the volumes of the relevant parts to appropriate levels. (Refer to page 26.) • The LOCAL CONTROL for a part performed on the keyboard is set to OFF. Set the LOCAL CONTROL to ON. (Refer to page 83.)
	Only percussion instrument sounds are produced when the keyboard is played.	<ul style="list-style-type: none"> • In the SOUND SELECT section, the KEYBOARD PERC button is on.
	The sustain does not work even when the sustain pedal is depressed.	<ul style="list-style-type: none"> • 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 sostenuto pedal and soft pedal do not operate properly. For example, when the soft pedal is depressed, the rhythm starts or a fill-in is played.	<ul style="list-style-type: none"> • Different functions can be programmed in these pedals. You can return the pedals to their original functions by turning off the instrument once, or by using the PEDAL SETTING mode. (Refer to page 77.)
Rhythm	The rhythm does not start.	<ul style="list-style-type: none"> • The DRUMS volume is set to the minimum level. Use the sliding BALANCE control 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 83.)
AUTO PLAY CHORD	No sound is produced for the automatic accompaniment.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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 sliding BALANCE control to set the volumes to appropriate levels.

	Phenomenon	Remedy
SEQUENCER	Storage is not possible.	<ul style="list-style-type: none"> The remaining memory capacity of the SEQUENCER is 0. Follow the SONG CLEAR or TRACK CLEAR procedure to erase the memory. (Refer to page 52.)
	Multi-track storage is not possible.	<ul style="list-style-type: none"> 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 45.)
COMPOSER	Storage is not possible.	<ul style="list-style-type: none"> The remaining memory capacity of the COMPOSER is 0.
	Setting the time signature and number of measures is not possible.	<ul style="list-style-type: none"> 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 60.)
	The playback timing of the rhythm pattern is different from the timing with which it was recorded.	<ul style="list-style-type: none"> 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 63.)
Disk Drive	The Disk Drive produces a noise during recording or playback.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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 69.)
Other	Noise from a radio or TV can be heard.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.
07	The disk that you are using is full. Please use another disk.
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.
21	Memory full
22	It is necessary to press PUNCH OUT to complete this procedure.
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.
26	It is only possible to merge melody tracks. Tracks such as RHYTHM, CHORD and CONTROL cannot be merged.
27	It is only possible to copy melody tracks. Tracks such as RHYTHM, CHORD and CONTROL cannot be copied.
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.
32	Memory full
43	The file that you are trying to load was saved on a previous PR. It is only possible to load using the "ALL" option.
45	This software format is not supported by the PR and cannot be loaded.

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**

Index

A

ACCOMP PART	35
ADVANCED	34
ADVANCED TYPE	71, 77
Assembly	88-89
AUTO PLAY CHORD	14, 20, 32
AUX IN	87

B

Backup memory	5, 86
BALANCE	24, 26, 29, 34, 71, 75
BASIC	14, 32
Beat indicators	29

C

Cautions for safest use of this unit	93
CHORD STEP RECORD	46
COMPOSER	58-64
ACCOMP TYPE	61
ALL ERASE	63
BAL	63
BASS TYPE	61
CHORD	61
INST ERASE	63
LOAD SINGLE COMPOSER	59
KEY	61
MEASURE	61
MODE SELECT	59, 64
PART CLR	63
QUANTIZE	63
RECORD SETTING	60
SOLO	63
TIME SIG.	61
COMPOSER REC	59, 60
Connections	87
CONTRAST	19
COUNT INTRO	30

D

DELETE	48
DEMO	7-8
DIGITAL EFFECT	10, 23
DIGITAL REVERB	10, 23, 75, 76
Disk Drive	65-70
DISK FORMAT	66, 68
DISK LOAD	66, 67
DISK SAVE	66, 69
Floppy Disk	65
LOAD SINGLE COMPOSER	66, 68
MIDI FILE LOAD	67
MIDI FILE SAVE	68, 70
Display	16
DISPLAY HOLD	18
DRUMS	29
DYNAMIC ACCOMP	35

E

EXIT	18
Error message	82

F

FILL IN	13, 31
Fingered chords	33

H

HELP	19
------------	----

I

INITIAL	86
INTRO & ENDING	12, 13, 30, 31

K

KEY SHIFT	71, 74
Keyboard cover	6
KEYBOARD PERC	22
KEYBOARD SPLIT	20, 25

L

LANGUAGE	19
LEFT SELECT	25
LINE OUT	87

M

MAIN VOLUME	6
MASTER TUNING	71, 72
MEM & CTRL	72
MENU	16
Metronome	28, 43
MIC	87
MIDI	78-85, 87
APC	80
APC INPUT	84
AUTO PLAY CHORD OUTPUT	85
BASIC CH	81, 82
CLOCK	83
COMMON	81, 83
DRUM PATTERN OUTPUT	85
GENERAL MIDI	80, 82
INPUT/OUTPUT	81, 84
LOCAL CTL	81, 83
MASTER	80
MIDI PRESETS	80
MIDI SETUP LOAD	84
NOTE ONLY	83
OCTAVE SHIFT	81, 82
P.CNG TO P.MEM	81, 85
PROG.CNG MODE	84
REALTIME	81, 83
REALTIME MES.	83
RIGHT INPUT	84
SLAVE	80
SONG SELECT	84
TECHNI-CHORD OUTPUT	84
MINIMUM RANGE	71, 73
Mixing two sounds	24
MORE/RETURN	10, 17, 21
Music Stand	6
MUSIC STYLE SELECT	37

O	
ONE TOUCH PLAY	14, 36
One-finger chords	33

P	
P. BEND RANGE	71, 75
PAN SETTING	71, 75
PANEL MEMORY	38
PART REVERB	71, 75
PEDAL IN	87
PEDAL SETTING	72, 77
Pedals	22, 72
PHONES	87
PIANIST	34
PIANO MODE	9, 10, 20, 21
PIANO TUNING	71, 73
PLAY STYLE	9, 14, 20
POWER	6
PROGRAM SECTION	5, 16

R	
REVERB SET	71, 76
RHYTHM SELECT	11, 28
RHYTHM STEP RECORD	49

S	
SEQUENCER	39-57
EASY RECORD	39, 41
EDIT	40, 52
MEASURE COPY	54
MEASURE ERASE	54
MEDLEY	40, 57
Multi-track recording	45
PLAY	40, 51
PUNCH REC	40, 55
QUANTIZE	53
REALTIME RECORD	39, 43
SONG CLEAR	52
STEP RECORD	39, 46
TRACK ASSIGN	40, 42, 50
TRACK CLEAR	52
TRACK MERGE	53
SEQUENCER REC	41, 43
SEQUENCER RESET	41, 44
SET	38
Soft pedal	22
Sostenuto pedal	22
SOUND	71, 74
SOUND SELECT	10, 21, 71, 74
SOUND SETTING	71, 74
Specifications	96
SPLIT POINT	25, 29
Standard MIDI Files	65
START/STOP	29
STEP REC	46
STRING RESONANCE	23
Sustain pedal	22
SYNCHRO START	29

