



# Technics

ORGAN

SX-EA1



**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

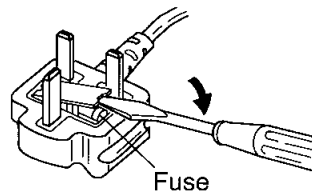
As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

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)**

Be sure the voltage adjuster located on the rear panel is in accordance with local voltage in your area before using this unit. Use a screwdriver to set the voltage adjuster to the local voltage.

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

BEFORE YOU PLAY, PLEASE READ THE CAUTIONARY COPY APPEARING ON PAGE 2.

	<b>CAUTION</b> 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 EA organ, 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 and MIDI.  |
| REFERENCE GUIDE<br>(separate booklet) | Reference guide for the contents of the sounds and rhythms etc.  |

# Cautions for safest use of this unit

## Installation location

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

## Power source

1. Be sure the line voltage selector is in accordance with local voltage in your area before connecting the plug to the socket.
2. DC power cannot be used.

## Handling the power cord

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

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

Do not permit metal articles to get inside the unit.

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

If, nevertheless, some such article does get inside, disconnect the power cord plug from the electrical outlet, and contact the store where the unit was purchased.

## If water gets into the unit

Disconnect the power cord plug from the electrical outlet, and contact the store where it was purchased.

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

## If operation seems abnormal

Immediately turn off the power, disconnect the power cord plug from the electrical outlet, and contact the store where it was purchased.

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

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

## A word about the power cord

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

## Don't touch the inside parts of this unit.

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

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

## Maintenance

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

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

**SERVICE MUST BE CARRIED OUT BY DEALER  
OR OTHER QUALIFIED PERSON**

# Contents

Before you play .....	1
Caution for safest use of this unit .....	2
Controls and functions .....	4
<b>BASIC FUNCTIONS</b>	
Getting started .....	6
Listen to the demonstration .....	8
Selecting sounds .....	10
Effects .....	13
Playing automatic rhythms .....	14
Automatic accompaniment .....	16
<b>PRACTICAL APPLICATIONS</b>	
<b>Part I Sounds and effects .....</b>	<b>18</b>
How to select sounds .....	18
Balance .....	23
Effects .....	24
Transpose .....	26
Techni-chord .....	27
Panel Memory .....	28
One Touch Registration .....	29
<b>Part II Playing the rhythm .....</b>	<b>30</b>
Rhythm .....	30
Keyboard Percussion .....	33
Auto Play Chord .....	33
One Touch Play .....	37
Music Style Arranger .....	38
Step Record .....	39
<b>Part III Setting the functions .....</b>	<b>42</b>
<b>Part IV MIDI .....</b>	<b>45</b>
Setting the functions .....	47
<b>Initialize .....</b>	<b>51</b>
<b>Connections .....</b>	<b>52</b>
<b>Assembly .....</b>	<b>53</b>
<b>Symptoms which appear to be signs of trouble .....</b>	<b>54</b>
<b>Index .....</b>	<b>55</b>
<b>Specifications .....</b>	<b>56</b>

# Controls and functions

## RHYTHM

Select preset automatic rhythms. Each rhythm has four variations. (Refer to page 30.)

## DEMO

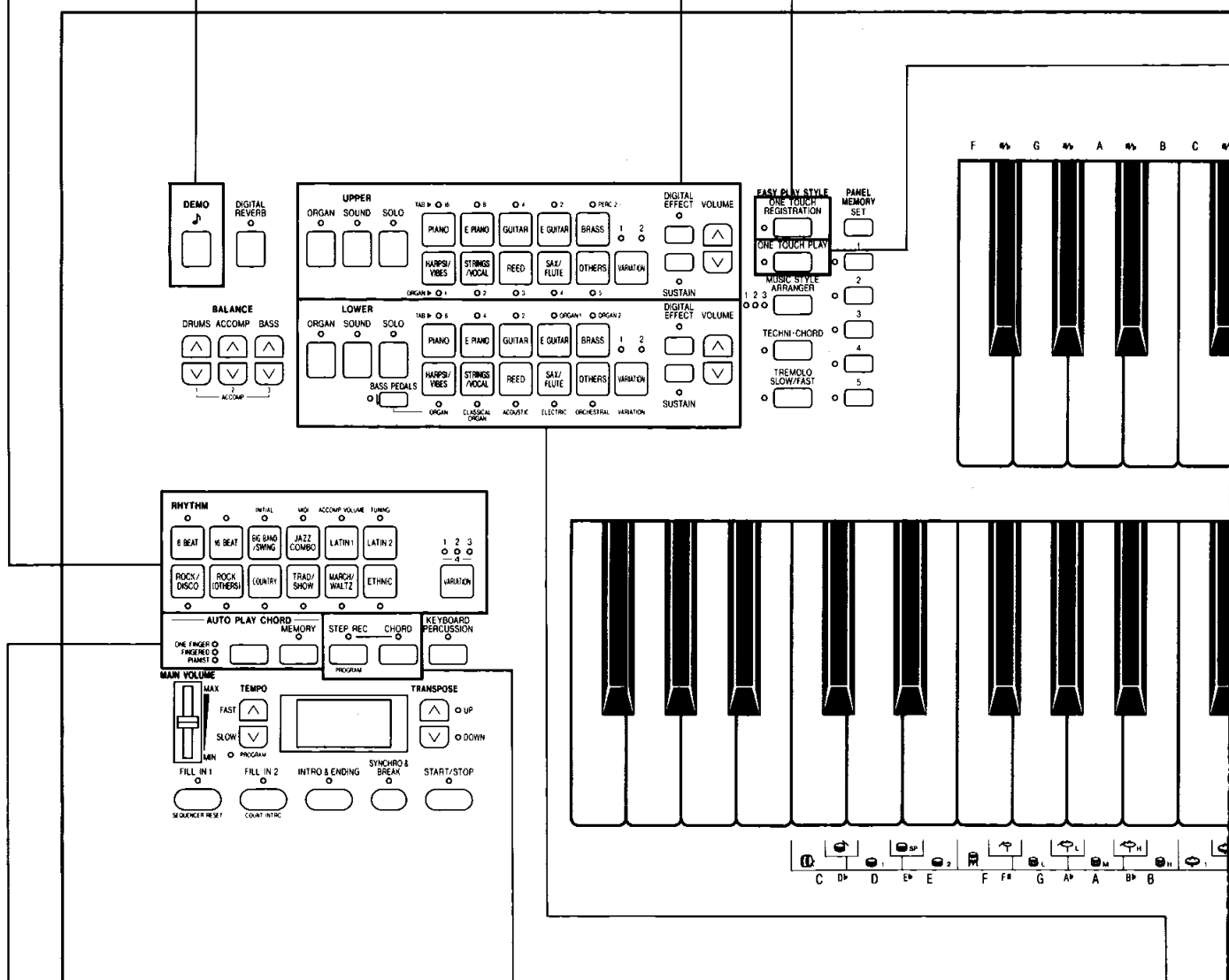
An automatic performance introduces you to the organ's sounds and features. (Refer to page 8.)

## UPPER

Select the sounds to be played on the upper keyboard. (Refer to page 19.)

## ONE TOUCH REGISTRATION

Select an authentic organ registration for automatic setup. (Refer to page 29.)



## AUTO PLAY CHORD

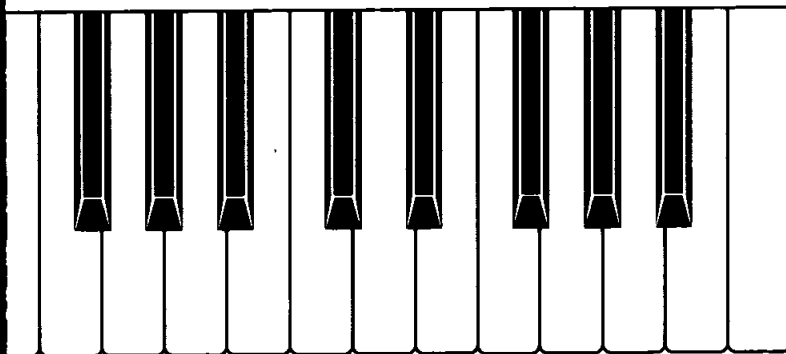
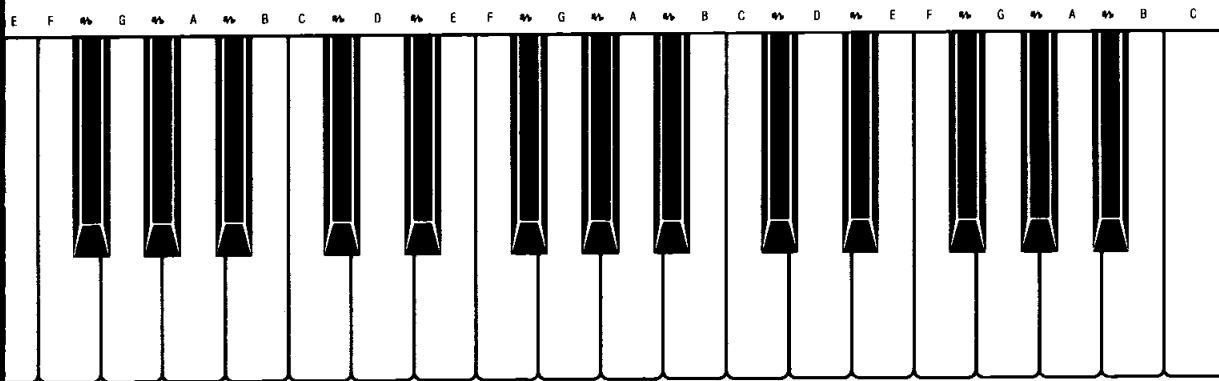
By specifying a chord on the lower keyboard, an accompaniment pattern is automatically produced. (Refer to page 33.)

## STEP REC

Record a chord progression, etc. to be used with the automatic accompaniment. (Refer to page 39.)

### ONE TOUCH PLAY

Select a rhythm, and the appropriate sounds and effects are automatically set. (Refer to page 37.)



Technics  
SX-EAI

POWER  
OFF ON



### LOWER

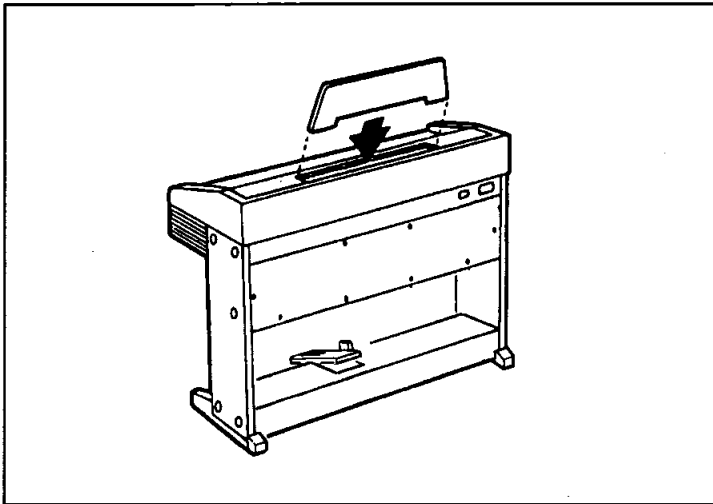
Select the sounds to be played on the lower keyboard and with the pedal keyboard. (Refer to page 21.)

# Getting started

## Before you play

- 1 | Plug the power cord into an outlet.

- 2 | **Music stand**  
Insert the music stand in the two holes as shown in the diagram.



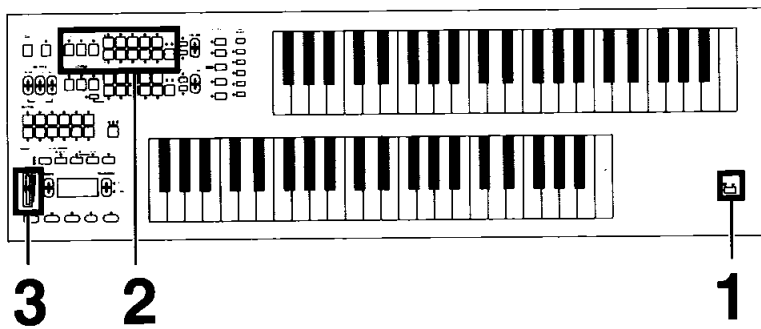
### Backup memory

The various stored memories and function settings are preserved for about one week even if the **POWER** button is turned off.

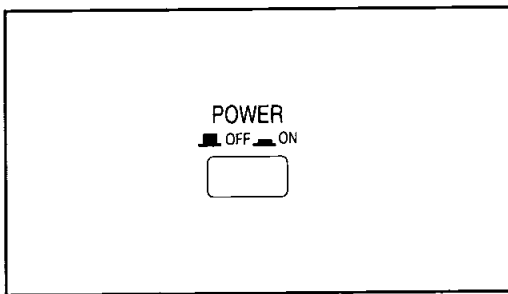
- The back-up memory does not function unless the power has been on for about 10 minutes.



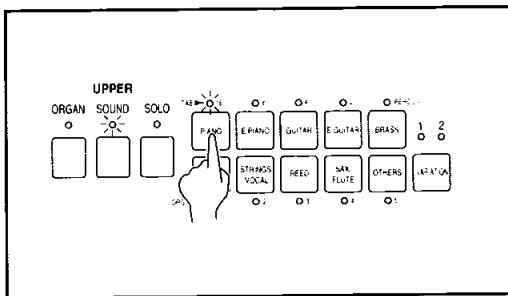
# Playing



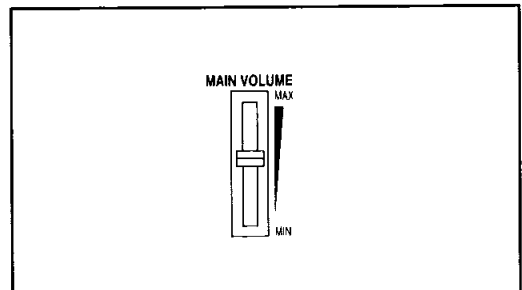
**1** Press the **POWER** button to turn it on.



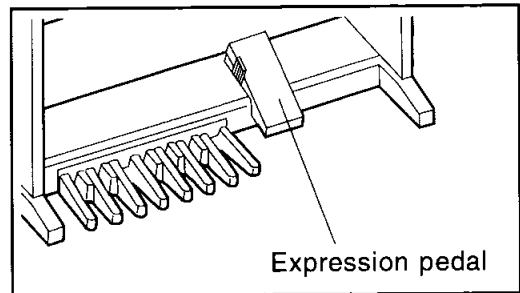
**2** In the **UPPER** section, press the **SOUND** button to turn it on, and select the **PIANO** sound.



