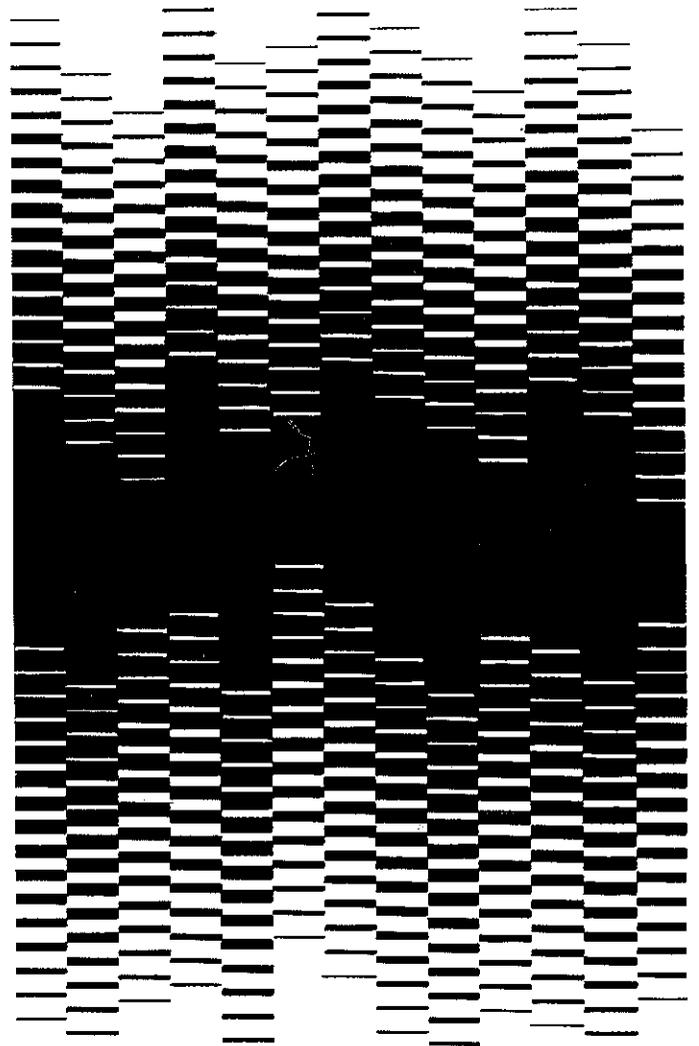


KAWAI

Digital Electronic Organs
SR5 · SR6 · SR7
Owner's Manual



WARNING: This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instruction manual, it can cause interference to radio communications. The rules with which it must comply afford reasonable protection against interference when used in most locations. However, there can be no guarantee that, such interference will not occur in a particular installation. If this equipment does not cause interference to radio or the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

- reorient the receiving antenna.
- move the receiver away from the organ.
- plug the digital piano into a different outlet so that organ and receiver are on different branch circuits.
- consult the dealer or an experienced radio television technician.

IMPORTANT SAFETY INSTRUCTIONS

WARNING — When using electric products, basic precautions should always be followed, including the following:

1. Read all the instructions before using the product.
2. Do not use this product near water - for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
3. This product should be used only with a cart or stand that is recommended by the manufacturer.
4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
8. This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.
9. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
10. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
11. The product should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the product; or
 - C. The product has been exposed to rain; or
 - D. The product does not appear to operate normally or exhibits a marked change in performance; or
 - E. The product has been dropped, or the enclosure damaged.
12. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.



AVIS: RISQUE DE CHOC ELECTRIQUE -NE PAS OUVRIR.

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). 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 product.

KAWAI SR SERIES OF ELECTRONIC ORGANS

Thank you for purchasing a member of the Kawai SR series of electronic organs. The latest advances in electronics and computer technology help make them the best Kawai organs yet!

We're proud that you recognize the distinctive quality and fine craftsmanship that makes Kawai the choice of beginners and professionals alike.

Your Kawai SR Series organ has so many exciting easy to use features that will help everyone in your family sound more like a professional player.

Standard features include Kawai's Additive Digital Dynamic (ADD) system, a third keyboard especially for solos (SR6 and SR7), full touch response, and external mass storage in the form of IC cards. These combine to provide you, the musician, with realistic sound, complete flexibility and a full range of artistic expression. Read and learn about these exclusive Kawai features, and many others. Then play one of your favorite songs utilizing some of these features. You'll be amazed at how good you sound!

To get the most out of your new organ, we recommend that you read the manual while seated at the organ. Always keep this manual handy for future reference.