T	
TECHNI-CHORD	27, 71, 76
TEMPO/PROGRAM	12, 18, 30
Touch Response	6
TOUCH SENSE	71, 73
TRANSPOSE	26, 84

Troubleshooting	90-91
TUNE & TOUCH	71
Tuning	4

V	
VARIATION	12, 31

Specifications

		SX-PR305	SX-PR307
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	
	SOUND SELECT	176 SOUNDS	196 SOUNDS
		GROUP: PIANO/E.PIANO, HARPSIMALLET, GUITAR, SPECIAL PERC, STRINGS, ORGAN, VOCAL/ENSEMBLE, REED, BRASS, SAX/CLARINET, FLUTE, SYNTH LEAD, BASS, SYNTH PAD, KEYBOARD PERC, PERC/EFFECT	
KEY SPLIT		<input type="radio"/> (G2, C3, C4)	
PEDAL		SUSTAIN, SOSTENUTO, SOFT	
DIGITAL EFFECT		<input type="radio"/>	
DIGITAL REVERB		<input type="radio"/>	
TRANSPOSE		<input type="radio"/> (G-C-F)	
RHYTHM		84 RHYTHMS	100 RHYTHMS
		GROUP: 8 BEAT, ROCK/DISCO, 16 BEAT, MODERN ROCK, SWING, ROCK (OTHERS), JAZZ COMBO, SHOW TIME, COUNTRY/R & B, TRAD, MARCH/POLKA, WALTZ, LATIN 1, LATIN 2	
METRONOME		<input type="radio"/>	
CONTROL		MAIN VOLUME, BALANCE, START/STOP, SYNCHRO START, FILL IN 1, FILL IN 2, VARIATION, INTRO & ENDING, TEMPO/PROGRAM DIAL	
ONE TOUCH PLAY/MUSIC STYLE SELECT		<input type="radio"/>	
TECHNI-CHORD		<input type="radio"/>	
AUTO PLAY CHORD		BASIC, ADVANCED, PIANIST, ACCOMP 1-3, DYNAMIC ACCOMP	
PANEL MEMORY		SET, 1-8	
SEQUENCER		16 TRACKS STORAGE CAPACITY: APPROX. 19000 NOTES INPUT MODES: REAL TIME, STEP (CHORD RHYTHM ONLY) FUNCTIONS: TRACK ASSIGN, EDIT (TRACK CLEAR, SONG CLEAR, QUANTIZE, TRACK MERGE, MEASURE ERASE, MEASURE COPY), PUNCH RECORD, PLAY, MEDLEY	
COMPOSER		STORAGE CAPACITY: APPROX. 8800 NOTES, 5 PARTS (BASS, ACCOMP 1, 2, 3, DRUMS), MEMORY: 2 BANK x 8 INPUT MODE: REALTIME, FUNCTIONS: MODE SELECT, LOAD SINGLE COMPOSER	
DISPLAY		LCD (240 x 64 DOTS), CONTRAST, EXIT, MORE/RETURN, DISPLAY HOLD	
DEMO		<input type="radio"/>	
HELP		<input type="radio"/>	
DISK DRIVE		DISK LOAD, DISK SAVE, MIDI FILE LOAD, MIDI FILE SAVE, LOAD SINGLE COMPOSER, DISK FORMAT	
SOUND		SOUND SETTING (SOUND SELECT, KEY SHIFT, PAN SETTING, PART REVERB, 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 MESSAGE, COMMON SETTING, INPUT/OUTPUT, PROGRAM CHANGE TO PANEL MEMORY	
EXTERNAL MEMORY		DISK DRIVE for 2HD, 2DD	
TERMINALS		HEADPHONE TERMINALS x 2, LINE OUT, AUX IN, MIDI (IN, THRU, OUT), MIC (PR307 ONLY)	
OUTPUT		50 W x 2	60 W x 2
SPEAKERS		16 cm x 2, 6.5 cm x 2, MONITOR SPEAKER x 2	
POWER REQUIREMENT		260 W, 195 W (NORTH AMERICA AND MEXICO) 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 (WxDxD)		139.7 cm x 103.8 cm x 57.2 cm (55" x 40-7/8" x 22-17/32")	143.3 cm x 104.6 cm x 59.1 cm (56-13/32" x 41-3/16" x 23-9/32")
NET WEIGHT		68 kg (149.9 lbs.)	76 kg (167.6 lbs.)
ACCESSORIES		STAND, AC CORD	

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

SX- PR305 / SX- PR307 REFERENCE GUIDE

Contents

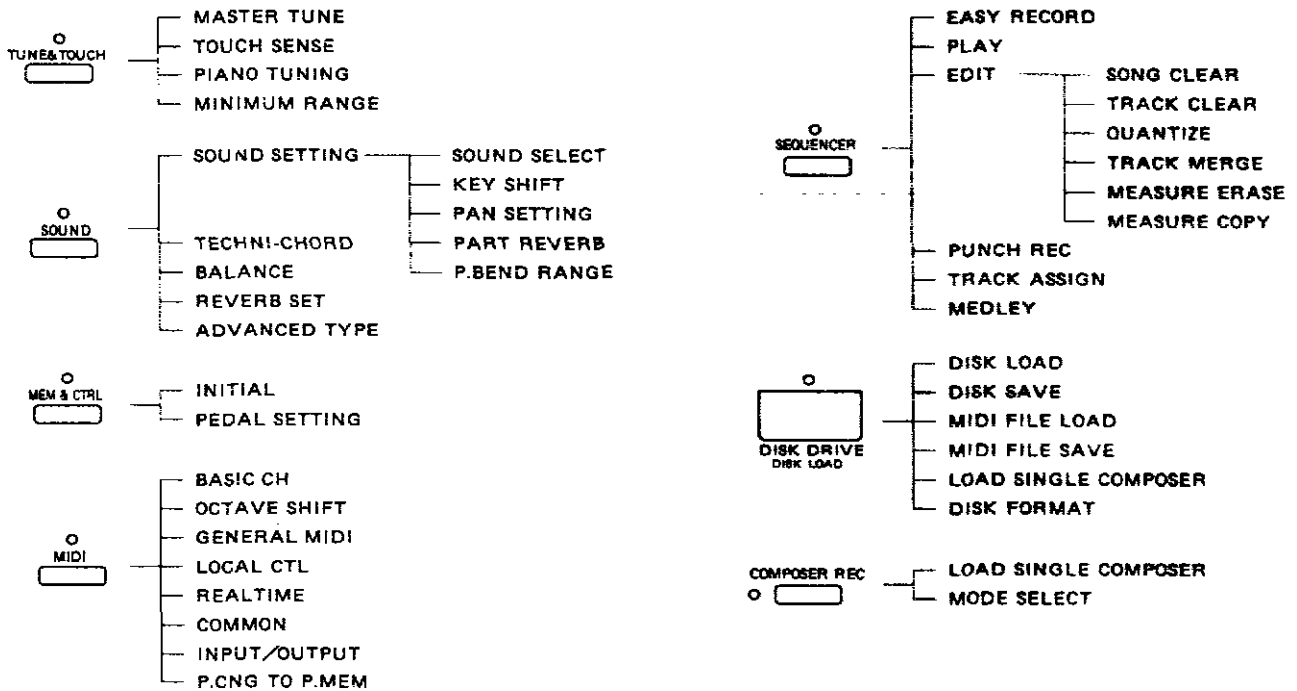
■ DEMO PERFORMANCE	2
■ DISPLAY GUIDE	2
■ EASY SETTING	2
■ SOUND(PR305)	3
■ SOUND(PR307)	5
■ RHYTHM(PR305)	7
■ RHYTHM(PR307)	8
■ KEYBOARD PERCUSSION	10
■ TECHNI-CHORD TYPE	11
■ MIDI Implementation Chart	12
■ MIDI DATA FORMAT	14

DEMO PERFORMANCE

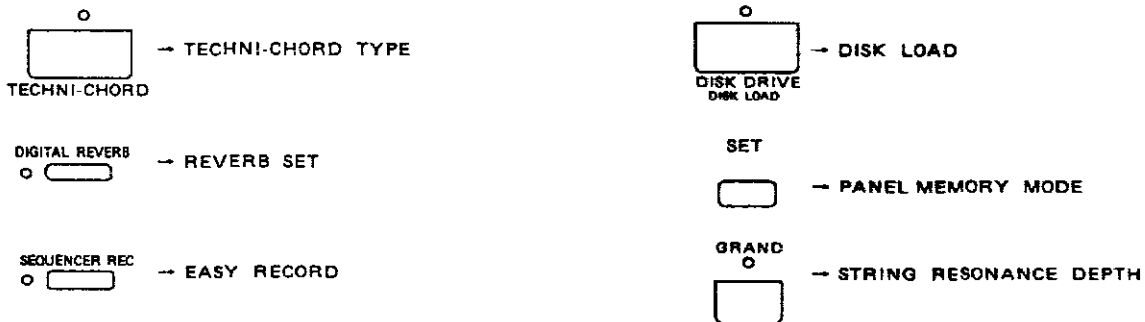
Style Demo	MAIN MEDLEY	Sound	E.PIANO
	FILM SCORE		GUITAR
	CONCERT (Rachmaninoff : Piano Concert No.2)		STRINGS
Piano Sound	MOZART (Mozart : Piano Sonata A major K. No.331)	Rhythm	SOLO BRASS
	LISZT (Liszt : Love's Dream No.3)		PIPE ORGAN
	CHOPIN (Chopin : Grande Valse Brillante Opus34 No.1)		SYNTH
	JOPLIN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