**3** Set the **MAIN VOLUME** to an appropriate level, and play a tune on the upper keyboard.



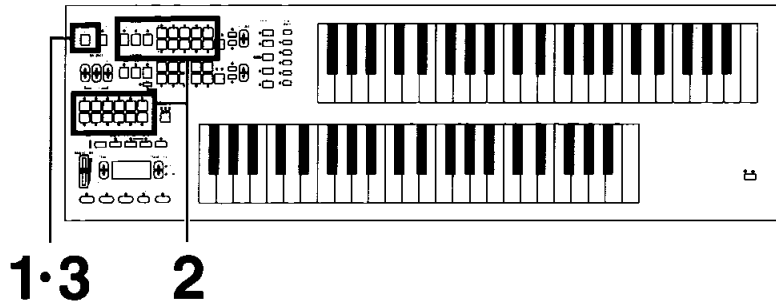
- Modulate the volume with the expression pedal.



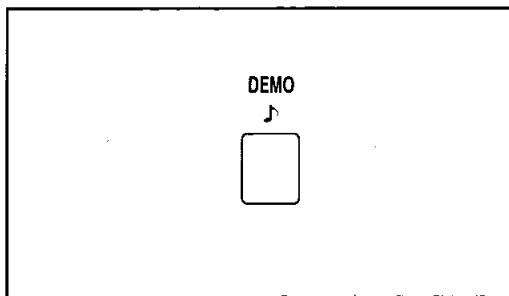
Expression pedal

# Listen to the demonstration

**Listen to a particular sound or rhythm demonstration.**

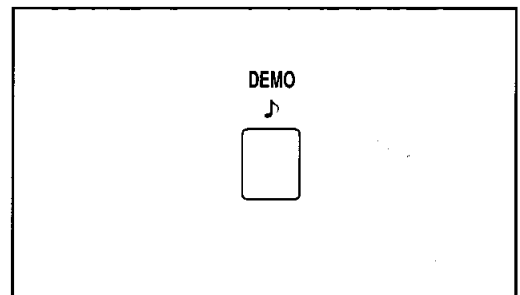


**1** Press the **DEMO** button.

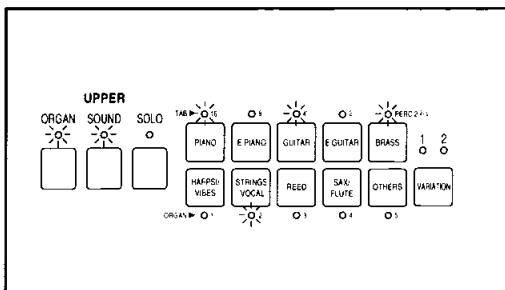


- The display changes to the DEMO display (---).

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

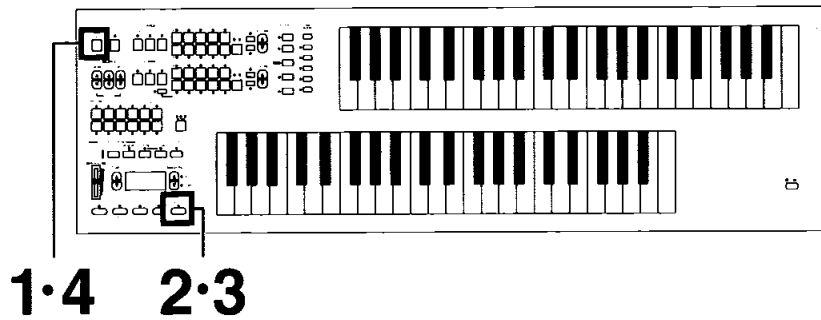


**2** Press any button whose indicator is flashing for the demonstration performance you wish to hear.  
<Example: sound>



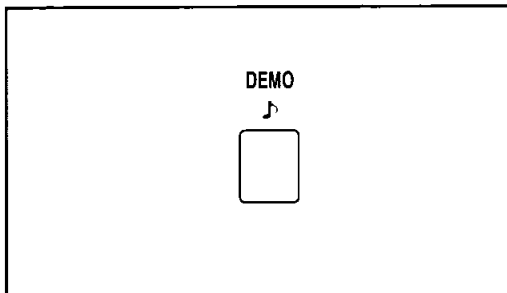
- The demonstration performance corresponding to your selection will begin.
- Repeat this procedure to listen to other sounds and rhythms.
- To end the performance before it has finished, press the button with the flashing indicator.

## Listen to the demonstration tunes in order.



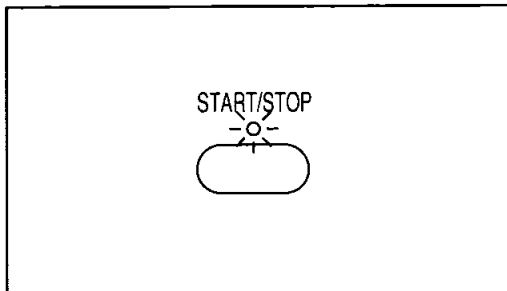
1·4 2·3

**1** Press the **DEMO** button.



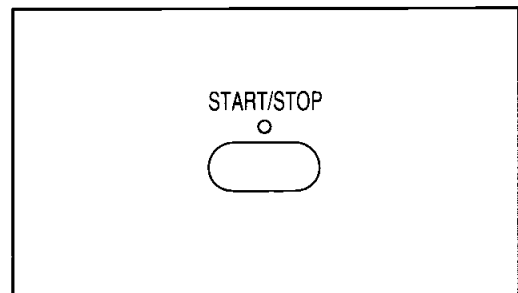
- The display changes to the DEMO display (---).

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



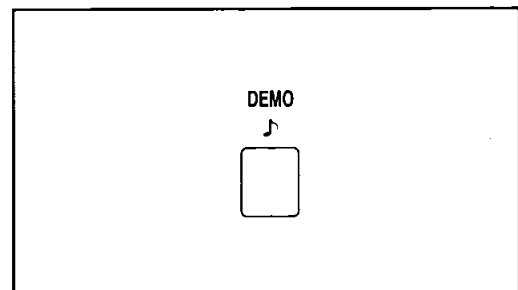
- The demonstration tunes are played in order.
- If you press the button with the flashing indicator during the demonstration performance, the current tune stops and the following tune begins.

**3** To stop the demonstration performance, press the **START/STOP** button.



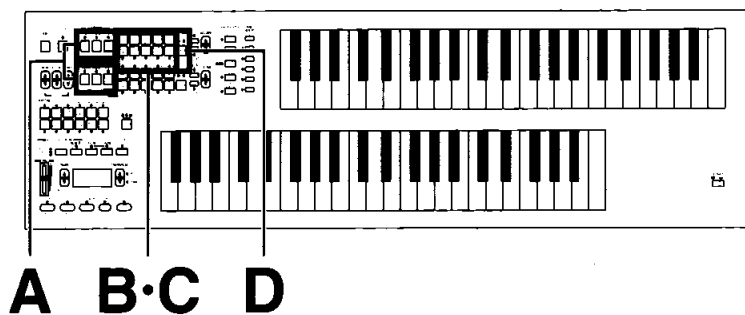
- The tunes are repeated in order until the **START/STOP** button is pressed.

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



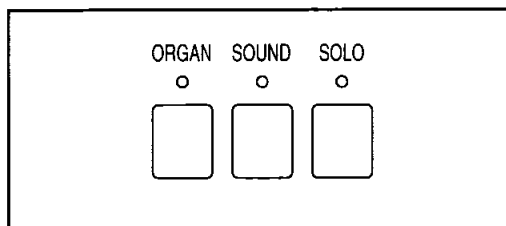
- The demonstration tunes can also be played continuously if you press and hold the **DEMO** button for a few seconds.
- Some of the buttons do not function while the demonstration performances are being played.

# Selecting sounds



## Part buttons

**A** The desired sounds are assigned to the upper and lower keyboards with the “part” buttons in the respective **UPPER** and **LOWER** sections.

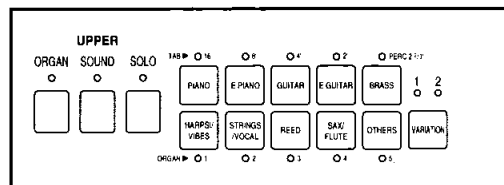


### ■ ORGAN (preset sounds)

Press one of the buttons, 1–5, in the lower row of the **UPPER** section.

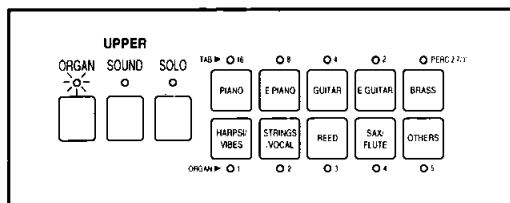
## C SOUND, SOLO

After turning on the **SOUND** or **SOLO** button in the **UPPER** section, you can select the sound for that part.



## Upper keyboard sounds

**B** **ORGAN**  
After turning on the **ORGAN** button in the **UPPER** section, you can select the **TAB** sounds or an **ORGAN (1–5)** sound for the upper keyboard.

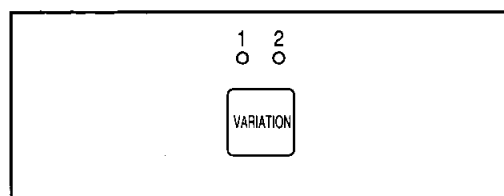


### ■ TAB (flute sounds)

Turn on the button or buttons in the upper row of the **UPPER** section to play the desired flute sounds. The higher the number, the lower the pitch of the sound.

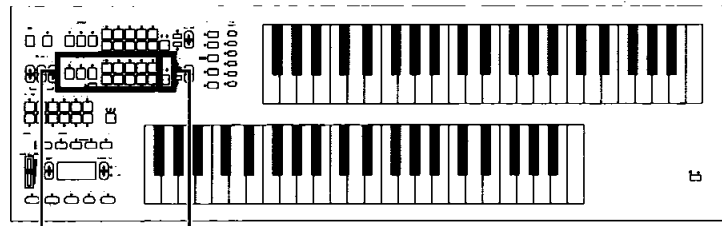
## D VARIATION

Use the **VARIATION** button to select variation 1 or 2.



- You can mix sounds on a keyboard by selecting two part buttons at the same time.
- The sound selected for the **SOLO** part is monophonic: only one note sounds at a time.

- An additional 32 types of various sounds are available in the **OTHERS** button. (Refer to page 21.)



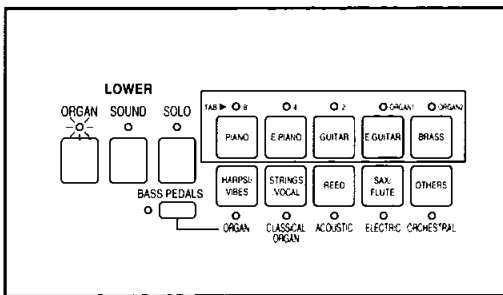
**E · F · G**

## Lower keyboard sounds

**E**

### ORGAN

After turning on the **ORGAN** button in the **LOWER** section, you can select the **TAB** sounds or an **ORGAN (1 or 2)** sound for the lower keyboard.



#### ■ TAB (flute sounds)

Turn on the button or buttons in the upper row of the **LOWER** section (**8'**, **4'**, **2'**) to play the desired flute sounds.

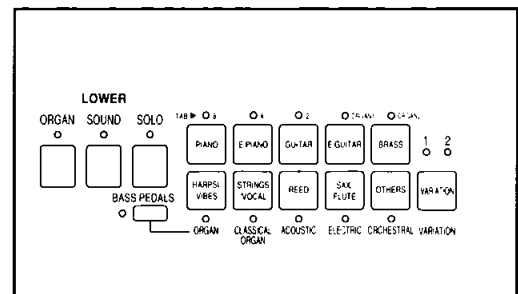
#### ■ ORGAN (preset sounds)

Press one of the buttons, **ORGAN 1** or **2**, in the upper row of the **LOWER** section.

**F**

### SOUND, SOLO

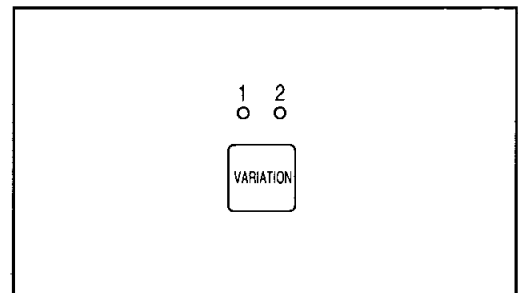
After turning on the **SOUND** or **SOLO** button in the **LOWER** section, you can select the sound for that part.

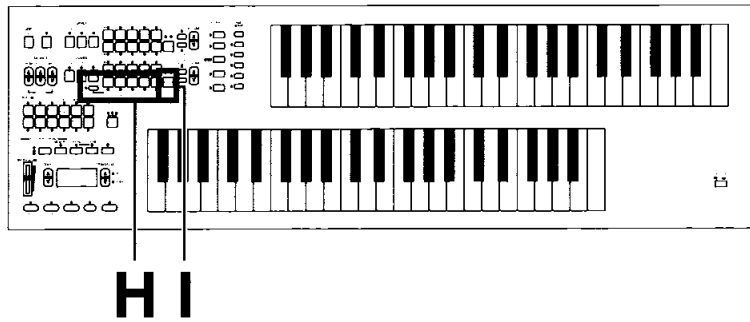


**G**

### VARIATION

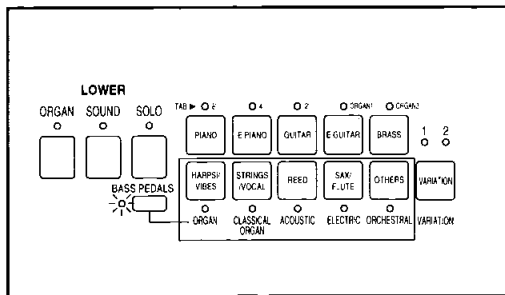
Use the **VARIATION** button to select variation 1 or 2.





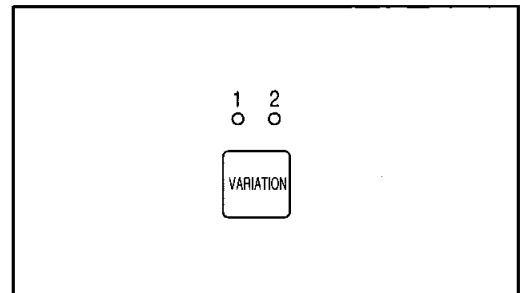
## Pedal keyboard sounds

**H** After turning on the **BASS PEDALS** button in the **LOWER** section, you can select the sounds for the pedal keyboard with the buttons in the lower row. (The names of the **BASS PEDALS** sounds are indicated below the buttons in the bottom row.)