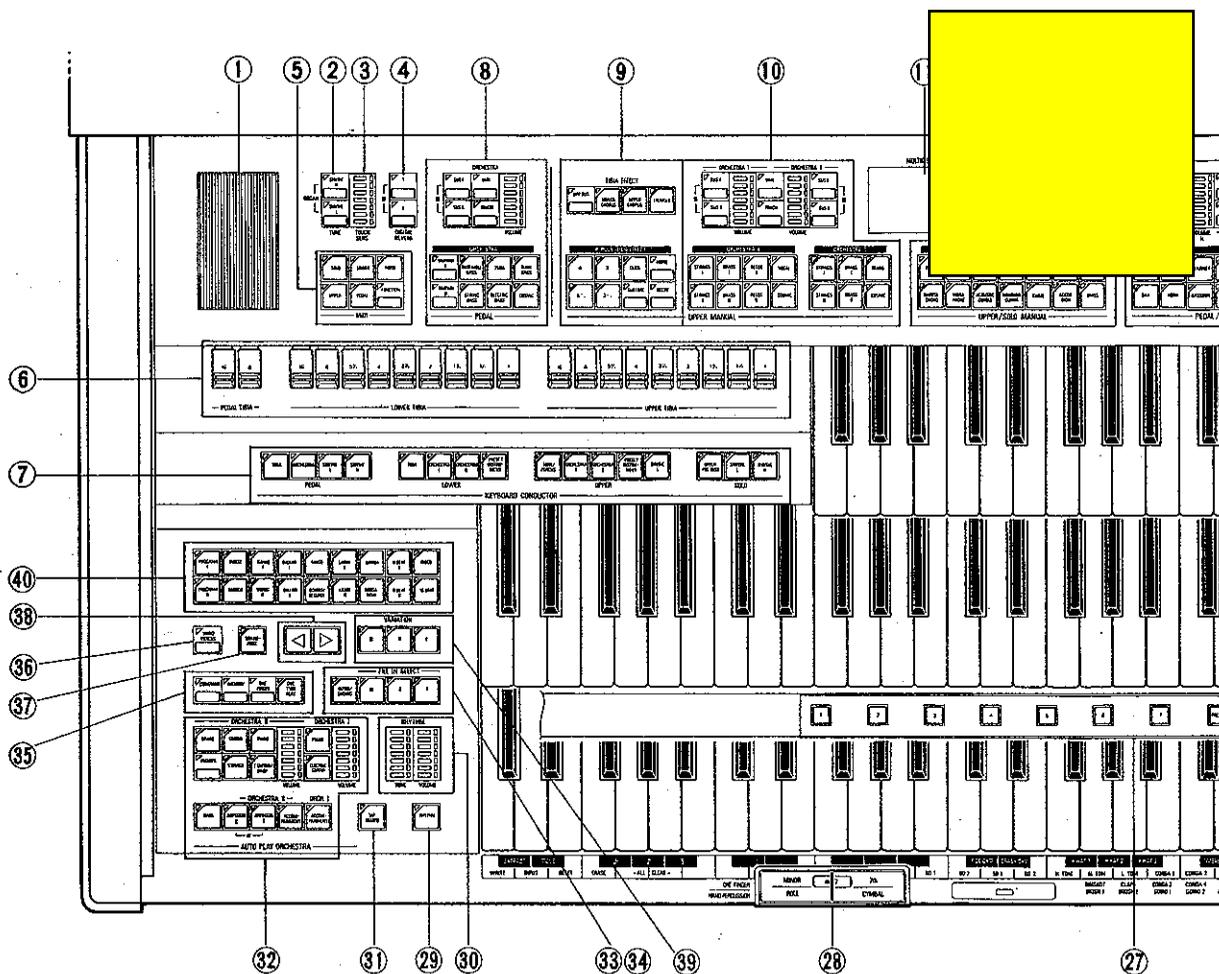
How to Care for Your Kawai Organ

Here are some general rules to follow.

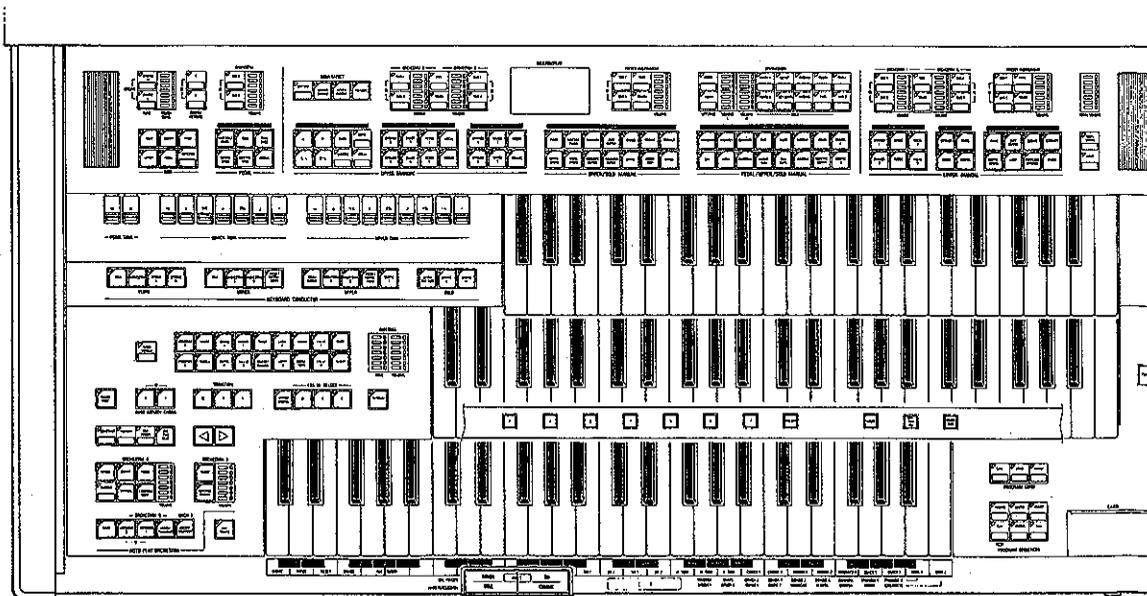
- 1) Always plug your KAWAI into a standard voltage AC line for your area. Plugging into a DC outlet will cause damage.
- 2) To remove any greasiness from the cabinetry, keys, or pedals, use a damp cloth and a little mild soap. Be sure to wipe dry with a soft cloth.
- 3) Do not expose your KAWAI to direct sunlight, cold drafts or radiator heat.
- 4) The battery protecting the sequencer/registration memory contents should last for five years. When it is exhausted, the WRITE button will flash three time. Replacement is not a job for an amateur. Have an authorized repairman replace the battery.