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

DISPLAY GUIDE



EASY SETTING (Press and hold)



SOUND	MIDI PROGRAM CHANGE DATA			SOUND	MIDI PROGRAM CHANGE DATA		
	NORM	TECH	GM		NORM	TECH	GM
GRAND PIANO				UPRIGHT PIANO			
Grand Piano	1 (0)	0 (0)	1	Upright Piano	2 (0)	2 (32)	—
ELECTRIC PIANO				MODERN PIANO			
E.Piano 1	3 (0)	5 (0)	5	Modern E.P.1	4 (0)	6 (0)	6
PIANO/E.PIANO				STRINGS			
Bright Piano	13 (0)	1 (0)	2	Strings	15 (0)	100 (0)	49
Piano 1 Oct.	13 (1)	0 (16)	—	Soft Strings	15 (1)	101 (32)	—
Piano 2 Oct.	13 (2)	2 (16)	—	OctaveStrings	15 (2)	102 (0)	—
Rock Piano	13 (3)	3 (32)	—	Pizzicato	15 (3)	99 (0)	46
Honky Tonk	13 (4)	1 (16)	4	Violin	15 (4)	96 (0)	41
E.Piano 2	13 (5)	5 (32)	—	CountryFiddle	15 (5)	96 (32)	111
Midi Grand	13 (6)	0 (32)	—	Slow Strings	15 (6)	101 (0)	50
E.Grand	13 (7)	3 (0)	3	TremoloString	15 (7)	100 (32)	45
Modern E.P.2	13 (8)	4 (0)	—	Synth Strings	15 (8)	103 (0)	51
Modern E.P.3	13 (9)	6 (48)	—	Viola	15 (9)	97 (32)	42
				Cello	15 (10)	97 (0)	43
				Bowed Bass	15 (11)	98 (0)	44
HARPSI / MALLETS				ORGAN			
Harpsichord	5 (0)	16 (0)	7	Jazz Organ	7 (0)	88 (0)	18
Cembalo	5 (1)	18 (0)	—	Full Drawbars	7 (1)	89 (0)	17
Synth Clavi	5 (2)	115 (0)	—	Jazz Drawbars	7 (2)	93 (0)	—
Glockenspiel	5 (3)	9 (0)	10	Pop Organ 1	7 (3)	90 (0)	—
Vibraphone	5 (4)	8 (0)	12	Pipe Organ 1	7 (4)	84 (0)	20
Marimba	5 (5)	10 (0)	13	Pipe Flute	7 (5)	85 (32)	—
Clavi	5 (6)	17 (0)	8	16' & 1'	7 (6)	91 (0)	—
Celesta	5 (7)	12 (0)	9	Pop Organ 2	7 (7)	89 (32)	—
Xylophone	5 (8)	11 (0)	14	Rock Organ	7 (8)	92 (32)	19
Tubular Bells	5 (9)	14 (0)	15	TheatreOrgan1	7 (9)	87 (32)	—
Tinkle Bell	5 (10)	14 (32)	113	Pipe Organ 2	7 (10)	85 (0)	—
GUITAR				VOCAL / ENSEMBLE			
Classic Gtr	14 (0)	20 (0)	—	Choir Ah	16 (0)	104 (0)	53
Bright Ac.Gtr	14 (1)	21 (0)	25	Pop Vocal Ah	16 (1)	104 (48)	—
Jazz Guitar	14 (2)	25 (0)	27	Vocal Ooh	16 (2)	104 (32)	—
Bright Solid	14 (3)	26 (0)	28	Vocal Doo	16 (3)	109 (0)	54
Country Gtr	14 (4)	31 (16)	—	Humming	16 (4)	105 (0)	—
Hawaiian Gtr	14 (5)	31 (0)	—	Mellow Ens.	16 (5)	107 (16)	90
Folk Guitar	14 (6)	22 (0)	26	Synth Vocal	16 (6)	107 (0)	55
12 String Gtr	14 (7)	23 (0)	—	Air Vox	16 (7)	106 (16)	86
Mellow Solid	14 (8)	28 (0)	—	Halo Vox	16 (8)	107 (48)	95
Mute Guitar	14 (9)	29 (0)	29	Click Vox	16 (9)	106 (48)	103
DistortionGtr	14 (10)	30 (0)	31				
Overdrive Gtr	14 (11)	27 (32)	30				
SPECIAL PERC				REED			
Banjo	6 (0)	33 (0)	106	Oboe	8 (0)	66 (0)	69
Mandolin	6 (1)	35 (0)	—	English Horn	8 (1)	67 (0)	70
Harp	6 (2)	32 (0)	47	Bassoon	8 (2)	70 (0)	71
Music Box	6 (3)	7 (0)	11	Bri.Accordion	8 (3)	80 (0)	22
Steel Drum	6 (4)	15 (0)	115	Musette	8 (4)	82 (0)	—
Timpani	6 (5)	126 (0)	48	Harmonica	8 (5)	83 (0)	23
Orchestra Hit	6 (6)	127 (16)	56	Bagpipe	8 (6)	73 (0)	110
Kalimba	6 (7)	39 (0)	109	Shenai	8 (7)	73 (16)	112
Sitar	6 (8)	38 (0)	105	Bandoneon	8 (8)	80 (16)	24
Dulcimer	6 (9)	38 (16)	16	Harmonium	8 (9)	86 (32)	21
Koto	6 (10)	37 (0)	108				
Shamisen	6 (11)	36 (0)	107				