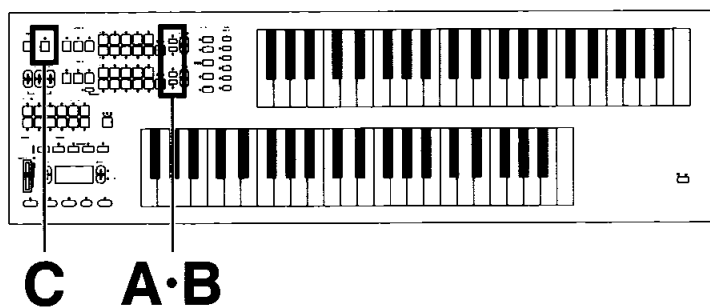
## VARIATION

Use the **VARIATION** button to select variation 1 or 2.



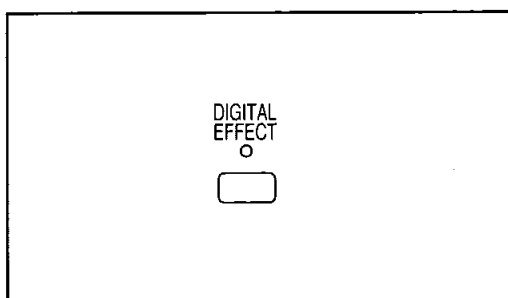
- Only one **BASS PEDALS** note can sound at a time.
- A few seconds after you choose the **BASS PEDALS** sound, the **BASS PEDALS** indicator turns off, and the indicators for the current lower keyboard sound turn on again.
- You can also turn off the **BASS PEDALS** button manually.

# Effects



## Add a feeling of spaciousness to the sound.

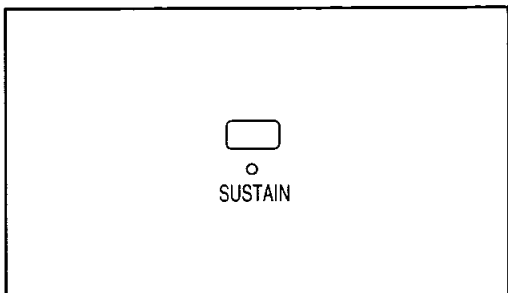
**A** Press the **DIGITAL EFFECT** button to turn it on.



- The sound is broader and deeper.
- When this button is on for the **ORGAN** part, a tremolo effect is applied.

## Add sustain.

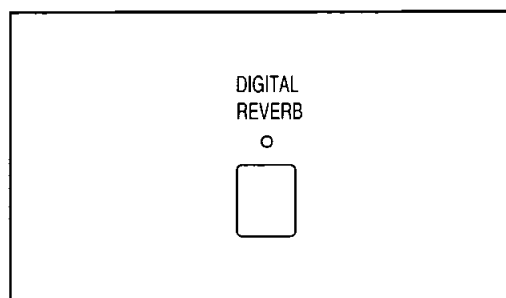
**B** Press the **SUSTAIN** button to turn it on.



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

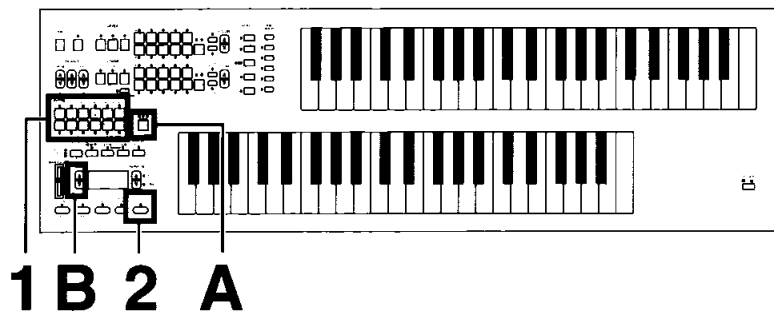
## Add reverberation.

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

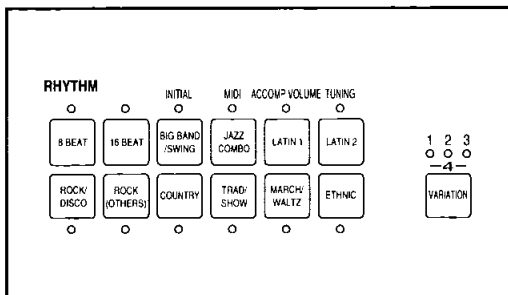


- The reverberation effect is applied to all sounds.

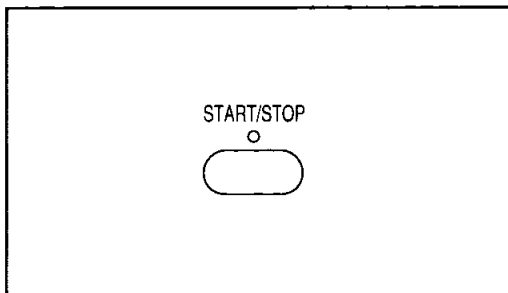
# Playing automatic rhythms



**1** Select a rhythm pattern using the buttons in the **RHYTHM** section.



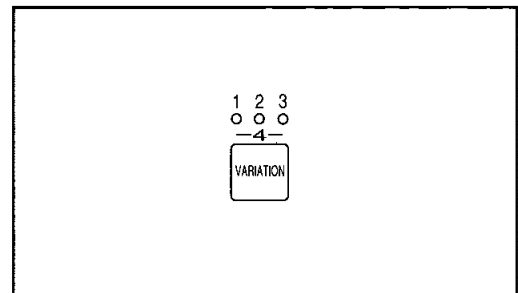
**2** Start the rhythm by pressing the **START/STOP** button.



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

## Select a variation.

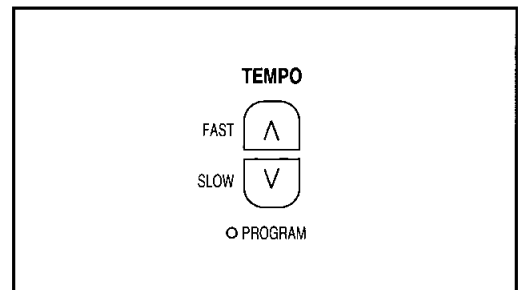
**A** Use the **VARIATION** button to select variation 1 to 4.



- When all the indicators are lit, it means that variation 4 is selected.

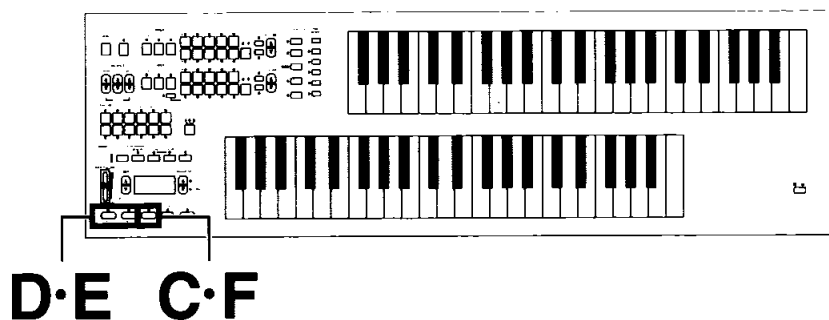
## Adjust the tempo.

**B** Adjust the speed with the **FAST** and **SLOW** buttons for tempo.



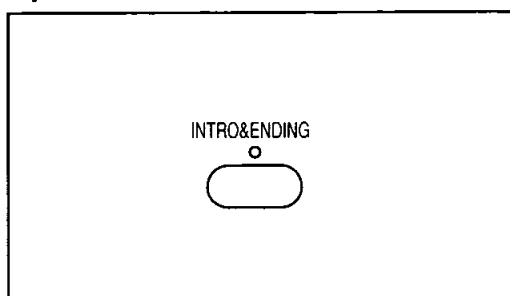
- The tempo is shown in the display as "♩=".





### ***Insert an intro pattern.***

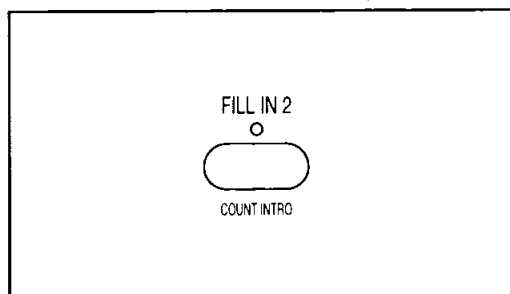
**C** To start your performance with an introduction, press the **INTRO & ENDING** button before starting the rhythm.



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

### ***Insert a count.***

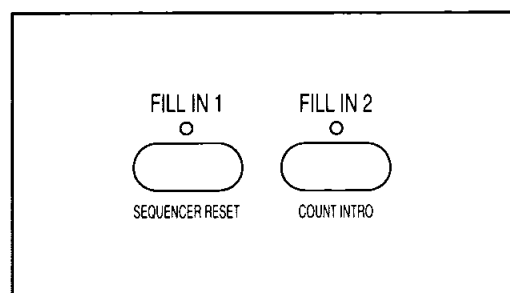
**D** With the rhythm stopped, turn on the **COUNT INTRO** button, and then press **START/STOP** to start the rhythm.



- A one-measure count is played, and then the regular rhythm begins.

### ***Insert a fill-in pattern.***

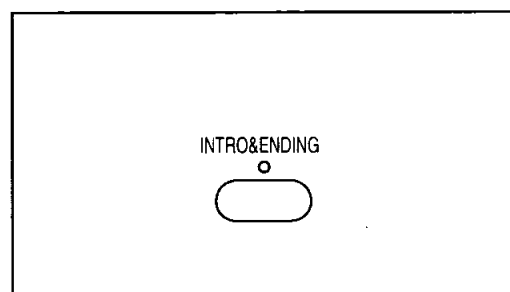
**E** While the preset rhythm pattern is playing, press either the **FILL IN 1** or **FILL IN 2** button.



- A fill-in pattern immediately starts to play.

### ***Insert an ending pattern.***

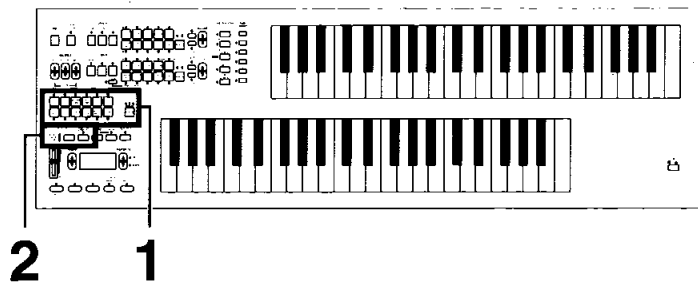
**F** While the rhythm is playing, press the **INTRO & ENDING** button.



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

# Automatic accompaniment

## Use the AUTO PLAY CHORD



Basic functions

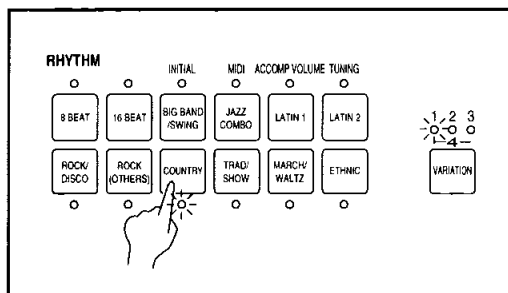
Use the **AUTO PLAY CHORD** with the following tune.

### She Wore A Yellow Ribbon

C  
 C G7 C  
 F C  
 C G7 C

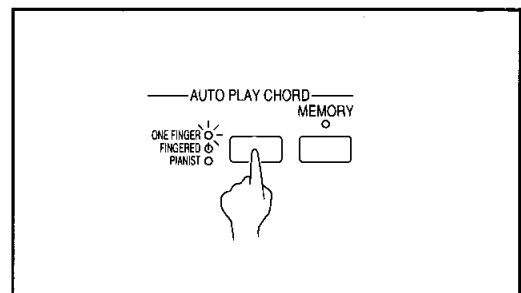
1

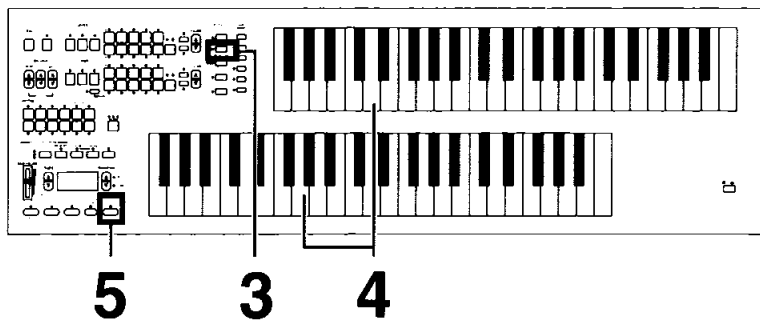
In the **RHYTHM** section, select the **COUNTRY** rhythm (**VARIATION 1**).



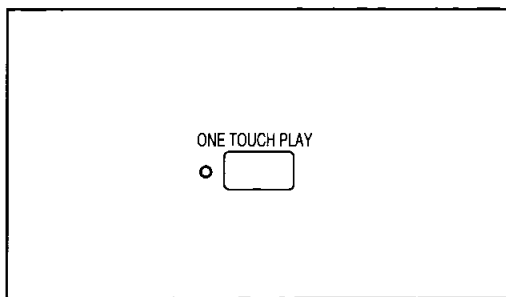
2

In the **AUTO PLAY CHORD** section, select **ONE FINGER**.





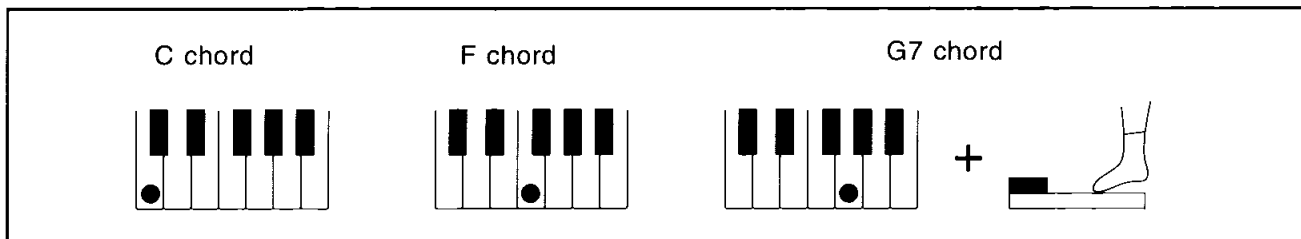
**3** Press and hold the **ONE TOUCH PLAY** button until the indicator goes out.



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

**4** Use your left hand to play the chords on the lower keyboard and your right hand to play the melody on the upper keyboard.

- Pressing a key on the lower keyboard will cause the automatic rhythm pattern to start playing (synchro start).
- Where C, G7 and F are indicated in the music score, you can play the lower keyboard and pedal keyboard as shown in the diagram below.