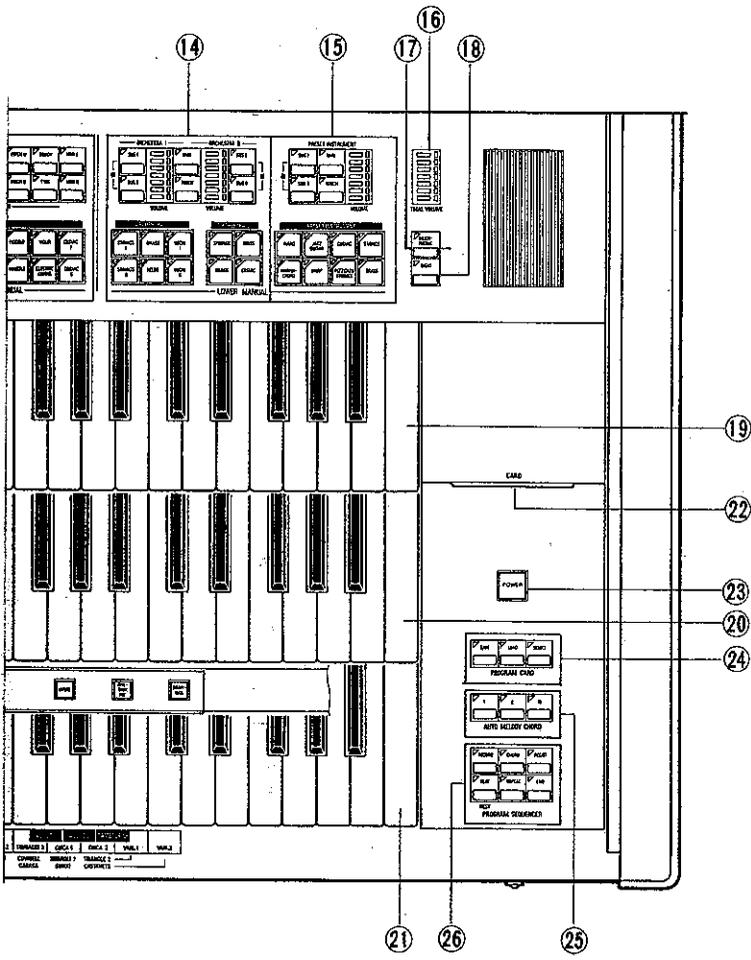
1. Product Features and Controls

SR7

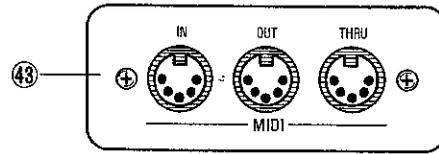


SR6

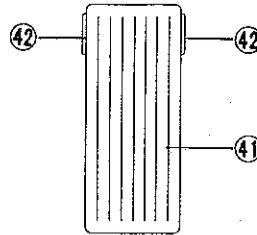




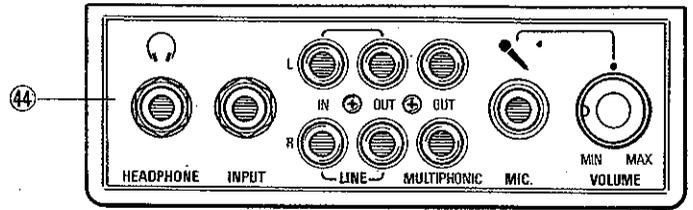
MIDI Terminals



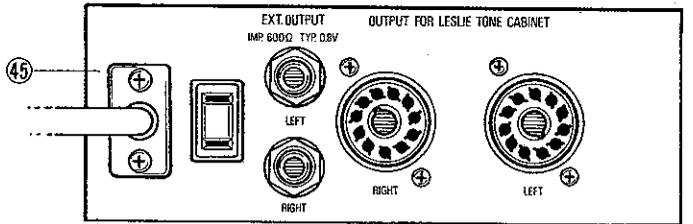
■ Expression Pedal



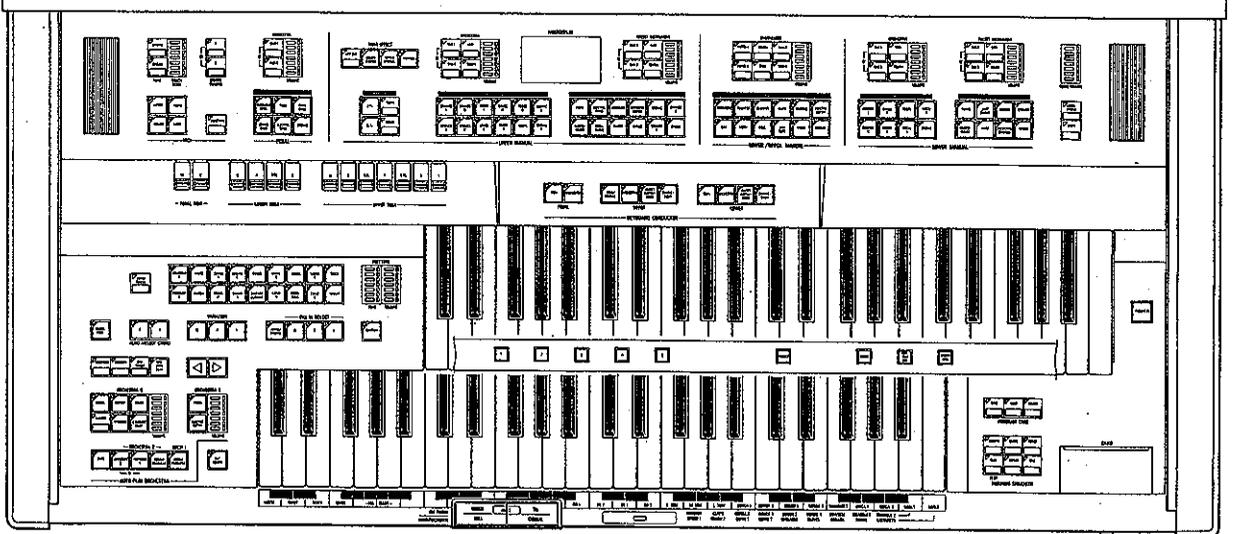
Front Panel Jacks



Rear Panel Jacks



■ SR5



CONTENTS

1. Product Features and Controls	3
1.1 Control Panel Location Guide	5
2. Getting Ready to Play	8
2.1 Volume Adjustment	8
2.2 KEYBOARD CONDUCTOR	9
3. Tones and Effects	11
3.1 TIBIA	11
3.2 ORCHESTRA	13
3.3 PRESET INSTRUMENT	18
3.4 SYNTHESIZER	21
4. Rhythm Accompaniment	24
4.1 Procedure	24
4.2 Additional Functions	25
4.3 Hand Percussion	27
4.4 Program Rhythms	29
5. Auto Accompaniment System	36
5.1 AUTO PLAY ORCHESTRA	36
5.2 AUTO MELODY CHORD	37
5.3 ONE FINGER, MEMORY, and CONSTANT Functions	38
5.4 ONE TWO PLAY	38
6. Registration Memory	39
7. Program Sequencer	41
7.1 Storing chords	41
7.2 Storing Registrations	42
7.3 Playing Stored Sequences	43
7.4 Editing Functions	44
8. Program Card	46
8.1 Inserting the Card	46
8.2 Saving to the Card	46
8.3 Loading All Data from a Card	48
8.4 Loading a Program Registration by Itself	48
8.5 Loading Only Part of a Set Saved with All	49
8.6 Loading Only Program 1 or 2 of Set Saved with RHY	49
8.7 Cancelling a Load or Save Operation	50
8.8 Memory Protect Switch	50
9. MIDI	51
9.1 Introduction	51
9.2 Operation	53
10. Other Functions	56
10.1 TUNE Function	56
10.2 TRANSPOSE Function	56
10.3 TOUCH SENS Control	57