SOUND	MIDI PROGRAM CHANGE DATA			SOUND	MIDI PROGRAM CHANGE DATA		
	NORM	TECH	GM		NORM	TECH	GM
BRASS				SYNTH LEAD			
Brass	17 (0)	56 (0)	62	Square Lead	10 (0)	117 (0)	81
Octave Brass	17 (1)	56 (16)	—	Saw Lead	10 (1)	118 (16)	82
Trumpet	17 (2)	48 (0)	57	Chiffer Lead	10 (2)	117 (32)	84
Mute Trumpet	17 (3)	50 (0)	60	Charang	10 (3)	27 (48)	85
Flugel Horn	17 (4)	51 (0)	—	Pluck Organ	10 (4)	112 (0)	—
Trombone	17 (5)	53 (0)	58	Gtr Harmonics	10 (5)	27 (16)	32
Brass & Synth	17 (6)	56 (48)	—	5th Wave	10 (6)	119 (0)	87
Close Fr.Horn	17 (7)	54 (0)	—	Chopper Flute	10 (7)	112 (32)	—
Open Fr.Horn	17 (8)	54 (16)	61	Synth Glocken	10 (8)	9 (32)	99
Tuba	17 (9)	55 (0)	59				
Synth Brass	17 (10)	60 (0)	64				
Syn.BrassEns.	17 (11)	61 (16)	63				
SAX / CLARINET				BASS			
Soprano Sax	9 (0)	76 (0)	65	Acoustic Bass	19 (0)	43 (0)	33
Alto Sax	9 (1)	77 (0)	66	Mellow A.Bass	19 (1)	43 (16)	—
Mellow Alto	9 (2)	77 (16)	—	Electric Bass	19 (2)	40 (0)	—
Tenor Sax	9 (3)	78 (48)	—	Mute Bass	19 (3)	47 (0)	—
Breathy Tenor	9 (4)	78 (16)	67	Slap Bass 1	19 (4)	41 (0)	37
Jazz Clarinet	9 (5)	68 (0)	72	Fretless Bass	19 (5)	40 (32)	36
Rock Tenor	9 (6)	79 (0)	—	Picked E.Bass	19 (6)	42 (0)	35
Baritone Sax	9 (7)	79 (16)	68	Bright E.Bass	19 (7)	40 (16)	34
Soft Clarinet	9 (8)	68 (16)	—	Synth Chopper	19 (8)	45 (0)	40
Clas.Clarinet	9 (9)	69 (0)	—	Slap Bass 2	19 (9)	41 (16)	38
				Smack Bass	19 (10)	46 (48)	39
				Bass & Lead	19 (11)	46 (32)	68
FLUTE				KEYBOARD PERC			
Piccolo	18 (0)	64 (0)	73	Rock Kit 1	20 (0)	112 (128)	—
Jazz Flute	18 (1)	65 (0)	74	Rock Kit 2	20 (1)	115 (128)	—
Classic Flute	18 (2)	65 (16)	—	LightRock Kit	20 (2)	126 (128)	—
Alto Flute	18 (3)	64 (16)	—	Soul Kit	20 (3)	121 (128)	—
Pan Flute	18 (4)	72 (0)	76	Jazz Kit	20 (4)	113 (128)	—
Shakuhachi	18 (5)	75 (0)	78	Brush Kit	20 (5)	117 (128)	—
Recorder	18 (6)	74 (0)	75				
Ocarina	18 (7)	74 (16)	80				
Blown Bottle	18 (8)	72 (32)	77				
Whistle	18 (9)	111 (0)	79				
SynthCalliope	18 (10)	72 (48)	83				
SYNTH PAD				PERC / EFFECT			
Fantasia	11 (0)	116 (32)	88	Seashore	12 (0)	124 (48)	123
Polysynth	11 (1)	102 (32)	91	Bird Tweet	12 (1)	125 (32)	124
Spacy Pad	11 (2)	107 (32)	92	Telephone	12 (2)	123 (0)	125
Crystal Ens.	11 (3)	120 (0)	93	Applause	12 (3)	125 (48)	127
Metal Pad	11 (4)	106 (32)	94	Agogo	12 (4)	122 (0)	114
Dream	11 (5)	108 (32)	—	Wood Block	12 (5)	122 (16)	116
Sweep Pad	11 (6)	62 (32)	96	Taiko Drum	12 (6)	123 (48)	117
Mist	11 (7)	108 (48)	101	Melodic Tom	12 (7)	122 (32)	118
Star Theme	11 (8)	120 (16)	104	Synth Drum	12 (8)	124 (0)	119
String Pad	11 (9)	103 (16)	52	ReverseCymbal	12 (9)	122 (48)	120
Ice Rain	11 (10)	121 (48)	97	Fret Noise	12 (10)	124 (16)	121
Soundtrack	11 (11)	119 (16)	98	Breath Noise	12 (11)	124 (32)	122
Goblins	11 (12)	106 (0)	102	Helicopter	12 (12)	123 (16)	126
Atmosphere	11 (13)	21 (48)	100	Gun Shot	12 (13)	123 (32)	128

•The numbers in parentheses () are bank data.

Program change number = Program change data+1 / Bank number = Bank data+1

SOUND	MIDI PROGRAM CHANGE DATA			SOUND	MIDI PROGRAM CHANGE DATA		
	NORM	TECH	GM		NORM	TECH	GM
GRAND PIANO				UPRIGHT PIANO			
Grand Piano	1 (0)	0 (0)	1	Upright Piano	2 (0)	2 (32)	—
ELECTRIC PIANO				MODERN PIANO			
E.Piano 1	3 (0)	5 (0)	5	Modern E.P. 1	4 (0)	8 (0)	6
PIANO/E.PIANO				STRINGS			
Bright Piano	13 (0)	1 (0)	2	Strings	15 (0)	100 (0)	49
Piano 1 Oct.	13 (1)	0 (16)	—	Soft Strings	15 (1)	101 (32)	—
Piano 2 Oct.	13 (2)	2 (16)	—	OctaveStrings	15 (2)	102 (0)	—
Rock Piano	13 (3)	3 (32)	—	Pizzicato	15 (3)	99 (0)	46
Honky Tonk	13 (4)	1 (16)	4	Violin	15 (4)	96 (0)	41
E.Piano 2	13 (5)	5 (32)	—	CountryFiddle	15 (5)	96 (32)	111
Midi Grand	13 (6)	0 (32)	—	Slow Strings	15 (6)	101 (0)	50
Jangle Piano	13 (7)	1 (48)	—	TremoloString	15 (7)	100 (32)	45
E.Grand	13 (8)	3 (0)	3	Synth Strings	15 (8)	103 (0)	51
Modern E.P.2	13 (9)	4 (0)	—	Viola	15 (9)	97 (32)	42
Modern E.P.3	13 (10)	6 (48)	—	Cello	15 (10)	97 (0)	43
Piano&Strings	13 (11)	58 (32)	—	Bowed Bass	15 (11)	98 (0)	44
HARPSI / MALLET				ORGAN			
Harpichord	5 (0)	16 (0)	7	Jazz Organ	7 (0)	88 (0)	18
Cembalo	5 (1)	18 (0)	—	Full Drawbars	7 (1)	89 (0)	17
Synth Clavi	5 (2)	115 (0)	—	Jazz Drawbars	7 (2)	93 (0)	—
Glockenspiel	5 (3)	9 (0)	10	Pop Organ 1	7 (3)	90 (0)	—
Vibraphone	5 (4)	8 (0)	12	Pipe Organ 1	7 (4)	84 (0)	20
Marimba	5 (5)	10 (0)	13	Pipe Flute	7 (5)	85 (32)	—
Clavi	5 (6)	17 (0)	8	16' & 1'	7 (6)	91 (0)	—
Celesta	5 (7)	12 (0)	9	Pop Organ 2	7 (7)	89 (32)	—
Xylophone	5 (8)	11 (0)	14	Rock Organ	7 (8)	92 (32)	19
AfricanMallet	5 (9)	113 (0)	—	TheatreOrgan1	7 (9)	87 (32)	—
Tubular Bells	5 (10)	14 (0)	15	TheatreOrgan2	7 (10)	87 (48)	—
Tinkle Bell	5 (11)	14 (32)	113	Pipe Organ 2	7 (11)	85 (0)	—
GUITAR				VOCAL / ENSEMBLE			
Classic Gtr	14 (0)	20 (0)	—	Choir Ah	16 (0)	104 (0)	53
Bright Ac.Gtr	14 (1)	21 (0)	25	Pop Vocal Ah	16 (1)	104 (48)	—
Jazz Guitar	14 (2)	25 (0)	27	Vocal Ooh	16 (2)	104 (32)	—
Bright Solid	14 (3)	26 (0)	28	Vocal Doo	16 (3)	109 (0)	54
Country Gtr	14 (4)	31 (16)	—	Mellow Ens.	16 (4)	107 (16)	90
Hawaiian Gtr	14 (5)	31 (0)	—	Orch.Pad	16 (5)	58 (0)	—
Folk Guitar	14 (6)	22 (0)	26	Synth Vocal	16 (6)	107 (0)	55
12 String Gtr	14 (7)	23 (0)	—	Humming	16 (7)	105 (0)	—
Mellow Solid	14 (8)	28 (0)	—	Air Vox	16 (8)	106 (16)	86
Mute Guitar	14 (9)	29 (0)	29	Halo Vox	16 (9)	107 (48)	95
DistortionGtr	14 (10)	30 (0)	31	Click Vox	16 (10)	106 (48)	103
Overdrive Gtr	14 (11)	27 (32)	30	Orch.Ensemble	16 (11)	58 (16)	—
SPECIAL PERC				REED			
Banjo	6 (0)	33 (0)	106	Oboe	8 (0)	66 (0)	69
Mandolin	6 (1)	35 (0)	—	English Horn	8 (1)	67 (0)	70
Harp	6 (2)	32 (0)	47	Bassoon	8 (2)	70 (0)	71
Music Box	6 (3)	7 (0)	11	Bri.Accordion	8 (3)	80 (0)	22
Steel Drum	6 (4)	15 (0)	115	Musette	8 (4)	82 (0)	—
Timpani	6 (5)	126 (0)	48	Harmonica	8 (5)	83 (0)	23
Orchestra Hit	6 (6)	127 (16)	56	Wood Wind Ens	8 (6)	64 (32)	—
Kalimba	6 (7)	39 (0)	109	Bagpipe	8 (7)	73 (0)	110
Sitar	6 (8)	38 (0)	105	Shanai	8 (8)	73 (16)	112
Dulcimer	6 (9)	38 (16)	16	Bandoneon	8 (9)	80 (16)	24
Koto	6 (10)	37 (0)	108	Harmonium	8 (10)	86 (32)	21
Shamisen	6 (11)	36 (0)	107	Mel.Accordion	8 (11)	81 (0)	—