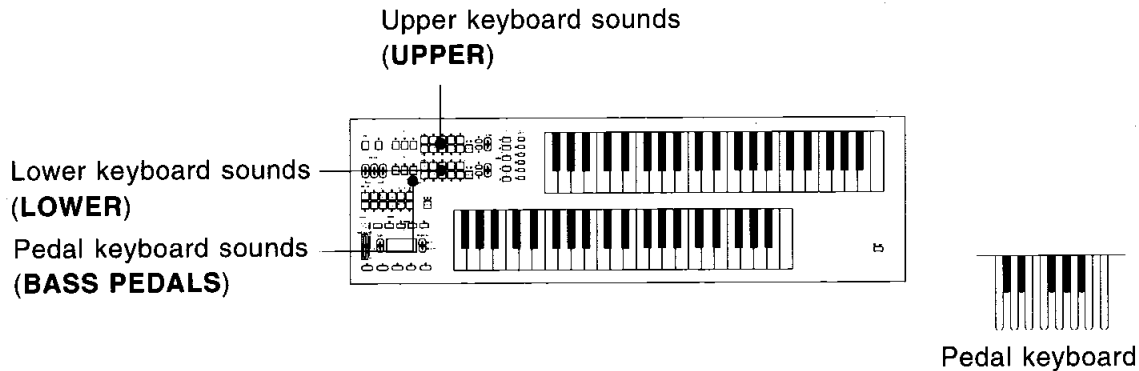


- In this example, you played chords by pressing the keys for the “root notes,” but you can also specify the chord by playing all the notes in the chord. (Refer to page 34.)

# Part I Sounds and effects

## How to select sounds

The sounds for the upper keyboard, lower keyboard and pedal keyboard are selected independently.

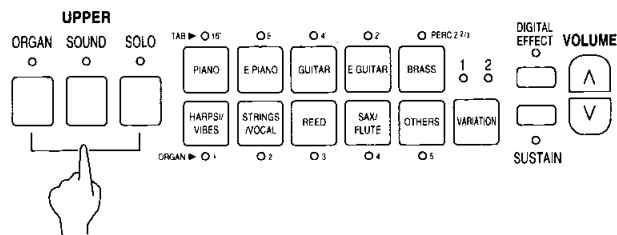


### Parts

	Part	Sound buttons
Upper keyboard	ORGAN, SOUND, SOLO	UPPER
Lower keyboard	ORGAN, SOUND, SOLO	LOWER
Pedal keyboard	BASS PEDALS	LOWER (lower row)

Turn on a part button in the **UPPER** section to assign the part to the upper keyboard, and turn on a part button in the **LOWER** section to assign the part to the lower keyboard.

<Example: **UPPER**>



- The selected sound, effects, volume, etc. change in accordance with the part you selected.
- By selecting sounds for each part beforehand, you can easily change from one sound to another during your performance just by selecting another part button.
- Sounds on the upper or lower keyboard respectively can be combined by turning on two part buttons for the corresponding keyboard at the same time. In this case, the panel status corresponds to the leftmost of the two selected part buttons.
- **SOLO** part sounds are monophonic, which means that only one **SOLO** note can be played at a time.
- The maximum number of notes which can sound simultaneously for all parts combined is 32.

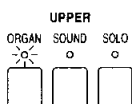
## Upper keyboard sounds

Sounds are assigned to the upper keyboard parts with the **UPPER** buttons.

### ORGAN

These are flute and organ sounds.

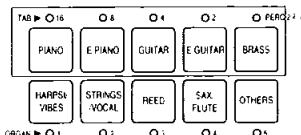
1. In the **UPPER** section, press the **ORGAN** button to turn it on.



2. Select the desired flute sound with the **TAB** buttons or organ sound with the **ORGAN (1-5)** buttons.

#### ■ TAB sounds

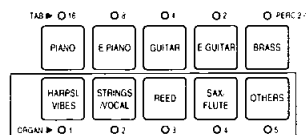
Flute sounds are selected with the **TAB** buttons (upper row). Flute sounds can be freely combined.



- Organ sounds are obtained by combining different sound pitches (foot). By turning the **TAB** buttons on and off, you can combine pitches to modify the selected organ sound (explained below).
- **PERC 2 2/3'** adds a tone with a fast initial attack to the tab sounds. You can get a sharp sound by combining this sound with other tab sounds.

#### ■ ORGAN preset sounds

Organ preset sounds are selected with the **ORGAN (1-5)** buttons (bottom row).



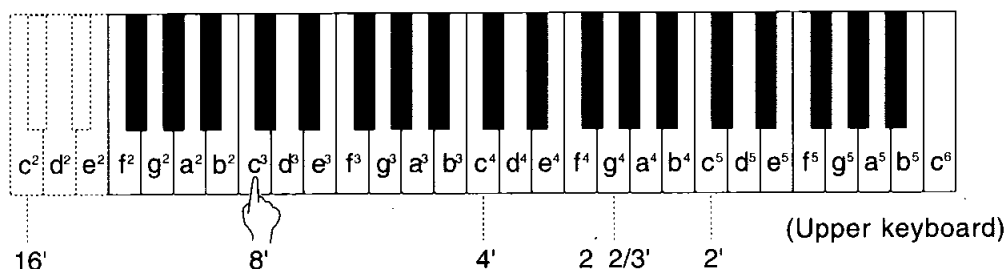
- Select the organ sound by referring to the numbers which are below the **ORGAN (1-5)** buttons.
- The **DIGITAL EFFECT** button on/off setting is automatic. (Refer to page 25.)

- **TAB** and **ORGAN** sounds cannot be used together.
- Press the **ORGAN (1-5)** button with the lit indicator to return to the **TAB** sounds.

#### About foot marks

The foot indication on each tab button (for example **8'**) refers to the pitch of a rank of pipes in a pipe organ. If **8'** is used as the standard (the pitch as played on the keyboard), a **16'** rank pitch will be one octave below the **8'** rank pitch, and a **4'** rank pitch one octave above.

When the **C<sup>3</sup>** key is pressed, the sounds of the different pitch ranks are as follows.

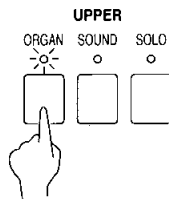


Practical applications

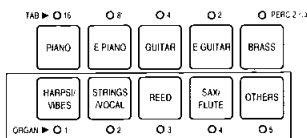
**Reassigning organ sounds**

You can assign organ sounds to the **ORGAN** (1-5) buttons as desired.

1. Press and hold the **ORGAN** button (2 or 3 seconds).

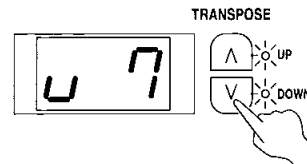


2. Press the **ORGAN (1-5)** button to which you wish to reassign the sound.



- The number of the organ sound currently assigned to the selected button appears on the display.

3. Use the **TRANPOSE** buttons to specify the number of the organ sound you wish to assign to the selected button.



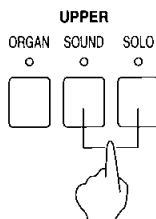
- Select from the following 16 organ sounds.
    - 1-6 Electronic tabs sounds
    - 7-12 Drawbars sounds
    - 13-16 Classical pipe organ sounds
 You can hear the organ sound of the specified number by pressing a key on the upper keyboard.
  - A list of sounds and their corresponding numbers can be found in the separate "REFERENCE GUIDE" provided.
4. Repeat steps 2 and 3 if you wish to reassign organ sounds to the other **ORGAN (1-5)** buttons.
5. When you have finished assigning the organ sounds, press the **ORGAN** button.

Practical applications

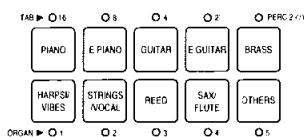
**SOUND, SOLO sounds**

Various instrument sounds, such as piano and strings, are preset in your organ.

1. In the **UPPER** section, select a part by pressing the **SOUND** or **SOLO** button to turn it on.



2. Select a sound for the part by pressing an **UPPER** sound button.



3. Repeat steps 1 and 2 to select the sound for the other part.
- You can change the sound assigned to the upper keyboard while you are playing, simply by selecting another part. You can also mix sounds on a keyboard. (Refer to page 18.)

**VARIATION**

Two variations are available for each sound. Use the **VARIATION** button to select the desired variation (1 or 2).

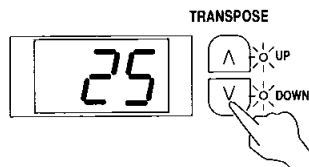


- A list of sounds can be found in the separate "REFERENCE GUIDE" provided.
- The selected variation is memorized independently for each sound of each part. This means that once you select a variation number for a sound in a part, the same number is recalled each time you select the same part and sound.

## OTHERS sounds

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

1. In the **UPPER** section, press the **OTHERS** button to turn it on.
2. Use the **TRANPOSE** buttons to the right of the display to select the number of the sound you want.



- The selected sound number is shown on the display (1–32).
- A list of sounds and their corresponding numbers can be found in the separate “REFERENCE GUIDE” provided.
- About 5 seconds after you have made the selection, the display returns to the previous display.

## SOLO

The **SOLO** sound is monophonic, which means that only one note can sound at a time. When only the **SOLO** part is selected for the upper keyboard, the **SOLO** sound is produced for the last key played.

When the **SOLO** part and another part are both selected for the upper keyboard, however, the **SOLO** sound is produced for the highest key played. This means that you can use the upper keyboard to play chords with your left hand and a **SOLO**-sound melody with your right hand, for example.

- If the interval between the highest note and the next lower note is more than one whole tone, the **SOLO** sound will not shift to the next lower key when the highest key is released.

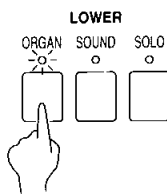
## Lower keyboard sounds

Sounds are assigned to the lower keyboard parts with the **LOWER** buttons.

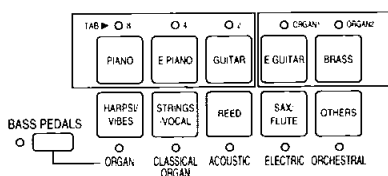
## ORGAN

These are flute and organ sounds.

1. In the **LOWER** section, press the **ORGAN** button to turn it on.



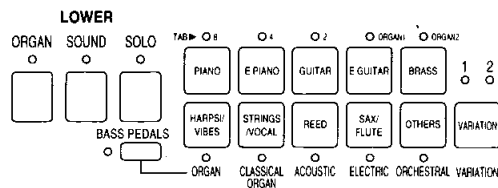
2. Select the desired flute sound with the **TAB** buttons or the organ sound with the **ORGAN** (1 or 2) button.



- Flute sounds are selected with the three **TAB** buttons (8', 4', 2') and the organ sound with the **ORGAN** (1 or 2) button in the upper row.
- **TAB** and **ORGAN** sounds are selected in the same way as for the upper keyboard. (Refer to page 19.)
- The desired organ sound can be assigned to the **ORGAN** (1 or 2) button in the same way as for the **UPPER** section. (Refer to page 20.)

## SOUND, SOLO sounds

The sounds for each part are selected with the sound select buttons in the **LOWER** section.

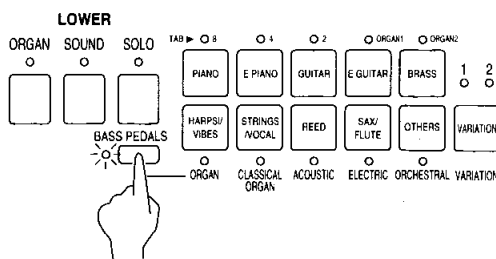


The sounds are selected in the same way as for the upper keyboard. (Refer to page 20.)

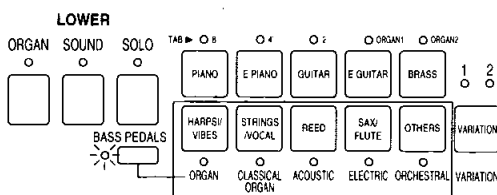
## Pedal keyboard sounds

Sounds are assigned to the pedal keyboard with the **BASS PEDALS** button in the **LOWER** section.

1. In the **LOWER** section, press the **BASS PEDALS** button to turn it on.



2. Select the sound for the pedal keyboard by pressing one of the buttons in the lower row.



- The names of the **BASS PEDALS** sounds are indicated below the buttons in the bottom row.
- Because the **BASS PEDALS** sound is monophonic, if two or more bass pedals are depressed at the same time, only the sound for the lowest of the pressed pedals is produced.
- About 5 seconds after you choose the **BASS PEDALS** sound, the **BASS PEDALS** indicator turns off, and the indicators for the current lower keyboard sound turn on again.
- You can also turn off the **BASS PEDALS** button manually.

### ■ VARIATION

Two variations are available for each **BASS PEDALS** sound. Use the **VARIATION** button to select the desired variation (1 or 2).



- A list of sounds can be found in the separate "REFERENCE GUIDE" provided.
- The variation is memorized independently for each **BASS PEDALS** sound. Once a variation number is selected for a **BASS PEDALS** sound, the same number is recalled each time you select that sound.

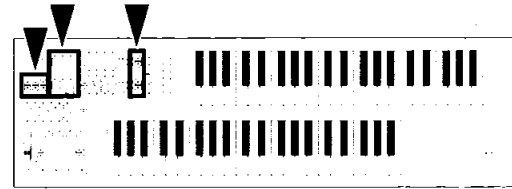
### ■ Changing the octave of the bass sounds

The pitch of the **BASS PEDALS** sounds (except for the **ORGAN** sound) can be raised by one octave, from 16' (the initialized setting) to 8'.

1. Press and hold the **BASS PEDALS** button for 2 or 3 seconds.
2. Use the **TRANSPOSE** buttons to select the octave.
  - Select 8' [8] or 16' [16].
  - The display automatically returns to the previous display after about 5 seconds.



# Balance

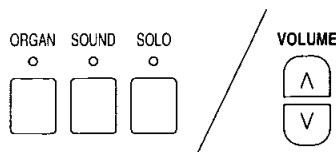


The volume of each part is adjusted separately.

## Upper and lower keyboard volumes

The volumes of the upper keyboard parts are adjusted with the **VOLUME** buttons in the **UPPER** section, and of the lower keyboard parts with the **VOLUME** buttons in the **LOWER** section.

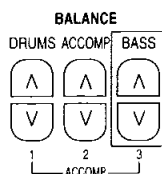
Press the desired part button, and then adjust the volume.



- Pressing the  $\wedge$  button increases the volume; pressing the  $\vee$  button decreases the volume.
- The volume of the selected part is indicated on the display as a number from 0 (off) to 9 (maximum).
- If two part buttons are on at the same time, the volume of the part corresponding to the leftmost of the two selected part buttons can be adjusted.
- The display automatically returns to the previous display after a few seconds.