10.4 DIGITAL REVERB Switch	57
10.5 MULTIPHONIC Switch	57
10.6 LIGHT Switch	57
11. Front and Rear Panel Connectors	58
11.1 Front Panel Connectors	58
11.2 Rear Panel Connectors	58
12. Specifications	59

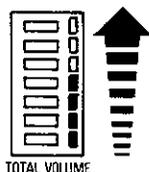
2. Getting Ready to Play

2.1 Volume Adjustment

■ Adjust the total volume control

● Procedure

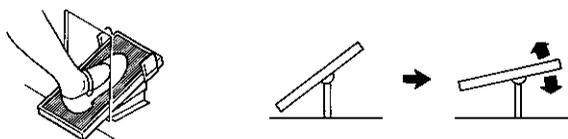
Set the total volume switch at mid range volume (half way between highest and lowest volume or the middle switch of the control)



Note:

All volume controls on your SR Series electronic organ feature a convenient set of tiny instantaneously acting electronic switches, placed vertically on each volume control. The switch at the bottom of the control will produce the softest volume. As you press the switches higher up on the control, the volume will increase. If you press more than one switch at a time on a given volume control, the organ will recognize the highest switch setting.

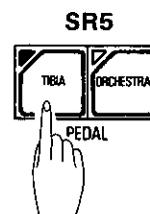
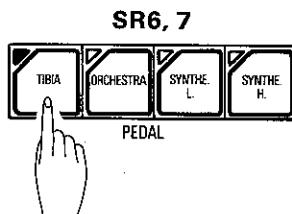
■ Depress the expression pedal halfway



■ Adjust the TIBIA tone and Volume

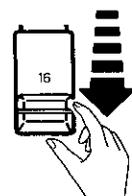
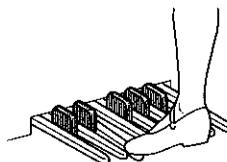
● Procedure

(1) Press the TIBIA switch in the KEYBOARD CONDUCTOR PEDAL section



(2) Press a pedal

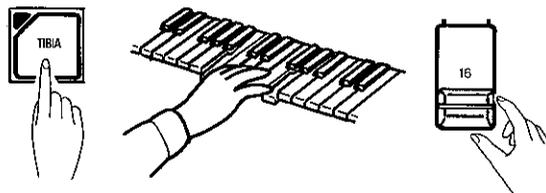
(3) Adjust the tone and volume with the PEDAL TIBIA drawbars



Note:

Pulling the drawbar towards you increased the volume.

■ Repeat step 2 for the lower and upper sections of the KEYBOARD CONDUCTOR.