SOUND	MIDI PROGRAM CHANGE DATA			SOUND	MIDI PROGRAM CHANGE DATA		
	NORM	TECH	GM		NORM	TECH	GM
BRASS							
Brass	17 (0)	56 (0)	62	Square Lead	10 (0)	117 (0)	81
Octave Brass	17 (1)	56 (16)	—	Saw Lead	10 (1)	118 (16)	82
Trumpet	17 (2)	48 (0)	57	Lead Voice	10 (2)	121 (32)	—
Mute Trumpet	17 (3)	50 (0)	60	Pluck Organ	10 (3)	112 (0)	—
Flugel Horn	17 (4)	51 (0)	—	Synthvnet	10 (4)	115 (16)	—
Trombone	17 (5)	53 (0)	58	Gr Harmonics	10 (5)	27 (16)	32
Brass & Synth	17 (6)	56 (48)	—	Chiffer Lead	10 (6)	117 (32)	84
Close Fr. Horn	17 (7)	54 (0)	—	Charang	10 (7)	27 (48)	85
Open Fr. Horn	17 (8)	54 (16)	61	5th Wave	10 (8)	119 (0)	87
Tuba	17 (9)	55 (0)	59	Chopper Flute	10 (9)	112 (32)	—
Synth Brass	17 (10)	60 (0)	64	Synth Glocken	10 (10)	9 (32)	90
Syn.BrassEns.	17 (11)	61 (16)	63	Nylon Synth	10 (11)	20 (48)	—
SAX / CLARINET							
BASS							
Soprano Sax	9 (0)	76 (0)	65	Acoustic Bass	19 (0)	43 (0)	33
Alto Sax	9 (1)	77 (0)	66	Mellow A. Bass	19 (1)	43 (16)	—
Mellow Alto	9 (2)	77 (16)	—	Electric Bass	19 (2)	40 (0)	—
Tenor Sax	9 (3)	78 (48)	—	Mute Bass	19 (3)	47 (0)	—
Breathy Tenor	9 (4)	78 (16)	67	Slap Bass 1	19 (4)	41 (0)	37
Jazz Clarinet	9 (5)	68 (0)	72	Fretless Bass	19 (5)	40 (32)	36
Rock Tenor	9 (6)	79 (0)	—	Picked E. Bass	19 (6)	42 (0)	35
Baritone Sax	9 (7)	79 (16)	68	Bright E. Bass	19 (7)	40 (16)	34
DistortionSax	9 (8)	78 (32)	—	Synth Chopper	19 (8)	45 (0)	40
Synth Sax	9 (9)	79 (48)	—	Slap Bass 2	19 (9)	41 (16)	38
Soft Clarinet	9 (10)	68 (16)	—	Smack Bass	19 (10)	46 (48)	39
Class Clarinet	9 (11)	69 (0)	—	Bass & Lead	19 (11)	46 (32)	88
FLUTE							
KEYBOARD PERC							
Piccolo	18 (0)	64 (0)	73	Rock Kit 1	20 (0)	112 (128)	—
Jazz Flute	18 (1)	65 (0)	74	Rock Kit 2	20 (1)	115 (128)	—
Classic Flute	18 (2)	65 (16)	—	LightRock Kit	20 (2)	126 (128)	—
Alto Flute	18 (3)	64 (16)	—	Soul Kit	20 (3)	121 (128)	—
Pan Flute	18 (4)	72 (0)	76	Jazz Kit	20 (4)	113 (128)	—
Shakuhachi	18 (5)	75 (0)	78	Brush Kit	20 (5)	117 (128)	—
Alto Ensemble	18 (6)	84 (48)	—	OrchestralKit	20 (6)	124 (128)	—
Recorder	18 (7)	74 (0)	75	Tred Kit	20 (7)	118 (128)	—
Ocarina	18 (8)	74 (16)	80				
Blown Bottle	18 (9)	72 (32)	77				
Whistle	18 (10)	111 (0)	79				
SynthCellope	18 (11)	72 (48)	83				
SYNTH PAD							
PERC / EFFECT							
Fantasia	11 (0)	116 (32)	89	Seashore	12 (0)	124 (48)	123
Polysynth	11 (1)	102 (32)	91	Bird Tweet	12 (1)	125 (32)	124
Spacey Pad	11 (2)	107 (32)	92	Telephone	12 (2)	123 (0)	125
Crystal Ens.	11 (3)	120 (0)	93	Applause	12 (3)	125 (48)	127
Metal Pad	11 (4)	106 (32)	94	Agogo	12 (4)	122 (0)	114
Dream	11 (5)	108 (32)	—	Wood Block	12 (5)	122 (16)	116
Sweep Pad	11 (6)	62 (32)	96	Taiko Drum	12 (6)	123 (48)	117
Mist	11 (7)	108 (48)	101	Melodic Tom	12 (7)	122 (32)	118
Click Echo	11 (8)	108 (0)	—	Synth Drum	12 (8)	124 (0)	119
Star Theme	11 (9)	120 (16)	104	ReverseCymbal	12 (9)	122 (48)	120
SynthEnsemble	11 (10)	103 (48)	—	Fret Noise	12 (10)	124 (16)	121
String Pad	11 (11)	103 (16)	52	Breath Noise	12 (11)	124 (32)	122
Glitter	11 (12)	104 (16)	—	Helicopter	12 (12)	123 (16)	126
Mellow Brass	11 (13)	62 (16)	—	Gun Shot	12 (13)	123 (32)	128
Ice Rain	11 (14)	121 (48)	97				
Soundtrack	11 (15)	119 (16)	88				
Goblins	11 (16)	106 (0)	102				
Atmosphere	11 (17)	21 (48)	100				