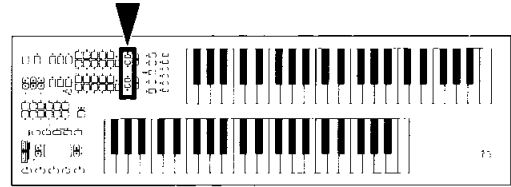
## Pedal keyboard volume

The pedal keyboard volume is adjusted with the **BASS** buttons in the **BALANCE** section.



- Pressing the  $\wedge$  button increases the volume; pressing the  $\vee$  button decreases the volume.
- The volume is indicated on the display as a number from 0 to 9.
- The display automatically returns to the previous display after a few seconds.

# Effects



Various effects add character to the selected sound.

## DIGITAL EFFECT

**DIGITAL EFFECT** gives the sound richness and enhances your performance.

1. In the **UPPER** or **LOWER** section, turn on a part button.
2. Press the **DIGITAL EFFECT** button to turn it on.



- The effect is applied to the part you selected in step 1.

3. Repeat steps 1 and 2 for other parts as desired.

- The on or off status of the **DIGITAL EFFECT** is preset for each sound, so that the **DIGITAL EFFECT** turns on when certain sounds are selected.
- This effect differs depending on the selected sound.
- When this button is on for the **ORGAN** part, a tremolo effect is applied. (Refer to page 25.)

## SUSTAIN

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

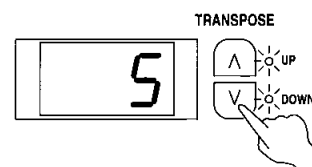
1. In the **UPPER** or **LOWER** section, turn on a part button.
2. Press the **SUSTAIN** button to turn it on.



- The effect is applied to the part you selected in step 1.
3. Repeat steps 1 and 2 for other parts as desired.
- This effect differs depending on the selected sound.

### ■ Adjusting the sustain

When the **SUSTAIN** button is on, the length of the sustain can be adjusted with the **TRANSCOPE** buttons.

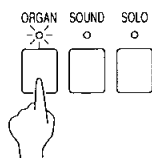


- Pressing the **UP** button increases the length of the sustain; pressing the **DOWN** button decreases it.
- The sustain length can be set to a value from 1 to 8, as indicated on the display.
- The display automatically returns to the previous display after a few seconds.

## Tremolo

The tremolo effect is a rapid oscillation in volume, producing the effect of a rotating speaker. The tremolo effect can be used with the upper and/or lower **ORGAN** part sounds.

1. In the **UPPER** or **LOWER** section, press the **ORGAN** button to turn it on.



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



- The tremolo effect is applied to the respective **UPPER** or **LOWER ORGAN** sounds.

### ■ TREMOLO SLOW/FAST

Choose from two tremolo speeds with the **TREMOLO SLOW/FAST** button.



- When this button is on, the speed is faster.
- The tremolo speed can be adjusted. (Refer to page 44.)

## DIGITAL REVERB

**DIGITAL REVERB** applies a reverberation effect to the sound of the whole organ, including the automatic rhythm sounds.

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

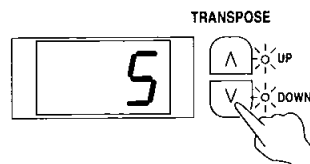


- The reverberation effect is applied to all sounds.

### ■ Adjusting the reverberation

The depth of the reverberation can be adjusted.

1. Press and hold the **DIGITAL REVERB** button until the display changes (2 or 3 seconds).
2. Use the **TRANSPOSE** buttons to adjust the reverberation depth.

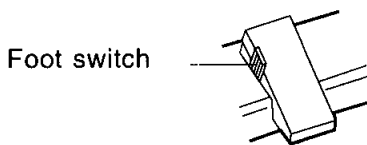


- Select from eight levels (1–8). The higher the number, the greater the depth.
- The display automatically returns to the previous display after a few seconds.

## Glide control

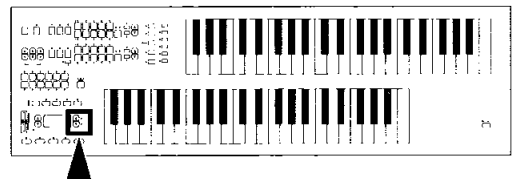
The foot switch, located on the left side of the expression pedal, is used as a glide control.

When pressed to the left with the side of your foot, it lowers the pitch of the organ about one half-tone. When released, the pitch returns to normal.



- A fast glide effect is applied when the foot switch is turned on and off quickly.
- The glide effect does not function for the lower keyboard and pedal keyboard sounds and for some other sounds.
- Other functions can be assigned to the foot switch. (Refer to page 43.)

## Transpose

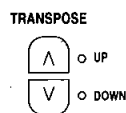


The **TRANSPOSE** buttons are used to change the key of the entire instrument in semi-tone steps across an entire octave.

Suppose you learn to play a song—in the key of C, for example—and decide you want to sing it, only to find 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 **UP** and **DOWN** buttons.

- The current key is indicated on the display.

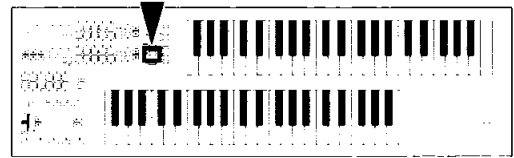


- Each press of the upper button raises the key as follows (brackets [ ] indicate how the key is shown on the display): D<sup>b</sup> [db] → D [d] → E<sup>b</sup> [Eb] → E [E] → F [F] → F<sup>#</sup> [FS].
- Each press of the lower button lowers the key as follows: B [b] → B<sup>b</sup> [bb] → A [A] → A<sup>b</sup> [Ab] → G [G].
- If the two buttons are pressed at the same time, the key returns to C.
- The **UP** or **DOWN** indicator lights when the corresponding button is pressed.
- The display automatically returns to the previous display after a few seconds.

Example: transposed to D

Played keys	→	Notes that sound
<p>C major</p>	→	<p>D major</p>

# Techni-chord



**TECHNI-CHORD** transfers the chord notes you play on the lower keyboard to each melody note you play on the upper keyboard.

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



2. Play the example below, playing the chords on the lower keyboard and the melody on the upper keyboard.

- The melody you play on the upper keyboard is automatically played in chords which are based on the chords you play on the lower keyboard.

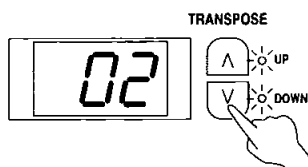
Left hand (chord)      C                      F                      G7                      C

Right hand (melody)

## Harmony style

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

1. Press and hold the **TECHNI-CHORD** button until the display changes (2 or 3 seconds).
  - The current harmony style is indicated on the display.
2. Use the **TRANSCOPE** buttons to select the desired harmony style: [C] (close), [O1] (open 1), [O2] (open 2) or [d] (duet).

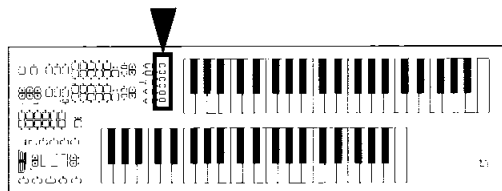


- The display automatically returns to the previous display after a few seconds.

- **TECHNI-CHORDs** cannot be played using the lowest octave (F–B) of the upper keyboard.
- **TECHNI-CHORD** does not work for the **SOLO** part.
- If both the **ORGAN** part and **SOUND** part are selected in the **UPPER** section, **TECHNI-CHORD** works only for the **ORGAN** part.
- **TECHNI-CHORD** also works with the **AUTO PLAY CHORD** feature (refer to page 33) for a more effective performance.

- When the **MEMORY** button of the **AUTO PLAY CHORD** (page 36) is set to on, **TECHNI-CHORD** will continue to add the selected harmony to the notes played on the upper keyboard even after the chord on the lower keyboard is released.

# Panel Memory

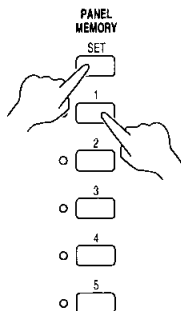


The **PANEL MEMORY** allows you to change the panel settings of the entire organ at the touch of a single button.

There are 5 storable memories.

## Example of storing the panel settings

1. Select the desired sounds, effects and volumes for each part, and assign the desired parts to the keyboards.
2. With the **SET** button held down, press the 1 button of the **PANEL MEMORY**.



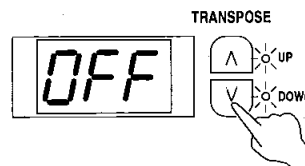
This procedure stores the current panel settings in **PANEL MEMORY** location 1.

- To recall the stored settings, just press the corresponding numbered button. You can then manually change the sounds and effects, etc.; however, the memory contents in the **PANEL MEMORY** remain unchanged until you store them again.
- When storing the panel settings in a numbered button, any previously stored settings are automatically replaced by the new ones.

## Range of storable settings

You can select the range of settings which are stored in the **PANEL MEMORY**.

1. Press and hold the **SET** button until the display changes.
2. Use the **TRANSPOSE** buttons to select On or OFF.



**NORMAL [OFF]:** Stores sound, effect and volume balance settings, etc.

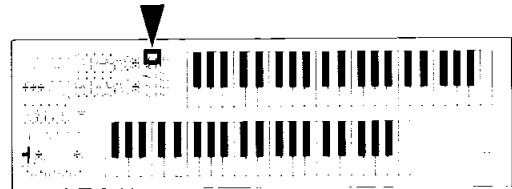
**EXPAND [On]:** Stores all instrument settings, including rhythm, **TRANSPOSE** status, tempo, etc.

- The display automatically returns to the previous display after a few seconds.

### Suggestions for using PANEL MEMORY

The initial factory setting of the **PANEL MEMORY** contains various settings which you may choose to use or to alter to your own taste. These can be restored at any time by initializing the instrument. (Refer to page 51.) Selecting the **EXPAND** mode will allow you to make full use of the initial factory settings of the **PANEL MEMORY**.

# One Touch Registration



With the **ONE TOUCH REGISTRATION** feature, the selected registration is automatically set for the entire organ in seconds, and you are ready to play immediately.

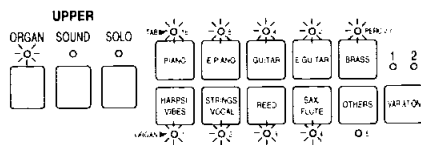
- The sound buttons in the **UPPER** section are used to select the type of **ONE TOUCH REGISTRATION**. There are 5 variations available for each type, which are selected with the **PANEL MEMORY 1 to 5** buttons.
- Note that when this operation is performed, all the stored contents of the **PANEL MEMORY** are instantly erased.

1. Press the **ONE TOUCH REGISTRATION** button to turn it on.

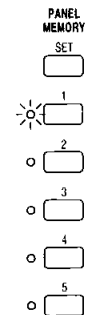


- In the **UPPER** section, the indicators for the **ORGAN** button and for the sound select buttons flash.

2. Select the desired sound button (except for **OTHERS**).



3. Use the **PANEL MEMORY 1 to 5** buttons to select a variation.



- The sound settings for each keyboard and the effect, volume settings, rhythm, tempo, etc. change to those matching the selected variation.
- When the **ONE TOUCH REGISTRATION** function is used, the **AUTO PLAY CHORD** turns off. (Refer to page 33.)
- The volume of the **ACCOMP** part may be 0 for some registrations.
- A list of each registration can be found in the separate "REFERENCE GUIDE" provided.

# Part II Playing the rhythm

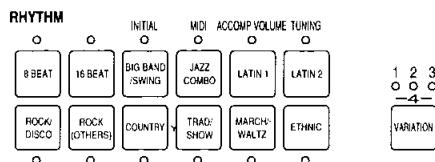
## Rhythm



The **RHYTHM** section provides automatic performance of rhythm patterns with realistic percussion instrument sounds.

### Select a rhythm

1. Select the desired rhythm pattern using the buttons in the **RHYTHM** section.



2. Use the **VARIATION** button to select the desired variation (1–4).



- When all the indicators are lit, it means that variation 4 is selected.
- A list of automatic rhythms can be found in the separate “REFERENCE GUIDE” provided.
- The selected variation is memorized independently for each rhythm pattern. Once a variation number for a rhythm pattern is selected, the same number is recalled each time the same rhythm pattern is selected.

Practical applications

### Start the rhythm

There are two ways to start the rhythm.

#### ■ Immediate rhythm start

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



- The selected rhythm pattern immediately begins to play.
- You can stop the rhythm by pressing the **START/STOP** button again to turn it off.

#### ■ Synchronized start

1. Press the **SYNCHRO & BREAK** button to turn it on.

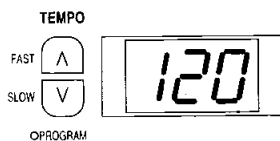


2. Play a key on the lower keyboard or pedal keyboard.
- The selected rhythm pattern begins to play.
  - You can stop the rhythm by pressing the **START/STOP** button.
  - If the **AUTO PLAY CHORD** (explained later) is used, however, the rhythm cannot be started with the pedal keyboard.



## Adjust the tempo

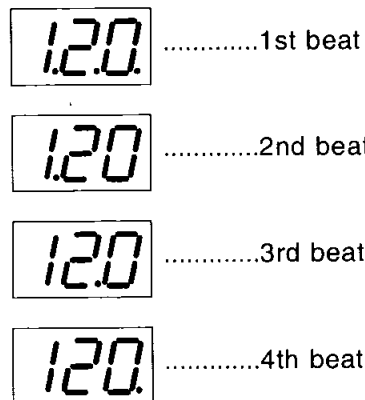
The tempo of the rhythm pattern is adjusted with the **TEMPO** buttons.



- The tempo increases each time the **FAST** button is pressed and decreases each time the **SLOW** button is pressed.
- The tempo is shown on the display as a numerical value (♩ = 40–300).
- Keep a button pressed to change the tempo continuously.
- If the two buttons are pressed at the same time, the tempo returns to the standard setting of 120.
- When the **PROGRAM** indicator is flashing, these buttons are used for setting the functions and cannot be used to change the tempo.

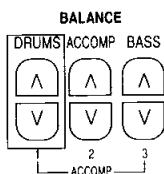
### ■ Beat

While the rhythm is on, the beat is shown on the display.



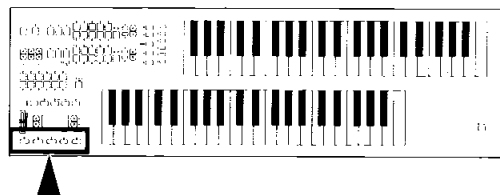
## Adjust the volume

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



- The volume is shown on the display as a numerical value from 0 (off) to 9 (maximum).

# Playing the rhythm



Intro, fill-in and ending patterns matching each different rhythm pattern are permanently recorded in your instrument, 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** button to turn it on.