■ Readjust the TOTAL VOLUME and the expression pedal

Notes:

- This step changes the TIBIA volumes, but not the tone.
- The TIBIA drawbars provide adjustment of both the tone and the volume. Each drawbar controls the volume for a particular pitch. Together, they provide a limitless range of possible combinations. Although it is possible to control output volume with just the drawbars, the standard procedure is to adjust their balance and then use the TOTAL VOLUME switches.

■ Repeat Steps 2-4 for the other voices available in the KEYBOARD CONDUCTOR section.

1.1 Control Panel Location Guide

① Panel Speakers

② Tune Switch

This enables you to change the tuning on your organ (example: To match the pitch of an out of tune piano). To change the tuning, press the tune switch and at the same time press the arrow switches in the rhythm section.

Tuning the organ page 56

Tuning the synthesizer page 22, 23

③ Touch Sensitive Switch page 57

This controls the sensitivity of the keyboard to your touch. The lighter touch you have on the keyboard, the softer the sound. If you strike the keyboard harder, it will sound louder.

④ Digital Reverb page 57

The use of this control will give you instant concert hall type of sound. It adds varying degrees of reverberation (echo) to the organ sound. This is used to overcome a room with poor acoustics. Since the reverb is digitally generated, you will not experience the unpleasant howling that arises when vibrations hit a spring reverb unit during a performance.

⑤ MIDI Switches page 51

(Musical Instrument Digital Interface)

These switches control the built-in MIDI Interface. The internationally recognized MIDI standard allows you to connect your SR Series organ to synthesizers, drum machine and other electronic equipment that is equipped with MIDI. In doing so you can play and control the other keyboards from your SR Series organ.

⑥ Drawbars page 11

The use of drawbars enables you to create millions of sound variations. Each individual drawbar is a volume control. Pulling the drawbar toward you increases the volume. When used in combination, the tone & volume are controlled by moving the drawbars in or out.

⑦ Keyboard conductor page 9

This section contains the various tone groups (Tibia —Orchestra — Preset Instrument — Synthesizer) for the upper, lower, pedal and solo keyboards (SR6, SR7). Having all of the tone groups in one handy location enables you to change the sound quickly and easily.

⑧ Pedal Orchestra Control Block page 16

These switches control the tone, volume and effect combinations.

⑨ Percus./Tibia Effect Control Block page 12

These switches control the effect settings for the tibia/percus section of the upper keyboard and the tibia section of the lower keyboard.

⑩ Upper Orchestra Control Block page 14

These switches control the tone, volume and effects setting combinations for the upper keyboard orchestra section.

⑪ Multifunction Display page 25

This normally displays the speed of the rhythm unit but changes to other functions during programming and adjustment.

⑫ Upper/Solo Preset Instrument Control Block page 18

The switches control the tone, volume and effect settings for the upper or solo keyboard preset instrument section.

⑬ Pedal/Upper/Solo Synthesizer Control Block page 21

These switches control the synthesizer tone, volume and effect settings for the pedal, upper and solo keyboards.

⑭ Lower Orchestra Control Block page 15

These switches determine the tone, volume and effect setting combinations for the lower keyboard orchestra section.

⑮ Lower Preset Instrument Control Block page 20

These switches control the tone, volume and effect setting for the lower keyboard preset instrument section.

⑯ Total Volume Control page 8

This controls the total organ volume.

⑰ Multiphonic Switch page 57

⑱ Light Switch page 57

⑲ Solo Keyboard

⑳ Upper Keyboard

㉑ Lower Keyboard

㉒ Card Slot page 46

㉓ Power Switch

㉔ Program Card Section page 46

These switches control the transfer of data between the organ and the IC card.

㉕ Auto Melody Chord Section page 37

These switches enable player to play 1-finger chords on the upper keyboard.

㉖ Program Sequencer page 41

These switches provide separate storage facilities for registration and chord data. These may be combined for automated playing.

㉗ Registration Memory Section page 39

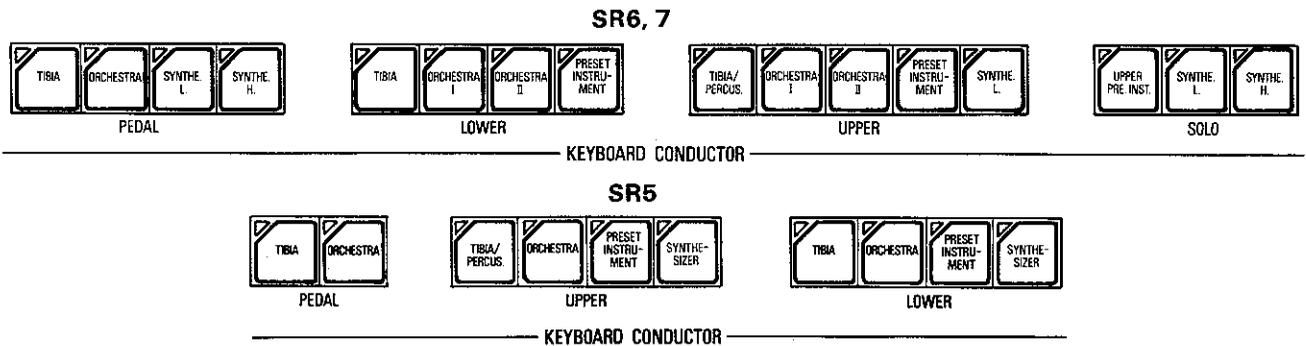
The switches control the storage and retrieval of tone, rhythm, volume and other settings.