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

RHYTHM	MIDI PROGRAM CHANGE DATA		RHYTHM	MIDI PROGRAM CHANGE DATA	
	NORM	TECH		NORM	TECH
8BEAT			SHOW TIME		
8Bt Standard 1	10 (0)	90 (96)	Broadway Show	8 (0)	15 (32)
8Bt Standard 2	10 (1)	90 (80)	Cabaret	6 (1)	15 (48)
8Bt Soft Rock	10 (2)	90 (48)	Hollywood	6 (2)	30 (16)
8Bt Ballad	10 (3)	91 (32)	Vaudeville	6 (3)	24 (64)
Folk Rock	10 (4)	85 (0)	Soft Shoe	6 (4)	24 (80)
Country Rock	10 (5)	85 (32)	Paris Ballad	6 (5)	74 (96)
ROCK/DISCO			COUNTRY/R&B		
Rock'n'Roll 1	3 (0)	80 (64)	Country 2step	14 (0)	17 (112)
Rock'n'Roll 2	3 (1)	80 (32)	Country Folk	14 (1)	16 (16)
Disco Pop	3 (2)	123 (48)	Country Waltz	14 (2)	19 (0)
8Bt Soul 1	3 (3)	87 (32)	Bluegrass	14 (3)	20 (48)
8Bt Soul 2	3 (4)	87 (0)	R&B 8 Beat	14 (4)	81 (16)
Disco	3 (5)	123 (64)	R&B Ballad	14 (5)	75 (64)
16BEAT			TRAD		
16Bt Stand. 1	11 (0)	96 (64)	Foxtrot	7 (0)	29 (96)
16Bt Stand. 2	11 (1)	96 (48)	Chanson Fox	7 (1)	29 (64)
16Bt Pop	11 (2)	107 (48)	Modern Fox	7 (2)	30 (0)
16Bt Rock	11 (3)	99 (112)	GospelShuffle	7 (3)	77 (64)
16Bt Ballad	11 (4)	99 (96)	Gospel 16Beat	7 (4)	100 (16)
Piano Pop	11 (5)	101 (0)	Hawaiian	7 (5)	22 (16)
MODERN ROCK			MARCH/POLKA		
Jazz Rock	4 (0)	113 (80)	U.S.March 2/4	15 (0)	0 (32)
Soul Rock	4 (1)	102 (48)	GermanMrch2/4	15 (1)	1 (48)
Soul Ballad	4 (2)	103 (32)	Polka 2/4	15 (2)	4 (32)
Carib. Rock	4 (3)	118 (48)	U.S.March 6/8	15 (3)	2 (16)
Samba Rock	4 (4)	117 (16)	Orch.March2/4	15 (4)	0 (48)
Salsa	4 (5)	68 (48)	Polka 6/8	15 (5)	5 (32)
SWING			WALTZ		
Stand.Swing	12 (0)	25 (0)	Simple Waltz	8 (0)	13 (0)
B.Band Ballad	12 (1)	39 (16)	StandardWaltz	8 (1)	11 (16)
Dixie	12 (2)	24 (32)	Swingy Waltz	8 (2)	12 (16)
Big Band Mid	12 (3)	36 (48)	Vienne Waltz	8 (3)	9 (32)
Big Band Fast	12 (4)	36 (32)	Chanson Waltz	8 (4)	11 (32)
Big Band Slow	12 (5)	38 (80)	Orch.Waltz	8 (5)	8 (64)
ROCK (OTHERS)			LATIN 1		
Shuffle R&R	5 (0)	76 (48)	Rhumba	16 (0)	58 (32)
ShuffleBoogie	5 (1)	77 (32)	Beguine	16 (1)	59 (32)
Swing Rock	5 (2)	73 (16)	Paso Doble	16 (2)	69 (16)
Rock Ballad 1	5 (3)	74 (80)	Mambo	16 (3)	56 (32)
Rock Ballad 2	5 (4)	75 (96)	Cha Cha	16 (4)	57 (48)
Soul R.Ballad	5 (5)	75 (32)	Swingy Reggae	16 (5)	71 (32)
JAZZ COMBO			LATIN 2		
Jazz Combo	13 (0)	34 (16)	Bossanova 1	9 (0)	48 (96)
Jazz Ballad 1	13 (1)	44 (16)	Bossanova 2	9 (1)	48 (64)
Jazz Ballad 2	13 (2)	35 (16)	Jazz Bossa	9 (2)	49 (16)
Mod.Jazz Mid	13 (3)	40 (48)	Samba	9 (3)	51 (48)
Mod.Jazz Fast	13 (4)	40 (80)	Tango Contin.	9 (4)	53 (64)
Jazz Waltz	13 (5)	46 (48)	Tango Haban.	9 (5)	55 (16)

-The numbers in parentheses () are bank data.

Program change number = Program change data+1 / Bank number = Bank data+1

RHYTHM

PR 307

RHYTHM	MIDI PROGRAM CHANGE DATA		RHYTHM	MIDI PROGRAM CHANGE DATA	
	NORM	TECH		NORM	TECH
8BEAT			ROCK (OTHERS)		
8Bt Standard 1	10 (0)	90 (96)	Shuffle R&R	5 (0)	76 (48)
8Bt Standard 2	10 (1)	90 (80)	ShuffleBoogie	5 (1)	77 (32)
8Bt Soft Rock	10 (2)	90 (48)	Swing Rock	5 (2)	73 (16)
8Bt Ballad 1	10 (3)	91 (32)	Rock Ballad 1	5 (3)	74 (80)
Folk Rock	10 (4)	85 (0)	Rock Ballad 2	5 (4)	75 (96)
Country Rock	10 (5)	85 (32)	Soul R.Ballad	5 (5)	75 (32)
8Bt Ballad 2	10 (6)	91 (16)			
British Rock	10 (7)	86 (16)			
ROCK/DISCO			JAZZ COMBO		
Rock'n'Roll 1	3 (0)	80 (64)	Jazz Combo 1	13 (0)	34 (16)
Rock'n'Roll 2	3 (1)	80 (32)	Jazz Ballad 1	13 (1)	44 (16)
Disco Pop	3 (2)	123 (48)	Jazz Ballad 2	13 (2)	35 (16)
8Bt Soul 1	3 (3)	87 (32)	Mod.Jazz Mid	13 (3)	40 (48)
8Bt Soul 2	3 (4)	87 (0)	Mod.Jazz Fast	13 (4)	40 (80)
Disco	3 (5)	123 (64)	Jazz Waltz	13 (5)	46 (48)
Disco 70's	3 (6)	121 (16)	Jazz Combo 2	13 (6)	34 (32)
Euro Beat	3 (7)	120 (48)	Jazz Blues	13 (7)	38 (96)
16BEAT			SHOW TIME		
16Bt Stand. 1	11 (0)	96 (64)	Broadway Show	6 (0)	15 (32)
16Bt Stand. 2	11 (1)	96 (48)	Cabaret	6 (1)	15 (48)
16Bt Pop	11 (2)	107 (48)	Hollywood	6 (2)	30 (16)
16Bt Rock 1	11 (3)	99 (112)	Vaudeville	6 (3)	24 (64)
16Bt Ballad	11 (4)	99 (96)	Soft Shoe	6 (4)	24 (80)
Piano Pop	11 (5)	101 (0)	Paris Ballad	6 (5)	74 (96)
16Bt Stand. 3	11 (6)	96 (32)			
16Bt Rock 2	11 (7)	101 (32)			
MODERN ROCK			COUNTRY/R&B		
Jazz Rock 1	4 (0)	113 (80)	Country 2step	14 (0)	17 (112)
Soul Rock	4 (1)	102 (48)	Country Folk	14 (1)	18 (16)
Soul Ballad	4 (2)	103 (32)	Country Waltz	14 (2)	19 (0)
Carib. Rock	4 (3)	118 (48)	Bluegrass	14 (3)	20 (48)
Samba Rock	4 (4)	117 (16)	R&B 8 Beat	14 (4)	81 (16)
Salsa	4 (5)	88 (48)	R&B Ballad	14 (5)	75 (64)
Jazz Rock 2	4 (6)	112 (48)	Country Pop	14 (6)	17 (64)
Funk	4 (7)	110 (48)	ModernCountry	14 (7)	17 (80)
SWING			TRAD		
Stand.Swing 1	12 (0)	25 (0)	Foxtrot	7 (0)	29 (96)
B.Band Ballad	12 (1)	39 (16)	Chanson Fox	7 (1)	29 (64)
Dixie	12 (2)	24 (32)	Modern Fox	7 (2)	30 (0)
Big Band Mid	12 (3)	36 (48)	GospelShuffle	7 (3)	77 (64)
Big Band Fast	12 (4)	36 (32)	Gospel 16Beat	7 (4)	100 (16)
Big Band Slow	12 (5)	39 (80)	Hawliian	7 (5)	22 (16)
Stand.Swing 2	12 (6)	32 (48)			
Orch. Swing	12 (7)	37 (0)			

RHYTHM

PR 307

RHYTHM	MIDI PROGRAM CHANGE DATA		RHYTHM	MIDI PROGRAM CHANGE DATA	
	NORM	TECH		NORM	TECH
MARCH/POLKA			LATIN 1		
U.S. March 2/4	15 (0)	0 (32)	Rhumba	16 (0)	58 (32)
German Mrch 2/4	15 (1)	1 (48)	Beguine	16 (1)	59 (32)
Polka 2/4	15 (2)	4 (32)	Paso Doble	16 (2)	69 (16)
U.S. March 6/8	15 (3)	2 (16)	Mambo	16 (3)	56 (32)
Orch. March 2/4	15 (4)	0 (48)	Cha Cha	16 (4)	57 (48)
Polka 6/8	15 (5)	5 (32)	Swingy Reggae	16 (5)	71 (32)
			Canzone Beguin	16 (4)	59 (16)
			Reggae	16 (5)	71 (16)
WALTZ			LATIN 2		
Simple Waltz	8 (0)	13 (0)	Bossanova 1	9 (0)	48 (96)
Standard Waltz	8 (1)	11 (16)	Bossanova 2	9 (1)	48 (64)
Swingy Waltz	8 (2)	12 (16)	Jazz Bossa	9 (2)	49 (16)
Vienna Waltz	8 (3)	9 (32)	Samba	9 (3)	51 (48)
Chanson Waltz	8 (4)	11 (32)	Tango Contin.	9 (4)	53 (64)
Orch. Waltz	8 (5)	8 (64)	Tango Haban.	9 (5)	55 (16)

•The numbers in parentheses () are bank data.