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



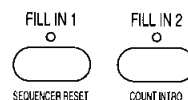
- A one-measure count is played, after which the normal rhythm pattern begins.

## FILL IN

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

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

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



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

## ENDING

Finish the rhythm performance with an ending pattern.

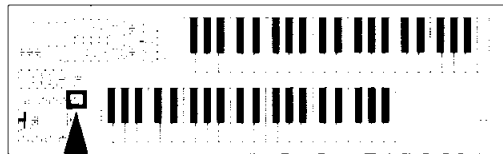
1. Select a rhythm and press the **START/STOP** button.

2. Press the **INTRO & ENDING** button.



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

## Keyboard Percussion

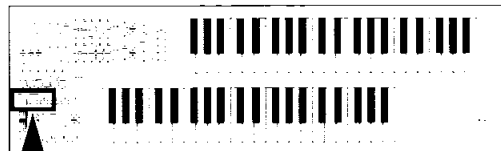


Press the **KEYBOARD PERCUSSION** button on to turn your lower keyboard into a whole band of percussion instruments and other special sounds.



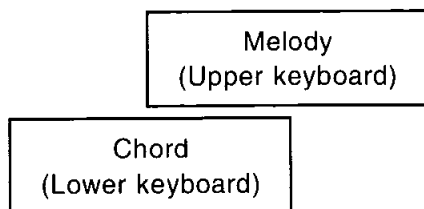
- Percussion instrument sounds are produced by the lower keyboard keys as indicated by the picture code below each key. (For further explanation, refer to the separate "REFERENCE GUIDE" provided.)
- When the **KEYBOARD PERCUSSION** button is on, other sounds are not available for the lower keyboard.
- The **KEYBOARD PERCUSSION** volume is adjusted with the **DRUMS** buttons in the **BALANCE** section.

## Auto Play Chord



Simply by playing a key on the lower keyboard, the **AUTO PLAY CHORD** function automatically plays an accompaniment pattern on the lower keyboard and pedal keyboard which matches the selected rhythm.

### How the AUTO PLAY CHORD works



- When an **AUTO PLAY CHORD** mode is selected, an automatic accompaniment which matches the rhythm you have chosen is played in the chord which you specify on the lower keyboard. You play the melody on the upper keyboard.
- The accompaniment pattern of the **AUTO PLAY CHORD** is composed of five parts: **DRUMS**, **BASS**, **ACCOMP 1**, **ACCOMP 2** and **ACCOMP 3**.

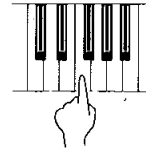
## Playing the chords

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



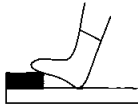
### ■ ONE FINGER mode

Press a key on the lower keyboard. A major chord can be played just by pressing its root note key on the lower keyboard.

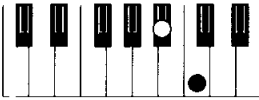
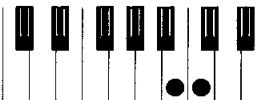
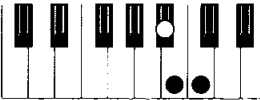
- The sound selected for the lower keyboard part is not produced.



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

minor chord	seventh chord	minor seventh chord
Play the root note on the lower keyboard and any black pedal.	Play the root note on the lower keyboard and any white pedal.	Play the root note on the lower keyboard and any black pedal and white pedal at the same time.
		

You can also use just the lower keyboard to specify minor, seventh and minor seventh chords.

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.
Example: Cm 	Example: C7 	Example: Cm7 

### ■ FINGERED mode

Specify the chord by playing all the notes in the chord on the lower keyboard.

- When a chord is specified, the sound selected for the lower keyboard part is produced at the same time. When the **MEMORY** button is on (see page 36), even when the keys are released, the lower keyboard sound continues to play.

- The automatic accompaniment can recognize the following types of chords for each key (C is given as an example).  
C, C7, CM7, Caug, Cm, Cm7, Cdim, Cm7<sup>b5</sup>, CmM7, Csus4, etc.



■ **PIANIST mode**

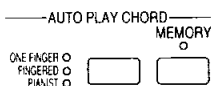
Indicate the chord by actually playing the chord keys on the lower keyboard. In addition to the chords recognized in the **FINGERED** mode, the **AUTO PLAY CHORD** also recognizes 9th and 13th chords.

- The sound for the lower keyboard is produced only while the keys are pressed.
- If a pedal is pressed while you are playing a chord in the **FINGERED** or **PIANIST** mode, only the bass pattern is produced in the key of the pressed pedal, thus making it possible to play chords such as "D on C."

## How to use the AUTO PLAY CHORD

Play an automatic accompaniment by using the **AUTO PLAY CHORD**.

1. Select a rhythm, and select the desired sounds and effects for the upper and lower keyboards.
2. Select an **AUTO PLAY CHORD** mode (**ONE FINGER**, **FINGERED** or **PIANIST**).



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



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

4. Specify the chord on the lower keyboard.
  - An accompaniment pattern in the specified chord begins to play. Play the melody on the upper keyboard.
  - When the rhythm is off, if the **ONE FINGER** mode or **FINGERED** mode is on and a chord is specified, the specified root note and chord notes are produced.
  - When you use **FILL IN**, **INTRO** or **ENDING**, the automatic accompaniment is also used in these patterns.
5. To stop the automatic accompaniment, press the **START/STOP** button.



■ Here is an example of how to play a one-finger accompaniment.

Right hand  
(Upper keyboard)



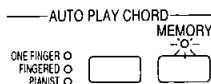
Left hand  
(Lower keyboard)



Practical applications

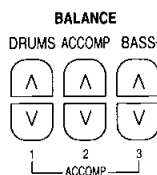
## MEMORY button

When the **MEMORY** button is on, even when the lower keyboard keys are released, the chord is memorized and the accompaniment continues to play until you specify another chord.



## Adjust the volume

The volume for each part is adjusted with the respective **DRUMS**, **ACCOMP** or **BASS** buttons in the **BALANCE** section.



- While you are adjusting the volume for a part, the volume is indicated on the display as a number from 0 (off) to 9 (maximum). A few seconds after you finish adjusting the volume, the display returns to the previous display.
- The volumes for the **ACCOMP 1**, **2** and **3** parts can be adjusted independently. (Refer to page 42.)

## Break function

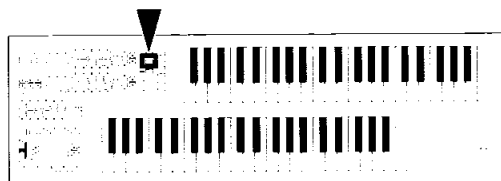
With the break function, the rhythm stops when the lower keyboard keys are released. When the keys are pressed again, the rhythm starts from the first beat of the measure.

1. Select an **AUTO PLAY CHORD** mode (**ONE FINGER**, **FINGERED** or **PIANIST**).
  - At this time, the **MEMORY** button should be off.
2. Turn on the **SYNCHRO & BREAK** button.



3. Specify a chord on the lower keyboard.
  - The automatic accompaniment begins to play (synchronized start).
4. Release the lower keyboard keys.
  - The automatic accompaniment stops. When the keys are pressed again, the rhythm starts from the first beat of the measure.

## 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. Use the **RHYTHM** buttons to select the rhythm pattern you wish to play.
2. Press and hold the **ONE TOUCH PLAY** button until the indicator goes out.

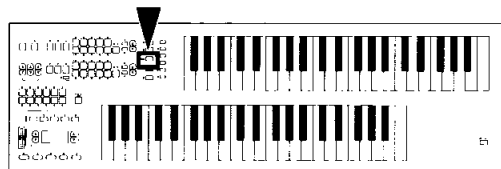


- The **AUTO PLAY CHORD**, the **MEMORY** button and the **SYNCHRO & BREAK** button turn on, and the sounds, effects, volume balance and tempo are automatically set.
3. Play the keyboards.
    - When a chord is specified on the lower keyboard, the automatic accompaniment begins to play. Play the melody on the upper keyboard.

### 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 28.)

# Music Style Arranger

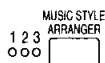


The **MUSIC STYLE ARRANGER** feature changes the sound and rhythm pattern automatically during your performance with the press of a button. You can change the arrangement depending on the atmosphere and feeling of the music to produce a varied and more interesting performance.

## How to use the MUSIC STYLE ARRANGER

1. Select a rhythm pattern with the **RHYTHM** buttons.
2. Press the **MUSIC STYLE ARRANGER** button to select the style (1, 2 or 3) you want at the beginning of your performance.

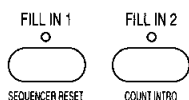
- 1: Simple style
- 2: Normal style
- 3: Flashy style



- Each the time **MUSIC STYLE ARRANGER** button is pressed, the style indication changes as follows: 1 → 2 → 3 → off.
- The panel settings (including the tempo) change according to the selected rhythm and music style. The **AUTO PLAY CHORD** and the **SYNCHRO & BREAK** button are automatically turned on. When a chord is specified on the lower keyboard, the automatic accompaniment begins to play immediately.
- During your performance, the style can be changed, but the tempo does not change.

## How to change the music style during your performance

While you are playing the organ with the **MUSIC STYLE ARRANGER** on, press the **FILL IN 1** or **2** button.



- Each time the **FILL IN 1** button is pressed, the **FILL IN 1** pattern plays, and then the music style changes in the 3 → 2 → 1 order. And each time the **FILL IN 2** button is pressed, the **FILL IN 2** pattern plays, and then the style changes in the 1 → 2 → 3 order.

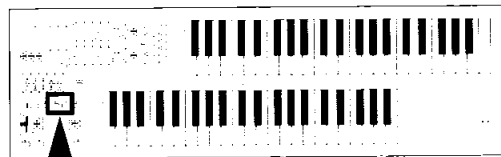
### ■ Define the settings which change

You can define which panel settings change when the **MUSIC STYLE ARRANGER** is used.

1. Press the **MUSIC STYLE ARRANGER** button until the display changes (2 or 3 seconds).
  2. Use the **TRANPOSE** buttons to select the desired mode.
    - [Snd]: Only the sound changes.
    - [rhy]: Only the rhythm changes.
    - [S-r]: Both the sound and rhythm change.
    - [PM]: The **PANEL MEMORY** number (1 to 3) changes.
- When set to [rhy] or [PM], the **AUTO PLAY CHORD** etc. are not automatically set.
  - The display automatically returns to the previous display after a few seconds.



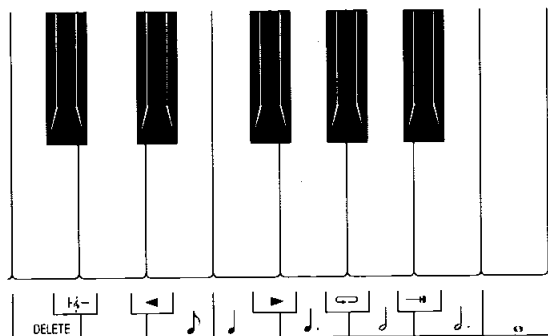
# Step Record



You can store the chord progression or various control data for an entire song with the **STEP RECORD** feature. When you play back the stored progression with the **AUTO PLAY CHORD**, even if you do not specify the chords on the lower keyboard, the chords change automatically.

## How to use the STEP RECORD

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



### Note value keys

- : Press to store a whole note.
- ◡ : Press to store a dotted half-note.
- ◢ : Press to store a half-note.
- ◣ : Press to store a dotted quarter-note.
- ◤ : Press to store a quarter-note.
- ◥ : Press to store an eighth-note.

### Reset key

- ⏮ : Press to begin storing from the beginning.

### Correction keys

- ◀ : Press once to move back one step.
- ▶ : Press once to move forward one step.
- DELETE : Erase the stored chord or control data.
- Hold down the **DELETE** key and press the **End** key to erase the entire chord progression and all the control data.

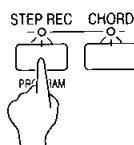
### Repeat key

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

### End key

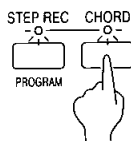
- ⏹ : Press after the whole chord progression or all the control data has been stored.

1. Turn on the **STEP REC** button.



- The indicator for the **CHORD** button flashes.

2. Press the **CHORD** button.



- On the display, measure number 1 is shown.

3. While holding the chord keys, use the **STEP RECORD** keys at the right end of the lower keyboard to specify the length of the chord (refer to the following page).

4. At the end of the chord progression, press the **End** key (⏹).

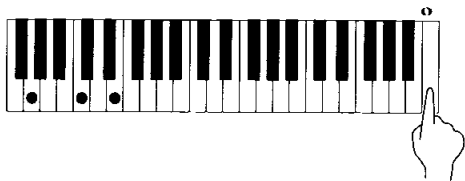
- The instrument exits the recording mode.
- You can press the **INTRO & ENDING** button instead of the **End** key (⏹) for an automatic ending pattern at the end of the performance during playback.
- During playback, playback of the recorded chord progression stops at this point. For automatic repeat playback of the chord progression, press the **Repeat** key (↺) instead of the **End** key (⏹).

## Example of storing a chord progression

measure 1	2	3	4
C	C	F G7	C Am
◦	◦	♪ ♪	♪ ♪

### <Measure 1, measure 2>

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



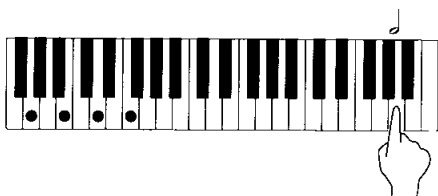
- A “beep” tone indicates that one C major chord of whole-note length is stored.
- The current measure number is shown on the display. This changes automatically, in accordance with the specified note value, to the next unrecorded position.

### <Measure 3>

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



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



### <Measure 4>

(1) While playing a C chord, press the ♪ key one time.

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

- You can press the **INTRO & ENDING** button or a **FILL IN** button on the panel to store the desired pattern at the current position. (An **INTRO** or **COUNT INTRO** can be stored only at the beginning.) To specify a chord for the **INTRO** or **ENDING** pattern, while pressing the chord keys, press the **INTRO & ENDING** button. To specify a chord for the **FILL IN**, store the chord after pressing the **FILL IN 1** or **FILL IN 2** button.
- The following data is also stored with the chord progression.
  - Rhythm settings and selection changes
  - **TEMPO** setting
  - Volume settings for the **BASS**, **ACCOMP** and **DRUMS** parts
  - **PANEL MEMORY** selection changes
  - **TECHNI-CHORD** on/off
  - **TRANSPOSE** status
- Store a rest by pressing a note value key without specifying a chord.
- When an **INTRO** or **COUNT INTRO** is stored, the measure number is incremented by the number of measures in the intro.
- Chords can also be specified in the **ONE FINGER** mode if the lower keyboard only (not the pedal keyboard) is used to specify the chords.
- In the step record mode, some fragmented chords (such as “D on C”) may not be stored.