㉘ Touch Bars page 28, 38

These bars will produce the chords, minor chords and minor 7th chord when you are in 1-finger chord play. When you are not in 1-finger chord play, the bars will produce a drum roll and crash cymbal effect. They will also produce other hand percussion sounds if you program them to do so.

- ②9 **Rhythm Switch** page 24
Automatic rhythm accompaniment on and off.
 - ③0 **Rhythm Volume/Tone Section** page 24
These switches control the rhythm sections output volume and tone.
Note:
Using a higher tone setting produces a more metallic tone.
 - ③1 **Tap Tempo Switch** page 26
Alternate method of setting the tempo of the rhythm accompaniment. Just tap the switch at the speed you would like and the tempo is automatically set.
 - ③2 **Auto Play Orchestra Section** page 36
These switches control the tone, volume and features of the organs auto accompaniment.
 - ③3 **Fill In Select Switches** page 26
This feature offers 3 different rhythm fill-in patterns.
 - ③4 **Intro-Ending Switch** page 26
This feature offers a selection of rhythm patterns to use for an introduction or as an end to a song.
 - ③5 **One Two Play Switch** page 38
This feature automatically puts the organ in 1-finger chord play. It automatically sets up the appropriate registrations and orchestral accompaniment for the rhythm pattern selected. Each of the 64 rhythms has a different registration and accompaniment.
 - ③6 **Hand Percussion Switch** page 27
Pressing this turns the lower keyboard into a percussion section. Each key then controls the instrument appearing on the keyboard template.
 - ③7 **Transpose Switch** page 56
This allows you to transpose into another key. The transpose feature has a range of 1 octave.
 - ③8 **Arrow Switches** page 25
Pressing these increases and decreases the numbers appearing on the multifunction display. Usually the display is showing the rhythm tempo, so pressing the right arrow will increase the tempo, left arrow will decrease the tempo. The arrow function also plays a key role in such functions as tuning, transposing, controlling the program sequencer and transferring data between the organ and an IC card.
 - ③9 **Variation Switches** page 24
Pressing these introduces a variation into the rhythm pattern that is playing.
 - ④0 **Rhythm Selection Switches** page 24
Since each rhythm pattern has 3 additional variations, these 16 switches provide instant access to 64 pre-recorded rhythm patterns.
-
- ④1 **Expression Pedal** page 8
 - ④2 **Foot Switches**
 - ④3 **MIDI Terminals** page 51
These provide standardized connections to other MIDI instrument.
 - ④4 **Front Panel Jacks** page 58
These allow you to connect headphones, a microphone, home stereo and other audio equipment to organ.
 - ④5 **Rear Panel Jacks** page 58
These provide connections to optional equipment and system enhancements.

2.2 KEYBOARD CONDUCTOR

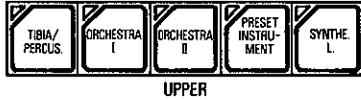


Sometimes a particular piece requires several changes of tone and volume during the course of a performance. Frequently, these changes come in groups of three or more. The KEYBOARD CONDUCTOR section provides, in one handy location, the controls necessary to make these changes with the minimum of fuss. The SR6 and SR7, for example, offer a choice of three registrations for the SOLO keyboard. (This keyboard is not available on the SR5).

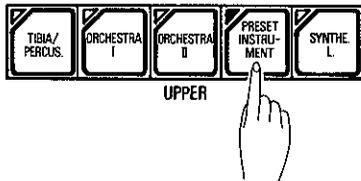
Similarly, there is a choice of five for the UPPER keyboard on these two models (four on the SR5), four for the LOWER keyboard on all three models, and four for the PEDAL keyboards (two on the SR5). In all cases, pressing a single switch is all that is required to change the registration for a keyboard.

● Procedure

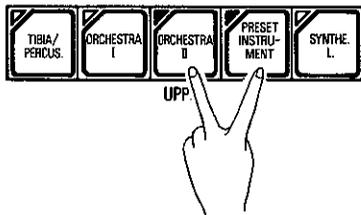
- (1) Press the appropriate switch in the KEYBOARD CONDUCTOR section.



To change from ORCHESTRA I to PRESET INSTRUMENT, for example, simply press the PRESET INSTRUMENT switch. The organ then automatically changes to the registration (tone, volume, and effects) specified in the PRESET INSTRUMENT (UPPER/SOLO) control block at the top of the keyboard.



It is also possible to mix two registrations by holding down the switch for the current one and pressing a second switch. The only exceptions are the SYNTHESIZER registrations. (See Note below.)



Notes:

- The synthesizer control blocks can only be used for one keyboard at a time. On the SR6 and SR7, SYNTHESIZER H offers a choice of SOLO or PEDAL; SYNTHESIZER L, SOLO, UPPER, or PEDAL. On the SR5, there is only one synthesizer and a choice between the UPPER or LOWER keyboards.
- The SR Series stores registration and other settings in non-volatile memory. This has its own battery power supply that keeps them from disappearing when you turn off the organ. The same RHYTHM, KEYBOARD CONDUCTOR, individual tone, and other settings are therefore always available when you next turn on the organ. However, the organ tuning automatically returns to 0 (see page 56), and the clock to internal.

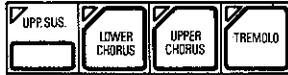
3. Tones and Effects

3.1 TIBIA

The UPPER keyboard has a TIBIA/PERCUS control block; the LOWER and PEDAL keyboards, separate TIBIA control blocks. Together, the three provide a wide range of possible combinations.