Program change number = Program change data + 1 / Bank number = Bank data + 1

KEYBOARD PERCUSSION

		Other kits	Orchestral kit (PR307)	General MIDI
		—	—	Bass Drum 2*
		Bass Drum	Orchestral Bass Drum	Bass Drum 1
		Rim Shot	Rim Shot	Rim Shot
		Snare Drum 1	Orchestral Snare Drum 1	Snare Drum 1
		Special Snare Drum	Castanets	Hand Clap
		Snare Drum 2	Orchestral Snare Drum 2	Electric Snare
		Floor Tom	Triangle	Floor Tom Low
		Splash Cymbal	Cymbal Soft Mallet	Hi Hat Close
		Tom Low	Tambourine	Floor Tom High
		Crash Cymbal Low	Orchstral Cymbal 1	Hi Hat Pedal
		Tom Mid	Tam-Tam	Tom Low
		Crash Cymbal High	Orchstral Cymbal 2	Hi Hat Open
		Tom High	Rattle	Tom Mid
		Hi Hat Close 1	Tublar Bells C	Tom High 1
		Hi Hat Close 2	Tublar Bells C*	Crash Cymbal 1
		Hi Hat Open	Tublar Bells D	Tom High 2
		Ride Bell	Tublar Bells D*	Ride Cymbal 1
		Ride Cymbal	Tublar Bells E	Chinese Cymbal
		Conga Low	Tublar Bells F	Ride Bell
		Small Conga Low	Tublar Bells F*	Tambourine
		Conga High	Tublar Bells G	Splash Cymbal
		Small Conga High	Tublar Bells G*	Cowbell
		Conga Crash	Tublar Bells A	Crash Cymbal 2
		Metal Cabasa	Tublar Bells A*	Vibraslap
		Timbales Low	Tublar Bells B	Ride Cymbal 2
		Timbales High	Tublar Bells c	Bongo High
		Cowbell Low	Tublar Bells c*	Bongo Low
		Cowbell High	Tublar Bells d	Conga Mute Crash
		Agogo Low	Tublar Bells d*	Conga High
		Agogo High	Timpani E	Conga Low
		Samba Whistle Low	Timpani F	Timbales High
		Samba Whistle High	Timpani F*	Timbales Low
		Claves	Timpani G	Agogo High
		Slap	Timpani G*	Agogo Low
		Hand Clap	Timpani A	Cabasa
		Tambourine	Timpani A*	Maracas
		Shaker	Timpani B	Samba Whistle Short
		Triangle Mute	Timpani c	Samba Whistle Long
		Maracas	Timpani c*	Guiro Short
		Triangle Open	Timpani d	Guiro Long
		Guiro Short	Timpani d*	Claves
		Guiro Long	Timpani e	Wood Block Mid
		Orchestral Bass Drum	Timpani f	Wood Block Low
		Orchestral Snare Drum	Wood Block Low	Cuica High
		Orchestral Cymbal	Wood Block Mid	Cuica Low
		Wind Chime	Wood Block High	Triangle Mute
		—	—	Triangle Open*

* Sounds in SEQUENCER and MIDI function.

TECHNI-CHORD TYPE

< Example: C major chord >

<p>CLOSE</p>	<p>OPEN1</p>	<p>OPEN2</p>
<p>DUET</p>	<p>COUNTRY</p>	<p>THEATRE</p>
<p>HYMN</p>	<p>BLOCK</p>	<p>BIG BAND BRASS</p>
<p>BIG BAND REEDS</p>	<p>OCTAVE</p>	<p>HARD ROCK</p>
<p>FANFARE</p>		

● : Played note (right-hand melody)
 ○ : Added notes

MIDI Implementation Chart

Digital Ensemble [SX-PR305/SX-PR307]

(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	X	X	X	X	X	X	X	X	X	
	Altered	-	X	-	-	-	-	-	-	-	
Note Number	True voice	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.
Velocity	Note ON	O	O	O	O	O	O	O	O	-	
	Note OFF	X	X	X	X	X	X	X	X	-	
After Touch	Key's	X	X	X	X	X	X	X	X	-	
	Ch's	X	X	X	X	X	X	X	X	-	
Pitch Bender		O*	O*	X	O*	O*	O*	X	O*	X	
Control Change	0,32	O	O	O	O**	O**	O**	O	O	X	bank select MSB, LSB modulation data entry MSB, LSB volume panpot expression sustain sostenute pedal soft pedal auto play chord intro, fill in, ending reverb digital effect RPN LSB, MSB all sound off reset all controllers
	1	O*	O*	X	O*	O*	O*	X	O*	X	
	6,38	O	O	X	X	X	X	X	X	X	
	7	O	O	O	O	O	O	O	O	X	
	10	O	O	X	X	X	X	X	X	X	
	11	O*	O*	O*	X	X	X	X	X	X	
	64	O	O	X	O**	O**	O**	X	X	X	
	66	O	O	X	X	X	X	X	X	X	
	67	O	O	X	X	X	X	X	X	X	
	80	O	O	X	X	X	X	X	X	X	
	82	O	O	X	X	X	X	O	X	X	
	91	O	O	O	O	O	O	O	O	O	
	93	O	O	X	O**	O**	O**	X	O	X	
100,101	O	O	X	X	X	X	X	X	X		
120	O*	O*	O*	X	X	X	X	X	X		
121	O*	O*	O*	X	X	X	X	X	X		
Prog Change	True #	-	-	-	O**	O**	O**	-	-	X	Changes depending on program change mode and prog.cng to p.mem.
System exclusive		O									
System common	Song Pos	OX*									0-19
	Song Sel	OX*									
	Tune	X									
System Real Time	Clock	O									
	Commands	OX*									start/stop.continue
Aux Messages	Local ON/OFF	X	X	X	X	X	X	X	X	-	
	All notes OFF	X	X	X	X	X	X	X	X	-	
Messages	Active Sense	O									
	Reset	X									
Notes		OX*.....Whether or not the data for each of these items is transmitted can be set. O*Transmitted during SEQUENCER playback and during rhythm performance. O**.....Transmitted during COMPOSER recording.									