### ■ Memory capacity

Expressed in terms of steps, the total number of steps which can be stored is about 300.

- As an example, in 4/4 time, if only 4-note chords of the same note value are specified, the number of measures that can be recorded is approximately as follows.

Note value	Number of measures
◦	280
♪	150
♩	80
♫	40

- When the memory is full, [FuL] appears on the display, and no more data can be stored.
- The recorded contents are preserved for about one week even if the **POWER** button is turned off.

## Correcting the chord progression

To correct or modify the recorded chord progression, while the **CHORD** button is in the recording mode, use the Correction keys (◀, ▶) to locate the data you wish to change.

- The current measure number is shown on the display. Measures in which no data is recorded are skipped.

### How chord progression data is indicated:

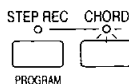
- **Chord data:** The current measure number is shown on the display, and the stored chord sounds.
- **INTRO data:** The **INTRO & ENDING** indicator flashes slowly.
- **COUNT INTRO data:** The **COUNT INTRO (FILL IN 2)** indicator flashes slowly.
- **ENDING data:** The **INTRO & ENDING** indicator flashes rapidly.
- **FILL IN data:** The **FILL IN 1** or **2** indicator flashes rapidly.
- **Volume data (BASS, ACCOMP, DRUMS):** A “beep” tone sounds.
- **Tempo, TRANSPOSE data:** The corresponding indicator flashes.
- When panel button data other than the above is stored, the corresponding panel indicator flashes.
- **End/repeat data:** The End command is indicated on the display as [E], and the Repeat command as [r]. A “beep” tone sounds.

- To go to the end of the chord progression, while pressing the Reset key (⏮), press the ◀ key.
- When the **DELETE** key is pressed, the recorded contents at the current position are erased.
- If you erase chord data and do not store a new chord, the following data shifts forward to replace the deleted data (the performance becomes shorter). Conversely, if you do not erase the chord data before entering a new chord, the new data is inserted, and the previously stored data is shifted back by the note value of the new chord (the performance becomes longer).
- In the same manner, when correcting panel button data (such as tempo data), be sure to press the **DELETE** key to erase the previously stored data before storing the new data.

When you hold down the **DELETE** key and press the End key, the entire chord progression is erased.

## Playing back the chord progression

1. Confirm that the **CHORD** button is on.



- If it is off, press it to turn it on.

2. Press the **SEQUENCER RESET** button.



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



- The **AUTO PLAY CHORD** begins to play following the stored chord progression.

# Part III Setting the functions

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



## Summary of adjustable settings and programmable functions

- **ACCOMP VOLUME:** Adjust the volume of the **ACCOMP** parts.
- **TUNING:** Modify the pitch of the instrument.
- **SWITCH ASSIGN:** Assign the desired function to the foot switch.
- **TREMOLO SPEED:** Regulate the speed of the tremolo.

### ACCOMP VOLUME

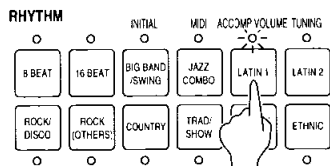
Adjust the volume of each of the three **ACCOMP** parts of the **AUTO PLAY CHORD**.

1. Turn on the **PROGRAM (STEP REC)** button.

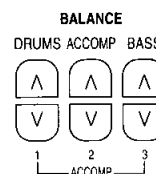


- The flashing indicators in the **RHYTHM** section show the settings which can be adjusted.
- Information regarding the following settings can be found on the pages indicated.  
**INITIAL**.....page 51  
**MIDI**.....page 45

2. Press the **ACCOMP VOLUME** button.



3. Use the **ACCOMP 1-3 (BALANCE)** buttons to set the volume to a level between 0 (off) and 9 (maximum).



**ACCOMP 3** volume  
**ACCOMP 2** volume  
**ACCOMP 1** volume

4. When you have completed making the settings, turn off the **PROGRAM** button.

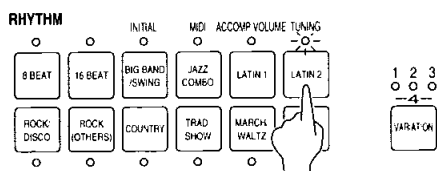
## TUNING

Fine-tune the pitch of the entire organ. This is convenient when playing with other instruments.

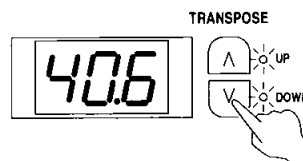
1. Turn on the **PROGRAM** button.



2. Press the **TUNING** button.



3. Use the **TRANSPOSE** buttons to adjust the pitch.



- The pitch is adjustable within a range of 427.3 to 453.0 Hz.
- The decimal can be set to 0, 3 or 6.
- The hundreds digit is not displayed.

4. When you have completed making the setting, turn off the **PROGRAM** button.

## SWITCH ASSIGN

Assign the desired function to the foot switch.

1. Turn on the **PROGRAM** button.
2. Press the foot switch.
  - A beep tone confirms that the foot switch is ready for programming.
  - Flashing indicators on the panel show which functions you can assign to the foot switch.
3. Press the button for the desired function.
  - When [End] appears on the display, the selected function is assigned to the foot switch. After a few seconds, the instrument returns to the normal performance mode.
  - Functions which can be assigned to the foot switch are as follows: glide, **START/STOP**, **FILL IN 1**, **FILL IN 2**, **INTRO & ENDING**, **SUSTAIN**, **TREMOLO SLOW/FAST**, **TECHNI-CHORD**.

- When the **SUSTAIN** function is assigned to the foot switch, the status alternates between the following two conditions each time the foot switch is pressed:
  - Sustain is off for all parts.
  - Sustain is on only for parts for which the **SUSTAIN** button was set to on.
 At this time, the **SUSTAIN** button indicator does not change.

### ■ Switch initialize

The initial function of the foot switch is the glide control. To return the foot switch to its initial function, press and hold both **TRANSPOSE** buttons at the same time.

## TREMOLO SPEED

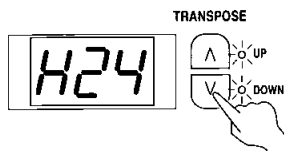
Set the **FAST TREMOLO** speeds with this procedure. The **FAST TREMOLO** creates an effect like two speakers rotating at different speeds.

1. Press and hold the **TREMOLO SLOW/FAST** button until the display changes (2 or 3 seconds).



2. Use the **TEMPO** buttons to select a speaker.  
H: Speaker for high-frequency sounds  
L: Speaker for low-frequency sounds

3. Use the **TRANSPOSE** buttons to adjust the speed.

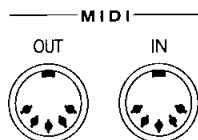


- Select a speed for L from 3.8 to 8.1, and for H from 11 to 32.
  - The higher the number, the faster the rotation speed.
4. Repeat steps 2 and 3 for the other speaker, as desired.
  5. When you have finished making the settings, press the **TREMOLO SLOW/FAST** button to turn it off.

# Part IV MIDI

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

## About the MIDI terminals



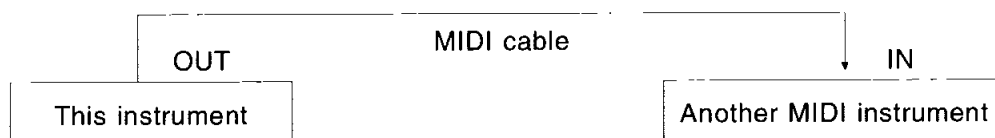
**IN:** The terminal by which this instrument receives data from other equipment.

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

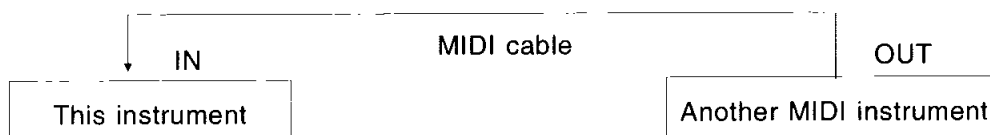
- For these connections, use a commercially available MIDI cable.

## Connection examples

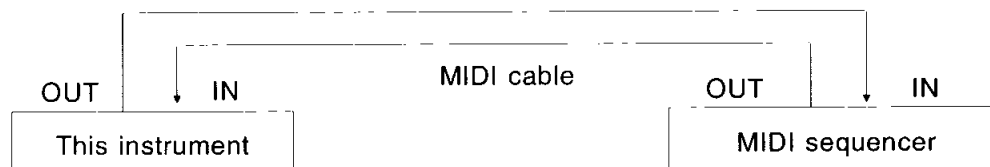
- To generate sound from a connected instrument by playing this instrument



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



- To connect with a MIDI sequencer or a personal computer



## Channel

The MIDI BASIC CHANNEL assignment of this instrument is permanently set for each part. Detailed information can be found in the MIDI Implementation Chart in the separate "REFERENCE GUIDE" provided.

## Types of MIDI data

### ■ 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 (C3) 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.

## Transmitted/received data

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

- The abbreviated function name as shown on the display is indicated in brackets [ ].

**START/STOP** [Str] ..... page 47

**MIDI CLOCK** [CL]..... page 48

### **PROGRAM CHANGE**

**MODE** [P.Ch] ..... page 48

**NOTE ONLY** [nt.o] ..... page 48

**DRUMS OUT** [dr.o] ..... page 49

**APC OUT** [Ac.o] ..... page 49

**TRANPOSE OUT** [trA] ..... page 49

**TECHNI-CHORD OUT** [tEC] ..... page 50

## 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 can not, 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 functions

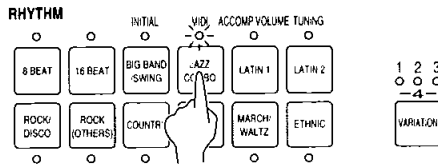
Adjust the setting after selecting the function.

## Procedure

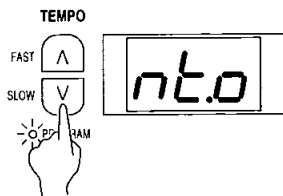
1. Press the **PROGRAM (STEP REC)** button to turn it on.



2. Press the **MIDI** button.



3. Use the **TEMPO** buttons to select the function you wish to set.



- The abbreviated function name is shown on the display.

4. Use the **TRANPOSE** buttons to adjust the setting (see the following section).

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

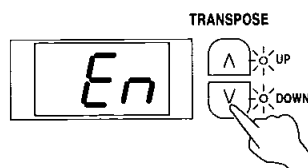
6. When you have finished setting the functions, press the **PROGRAM** button to turn it off.

- This instrument returns to the normal performance mode.

## START/STOP

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

1. Select **START/STOP [Str]**.
2. Use the **TRANPOSE** buttons to change the **REALTIME COMMAND** setting.



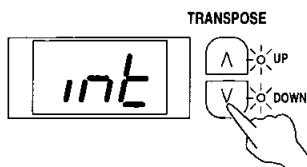
[En]: Rhythm and sequencer start/stop, continue, and song position pointer data can be transmitted/received.

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

## MIDI CLOCK

Select the CLOCK mode.

1. Select **MIDI CLOCK [CL]**. (Refer to page 47.)
2. Use the **TRANPOSE** buttons to change the CLOCK setting.



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

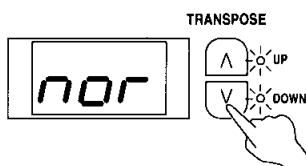
**MIDI [---]**: The CLOCK of the connected equipment is used to control the performance. This instrument's CLOCK is disabled.

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

## PROGRAM CHANGE MODE

Set the PROGRAM CHANGE mode.

1. Select **PROGRAM CHANGE MODE [P.Ch]**. (Refer to page 47.)
2. Use the **TRANPOSE** buttons to select the mode.



**NORMAL [nor]**: The PROGRAM CHANGE numbers follow the order of the sound buttons as they are lined up on the panel. Also, the note number of each **KEYBOARD PERCUSSION** instrument sound is the same as the NOTE NUMBER of the key with the corresponding picture code.

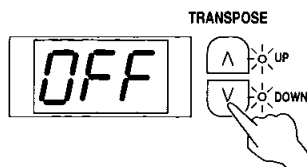
**TECHNICS [tEC]**: PROGRAM CHANGE numbers are standardized among all Technics models which are set to this mode. The PROGRAM CHANGE number assigned to a given sound on one model is assigned to the same sound on all models which are set to the same mode. In addition, the NOTE NUMBER of each **KEYBOARD PERCUSSION** instrument sound is also standardized among Technics models.

- The PROGRAM CHANGE numbers and **KEYBOARD PERCUSSION NOTE NUMBERS** for each mode can be found in the separate "REFERENCE GUIDE" provided.

## NOTE ONLY

Of the performance data, specify whether or not only note data is transmitted/received.

1. Select **NOTE ONLY [nt.o]**. (Refer to page 47.)
2. Use the **TRANPOSE** buttons to change the setting.



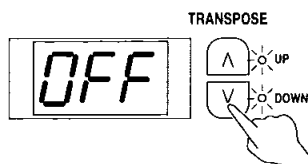
**[On]**: Only note on/off data is transmitted/received.

**[OFF]**: Other data is also transmitted/received.

## DRUMS OUT

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

1. Select **DRUMS OUT** [dr.o]. (Refer to page 47.)
2. Use the **TRANPOSE** buttons to change the setting.

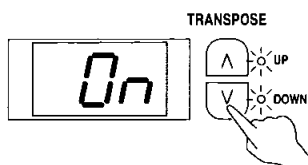


[On]: Data from the **DRUMS** part is transmitted.  
[OFF]: Data from the **DRUMS** part is not transmitted.

## APC OUT

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

1. Select **APC OUT** [Ac.o]. (Refer to page 47.)
2. Use the **TRANPOSE** buttons to change the setting.

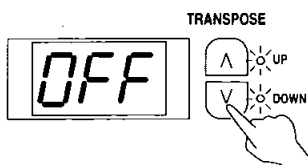


[On]: Data from the **ACCOMP 1, 2, 3, BASS** and **CHORD** parts is transmitted.  
[OFF]: Data from these parts is not transmitted.

## TRANPOSE OUT

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

1. Select **TRANPOSE OUT** [trA]. (Refer to page 47.)
2. Use the **TRANPOSE** buttons to change the setting.

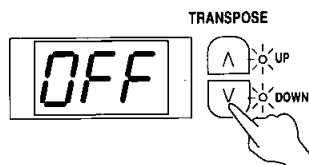


[On]: The note number of the transposed note is transmitted.  
[OFF]: The note number of the played key is transmitted.

## TECHNI-CHORD OUT

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

1. Select **TECHNI-CHORD OUT** [tEC]. (Refer to page 47.)
2. Use the **TRANSCOPE** buttons to change the setting.



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

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

# Initialize

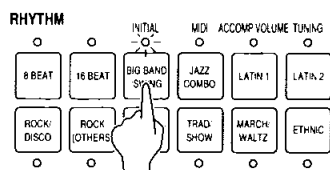
This instrument has many settable functions and storable memories. However, you can return the settings and memories to the factory-preset status.