SR6, 7

TIBIA EFFECT

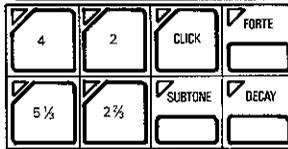


SR5

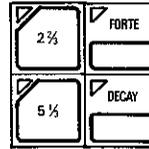
TIBIA EFFECT



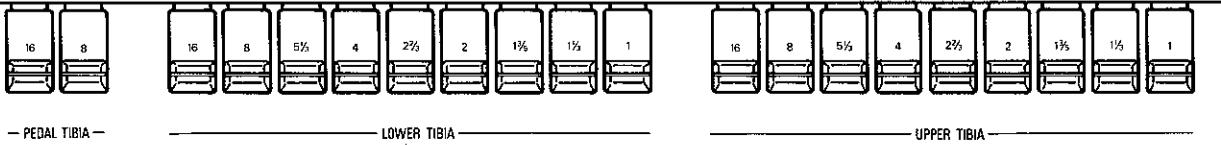
PERCUS / TIBIA EFFECT



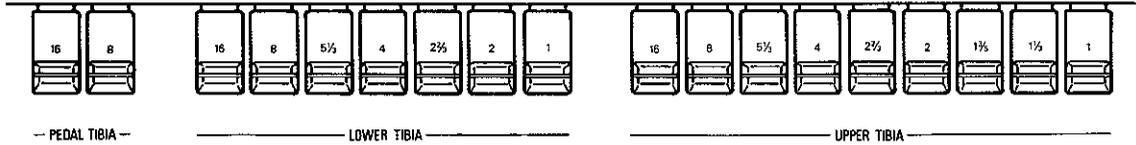
PERCUS



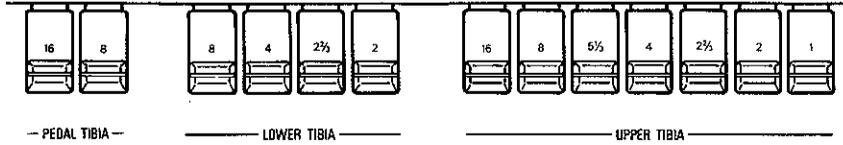
SR7



SR6



SR5

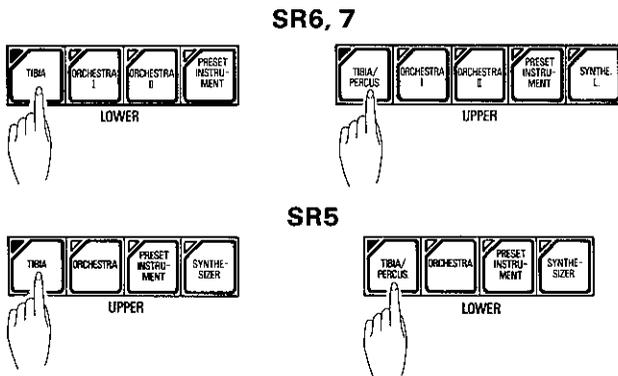


■ UPPER TIBIA/PERCUS and LOWER TIBIA

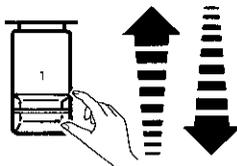
(1) Changing registrations is as easy as pressing the appropriate TIBIA switch in the KEYBOARD CONDUCTOR section.

Note:

At this point, you may wish to double-check by sounding a note on the corresponding keyboard. If not, this entire step becomes optional.



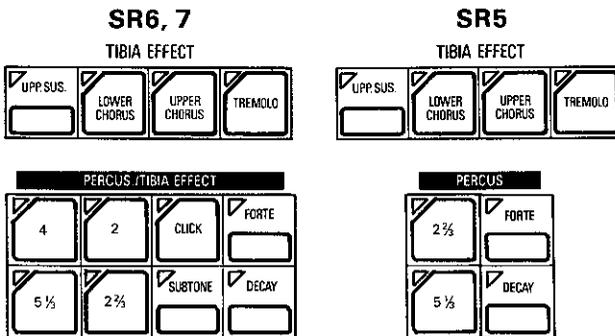
(2) Use the UPPER and LOWER drawbars to adjust the balance between the output from the two sets of tibia.



(3) Use the TIBIA EFFECT and PERCUS/TIBIA EFFECT switches (TIBIA EFFECT and PERCUS on the SR-5) in the UPPER MANUAL control block to add or subtract effects. (See accompanying chart.)

Note:

These effect switches are toggles: Pressing the switch turns on the effect; pressing it a second time turns it off.



■ Effect Switches

UPP. SUS — This adds a lingering SUSTAIN effect to the UPPER keyboard tibia. It does not affect percussion output.

LOWER CHORUS — This adds a slow swelling to the LOWER keyboard tibia.

UPPER CHORUS — This adds a slow swelling to the UPPER keyboard tibia, percussion and click.

TREMOLO — This switches the UPPER and LOWER keyboard CHORUS effects, if present, to TREMOLO. This effect applies to percussion as well. The sound swells much more quickly than CHORUS.

Note:

It is impossible to use CHORUS and TAREMOLO simultaneously. (See chart.)