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

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

O:Yes
X:No

MIDI Implementation Chart

Digital Ensemble [SX-PR305/SX-PR307]

(Recognized)

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

Mode 1: OMNI ON, POLY

Mode 2: OMNI ON, MONO

○:Yes

Mode 3: OMNI OFF, POLY

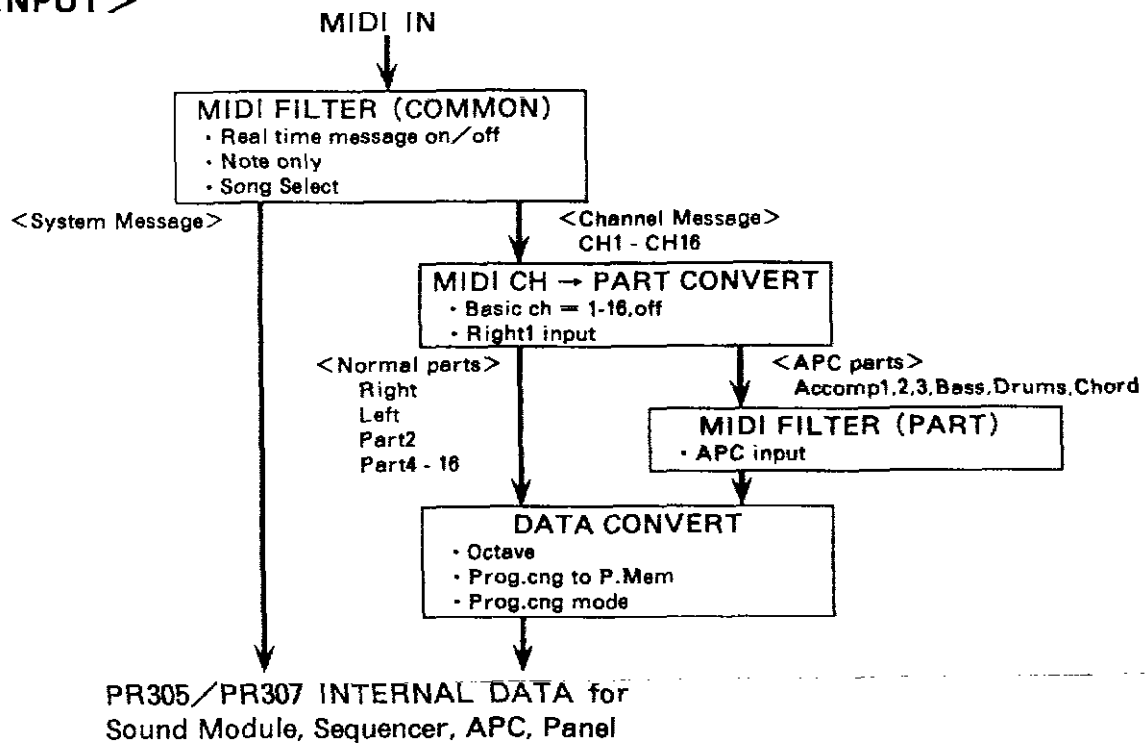
Mode 4: OMNI OFF, MONO

X:No

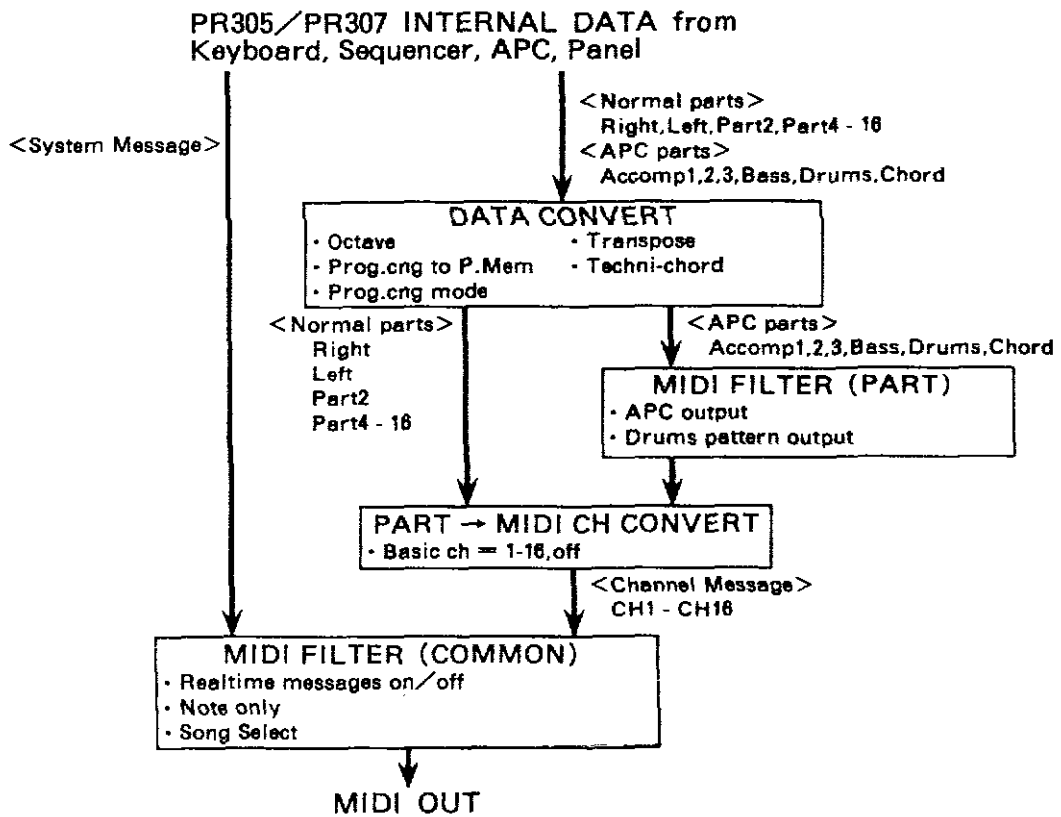
MIDI DATA FORMAT

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)
ll	RPN data number (LSB)

n: 0-F Basic channel
 mm,ll: 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	
00H 00H	mm	--	Pitch Bend Sensitivity mm:00H - 0CH (0 - 12semi-tones) ll: ignored -Up to 1 octave can be specified in semi-tone increments.
00H 01H	mm	ll	Fine Tuning mm,ll:00H,00H - 40H,00H - 7FH,7FH (-128*100/128-0-127*100/128cents) -ll:00H or 40H (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) ll: ignored -Up to 2 octave can be specified in semi-tone increments.
7FH 7FH	--	--	RPN Reset mm,ll: 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
ll	Pitch bend value (LSB)
mm	Pitch bend value (MSB)

- n: 0-F Basic channel
 ll,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 notes 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
ll	Least significant
mm	Most significant

- ll,mm: 00H - 7FH

Song select

F3H	Song select
ss	Song number

- ss: 0-19

■ System real time message

Timing Clock

F8H	Timing clock
-----	--------------

Start

FAH	Start
-----	-------

Continue

FBH	Continue
-----	----------

Stop

FCH	Stop
-----	------

Active Sense

FEH	Active sense
-----	--------------

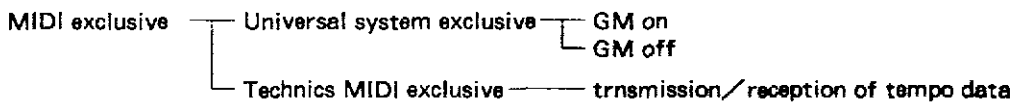
System exclusive

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 PR305 / PR307 MIDI exclusive

Outline of PR305 / PR307 MIDI exclusive



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.



Tempo command →

· 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	Piano (2*)	33	Acoustic Bass (1)	65	Soprano Sax (1*)	97	Ice Rain (2)
2	Bright Piano (1)	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 (1)	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 (1)	45	Tremolo String (2)	77	Blown Bottle (2*)	109	Kalimba (1*)
14	Xylophone (1*)	46	Pizzicato (2)	78	Shakuhachi (1*)	110	Bagpipe (1)
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/MUSIC STYLE SELECT, PANEL MEMORY, TECHNICHORD, AUTO PLAY CHORD, COMPOSER

579.

MIDI PRESET DATA

		Without APC								With APC							
Master ↓ Slave		PR series								PR series							
		Keyboard		Organ		Sound module	Ext SEQ	Kbd type2	Ext SEQ	Keyboard		Organ		Sound module	Ext SEQ	Kbd type2	Ext SEQ
		type1	type2	type1	type2			↓	PR series	type1	type2	type1	type2			↓	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
Control	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	18	15	15	15	15	15	off	15	off	15	off	15	15	15
	16	15	16	15	16	18	18	18	18	18	off	18	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	18	15	18	18	18	18	18	
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.