## INITIAL

1. Turn on the **PROGRAM (STEP REC)** button.



2. In the **RHYTHM** section, press and hold the **INITIAL** button for a few seconds until a “beep” tone sounds and the **INITIAL** indicator goes out.



- When [End] appears on the display, the memories and settings are returned to their initialized status. After few seconds, this 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** section at the same time, turn the **POWER** button on again.

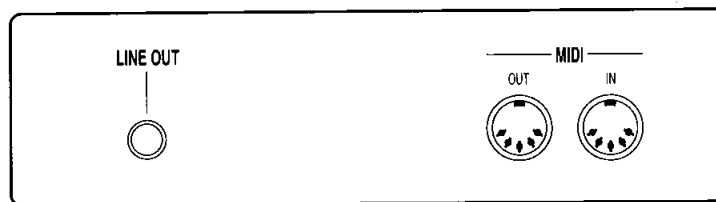
### ■ Backup memory

The various stored memories and function settings are preserved for about one week even if the **POWER** button is turned off.

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

# Connections

(On the rear panel)

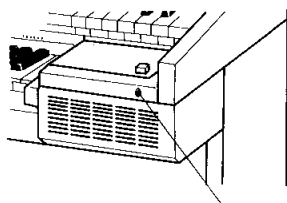


**LINE OUT** (output level 1.5 Vrms, 600  $\Omega$ )

By connecting an external high-power amplifier, the sound can be reproduced at a high volume.

## MIDI

These terminals are for connection to another MIDI instrument. (Refer to page 45.)



Headphone terminal

## Headphone terminal

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

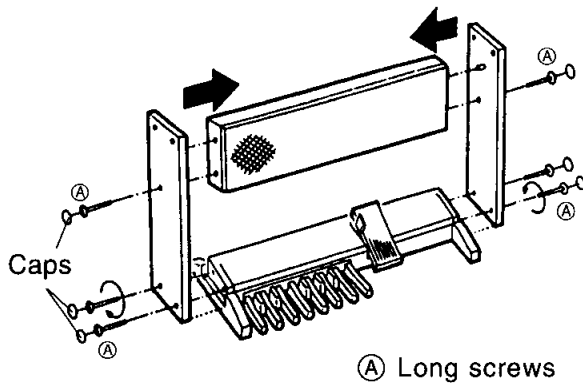
# Assembly

## ■ Securely tighten the four screws only AFTER they are all properly inserted.

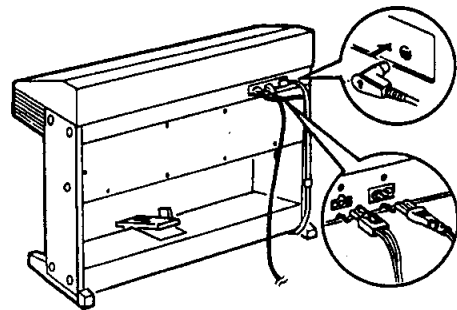
If each screw is tightened at the time it is inserted, the remaining screws may not fit properly in the holes. In this situation, applying undue force to tighten the screws may damage the screw threads.

1. Assemble the lower organ unit as shown in the figure.

- Use the long screws.
- After tightening the screws, place the caps on the screw heads.

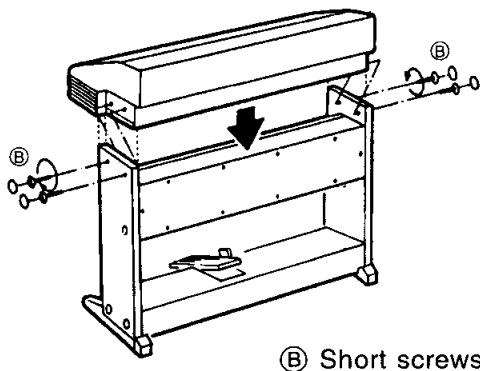


3. Connect the two cords from the lower unit and the power cord to the terminals on the upper unit.

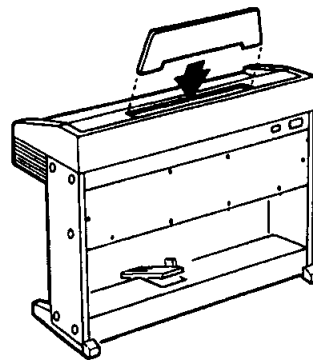


2. Position the upper unit on top of the lower unit.

- Use the short screws.
- After tightening the screws, place the caps on the screw heads.



4. Insert the music stand into the holes in the upper unit.



## ■ CHECK

Check the following after assembling.

- Does any part of the organ slide or rattle?  
→ Secure the screws firmly.
- Are the three cords fully connected to the terminals?  
→ If no sound is heard, check the cords and make sure they are securely connected.

# Symptoms which appear to be signs of trouble

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

	Phenomenon	Remedy
Sounds and effects	The buttons, keys, etc. malfunction.	<ul style="list-style-type: none"> <li>• Turn off the <b>POWER</b> button once, then turn it on again. If this procedure is not successful, turn off the <b>POWER</b> button once. Then, while pressing the three lower left buttons in the <b>RHYTHM</b> section (<b>ROCK/DISCO</b>, <b>ROCK [OTHERS]</b> and <b>COUNTRY</b>) at the same time, turn the <b>POWER</b> button on again. (Note that, in this case, all programmable settings, functions and memories return to their factory-preset status.)</li> </ul>
	No sound is produced when the keys are pressed.	<ul style="list-style-type: none"> <li>• The <b>MAIN VOLUME</b> is at the minimum setting. Adjust the volume with the <b>MAIN VOLUME</b> control.</li> <li>• The volumes for the selected parts are set to the minimum levels. Use the <b>VOLUME</b> buttons to set the volumes of the relevant parts to appropriate levels. (Refer to page 23.)</li> </ul>
	The volume is very low when the keyboard is played.	<ul style="list-style-type: none"> <li>• Connect the speaker cord so that the plug is fully inserted into the terminal.</li> </ul>
	Only percussive instrument sounds are produced when the lower keyboard is played.	<ul style="list-style-type: none"> <li>• The <b>KEYBOARD PERCUSSION</b> button is on.</li> </ul>
	The foot switch does not operate properly.	<ul style="list-style-type: none"> <li>• Any functional on and off operation other than the factory presets are storable in the foot switch. Store your favorite function to turn it on and off. (Refer to page 43.)</li> </ul>
	The sound of the lower keyboard does not stop.	<ul style="list-style-type: none"> <li>• The <b>MEMORY</b> button of the <b>AUTO PLAY CHORD</b> is on. Turn off the <b>MEMORY</b> button.</li> </ul>
Rhythm	The rhythm does not start.	<ul style="list-style-type: none"> <li>• The <b>DRUMS</b> volume is set to the minimum level. Use the <b>BALANCE</b> buttons to set the <b>DRUMS</b> volume to an appropriate level.</li> <li>• <b>CLOCK</b> is set to <b>MIDI</b>. Set <b>CLOCK</b> to <b>INTERNAL</b>. (Refer to page 48.)</li> </ul>
AUTO PLAY CHORD	No sound is produced for the automatic accompaniment.	<ul style="list-style-type: none"> <li>• The <b>ACCOMP</b> volume is set to the minimum level. Use the <b>BALANCE</b> buttons to set the <b>ACCOMP</b> volume to an appropriate level.</li> </ul>
	No sound is produced for the automatic accompaniment, or only the sounds of some parts are produced.	<ul style="list-style-type: none"> <li>• An <b>ACCOMP</b> part does not sound if its corresponding volume is set to the minimum level. Use the <b>ACCOMP 1-3 (BALANCE)</b> buttons to set the <b>ACCOMP</b> volume to appropriate levels. (Refer to page 42.)</li> </ul>
	Chord storage is not possible ( <b>STEP RECORD</b> ).	<ul style="list-style-type: none"> <li>• The remaining memory capacity is 0. Erase the memory. (Refer to page 41.)</li> </ul>
Other	Noise from a radio or TV can be heard.	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>
	The cabinet becomes warm during use.	<ul style="list-style-type: none"> <li>• This instrument has a built-in power source that heats the cabinet to some degree. This is not an indication of trouble.</li> </ul>



# Index

**A**  
ACCOMP VOLUME ..... 42  
ASSEMBLY ..... 53  
AUTO PLAY CHORD ..... 16, 33-36

**B**  
Backup memory ..... 6, 51  
BALANCE ..... 23, 31, 36  
BASS PEDALS ..... 12, 22  
BEAT ..... 31

**C**  
CHORD ..... 39-41  
Connections ..... 52  
COUNT INTRO ..... 15, 32

**D**  
DEMO ..... 8  
DIGITAL EFFECT ..... 13, 24  
DIGITAL REVERB ..... 13, 25

**E**  
ENDING ..... 15, 32  
Expression pedal ..... 7

**F**  
FILL IN ..... 15, 32  
FINGERED ..... 34  
Foot marks ..... 19  
Foot switch ..... 26, 43

**G**  
Glide ..... 26

**I**  
Initialize ..... 51  
INTRO & ENDING ..... 15, 32

**K**  
KEYBOARD PERCUSSION ..... 33

**L**  
LOWER ..... 11, 18, 21

**M**  
MAIN VOLUME ..... 7  
MEMORY ..... 36  
MIDI ..... 45-50  
Music stand ..... 6  
MUSIC STYLE ARRANGER ..... 38

**O**  
ONE FINGER ..... 16, 34  
ONE TOUCH PLAY ..... 37  
ONE TOUCH REGISTRATION ..... 29  
ORGAN ..... 10, 11, 19-21  
OTHERS ..... 21

**P**  
PANEL MEMORY ..... 28  
PERC 2 2/3' ..... 19  
PIANIST ..... 35  
POWER ..... 7  
PROGRAM ..... 42, 43, 47

**R**  
RHYTHM ..... 14, 30

**S**  
SOLO ..... 10, 11, 18, 20-22  
SOUND ..... 10, 11, 20, 22  
Specifications ..... 56  
START/STOP ..... 14, 30  
STEP RECORD ..... 39  
SUSTAIN ..... 13, 24  
SYNCHRO & BREAK ..... 30, 36

**T**  
TAB ..... 10, 11, 19, 21  
TECHNI-CHORD ..... 27  
TEMPO ..... 14, 31  
TRANSPOSE ..... 26  
TREMLO ..... 25  
TREMLO SLOW/FAST ..... 25, 44  
Troubleshooting ..... 54  
Tuning ..... 43

**U**  
UPPER ..... 10, 18, 19

**V**  
VARIATION ..... 10-12, 14, 20, 22, 30  
VOLUME ..... 23

# Specifications

		SX-EA1
KEYBOARD		UPPER KEYBOARD 44 KEYS LOWER KEYBOARD 44 KEYS PEDAL KEYBOARD 13 KEYS
SOUND GENERATOR		PCM
MAXIMUM NUMBER OF NOTES PRODUCED SIMULTANEOUSLY		32 NOTES
SOUNDS	PARTS	UPPER KEYBOARD: ORGAN, SOUND, SOLO LOWER KEYBOARD: ORGAN, SOUND, SOLO
	UPPER	<SOUND, SOLO> 50 SOUNDS (10 GROUPS): PIANO, E PIANO, GUITAR, E GUITAR, BRASS, HARPSI/VIBES, STRINGS/VOCAL, REED, SAX/FLUTE, OTHERS <TAB> : 16', 8', 4', 2', PERC 2-2/3' <ORGAN> : 1-5 (16 PRESETS)
	LOWER	<SOUND, SOLO> 50 SOUNDS (10 GROUPS): PIANO, E PIANO, GUITAR, E GUITAR, BRASS, HARPSI/VIBES, STRINGS/VOCAL, REED, SAX/FLUTE, OTHERS <TAB> : 8', 4', 2' <ORGAN> : 1, 2 (16 PRESETS)
	BASS	10 SOUNDS (5 GROUPS): ORGAN, CLASSICAL ORGAN, ACOUSTIC, ELECTRIC, ORCHESTRAL
EFFECTS	SUSTAIN	UPPER, LOWER, BASS
	DIGITAL EFFECT	UPPER, LOWER, BASS
	DIGITAL REVERB	○
	GLIDE	UPPER
	TREMOLO	UPPER ORGAN, LOWER ORGAN (SLOW/FAST)
RHYTHM	RHYTHM	48 RHYTHMS (12 RHYTHMS×4 VARIATIONS): 8 BEAT, 16 BEAT, BIG BAND/SWING, JAZZ COMBO, LATIN1, LATIN2, ROCK/DISCO, ROCK (OTHERS), COUNTRY, TRAD/SHOW, MARCH/WALTZ, ETHNIC
	CONTROL	START/STOP, SYNCHRO & BREAK, INTRO & ENDING, FILL IN 1, 2, COUNT INTRO, TEMPO
	KEYBOARD PERCUSSION	37 KEYS
EASY PLAY STYLE		ONE TOUCH REGISTRATION, ONE TOUCH PLAY, MUSIC STYLE ARRANGER
AUTO PLAY CHORD		AUTO PLAY CHORD (ONE FINGER, FINGERED, PIANIST, MEMORY)
TECHNI-CHORD		○
PANEL MEMORY		SET, 1-5
SEQUENCER		STEP RECORD (CHORD) STORAGE CAPACITY: 300 STEPS
DISPLAY		○ (LED)
DEMO		○
PROGRAM		INITIAL, MIDI, ACCOMP VOLUME, TUNING, SWITCH ASSIGN, TREMOLO SPEED
MIDI		START/STOP, MIDI CLOCK, NOTE ONLY, PROGRAM CHANGE MODE, DRUMS OUT, APC OUT, TRANSCOPE OUT, TECHNI-CHORD OUT
CONTROL		VOLUME, TEMPO, TRANSCOPE
TERMINALS		PHONE, LINE OUT, MIDI (IN, OUT)
OTHERS		POWER SWITCH, MAIN VOLUME, EXPRESSION PEDAL, FOOT SWITCH
OUTPUT		40 W
SPEAKERS		20cm×1, 6.5cm×1
POWER REQUIREMENT		100W, 70W (NORTH AMERICA AND MEXICO)
		AC120/220/240V 50/60 Hz
		AC120V 60 Hz (NORTH AMERICA AND MEXICO) AC230V 50/60 Hz (NEW ZEALAND) AC230-240V 50/60 Hz (EUROPE)
DIMENSIONS (W×H×D) (WITH MUSIC STAND)		105.2cm×100.8cm×46.1cm (41-13/32"×39-11/16"×18-5/32")
NET WEIGHT		37 kg (81.6 lbs.)

- Design and specifications are subject to change without notice.