UPPER CHORUS	LOWER CHORUS	TREMOLO	UPPER keyboard effect	LOWER keyboard effect
ON	OFF	OFF	CHORUS	—
ON	OFF	ON	TREMOLO	—
OFF	ON	OFF	—	CHORUS
OFF	ON	ON	—	TREMOLO
ON	ON	OFF	CHORUS	CHORUS
ON	ON	ON	TREMOLO	TREMOLO
OFF	OFF	OFF	—	—

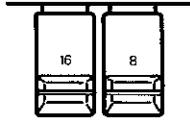
CLICK (SR6, 7 only) — This adds clicks to the UPPER keyboard TIBIA output. It does not affect the LOWER TIBIA. When the click is added to the TIBIA sound, it creates a nice jazz effect.

FORTE — This accentuates the UPPER keyboard percussion effect. It does not affect the LOWER TIBIA.

DECAY — This increase the time that it takes the UPPER keyboard percussion effect to die out. It does not affect the LOWER TIBIA or CLICK effect.

SUBTONE (SR6, 7 only) — This adds a note one octave below the highest note on the keyboard.

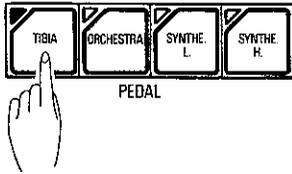
■ PEDAL TIBIA



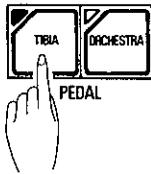
— PEDAL TIBIA —

- (1) Changing registrations is as easy as pressing the appropriate TIBIA switch in the PEDAL KEYBOARD CONDUCTOR section.

SR6, 7



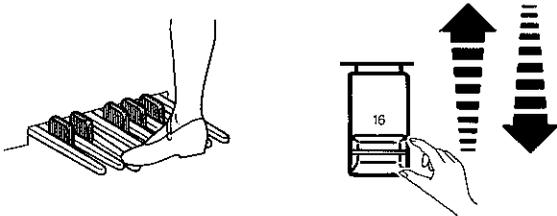
SR5



- (2) Use the PEDAL drawbars to adjust the tibia output.

Note:

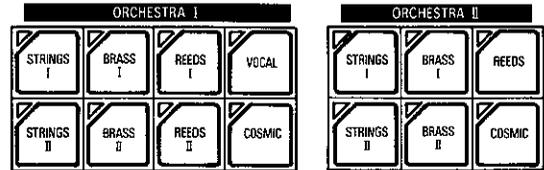
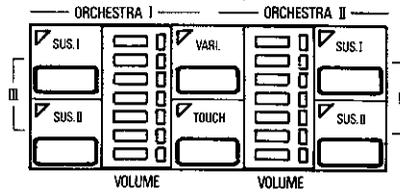
The only effect available for the PEDAL keyboard tibia is the SUSTAIN in the PEDAL ORCHESTRA control block.



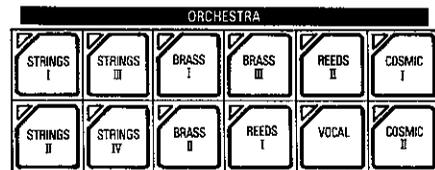
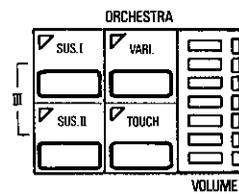
3.2 ORCHESTRA

The SR6 and SR7 offer a choice of two sections, ORCHESTRA I and ORCHESTRA II, for the UPPER and LOWER keyboards; the SR5 has only one (ORCHESTRA) each. All three models have a PEDAL ORCHESTRA section.

SR6, 7

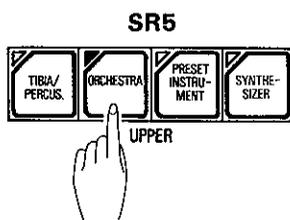
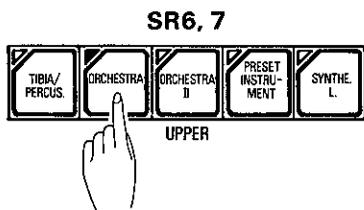


SR5



■ UPPER ORCHESTRA

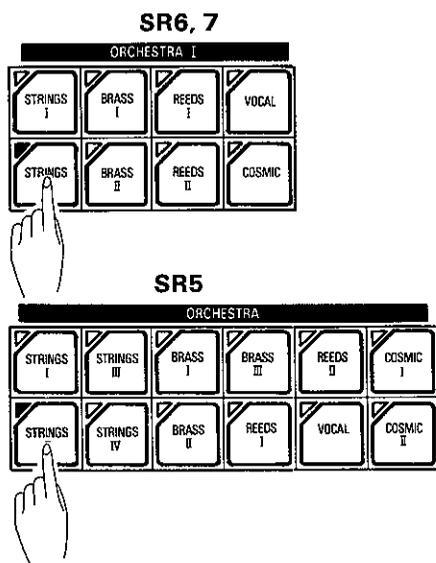
- (1) Changing registrations is as easy as pressing the ORCHESTRA I (ORCHESTRA on the SR5) switch in the KEYBOARD CONDUCTOR section.



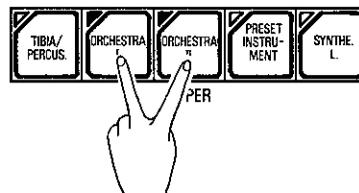
Note:

At this point, you may wish to double-check by sounding a note on the corresponding keyboard. If not, this entire step becomes optional.

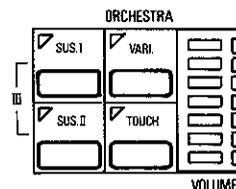
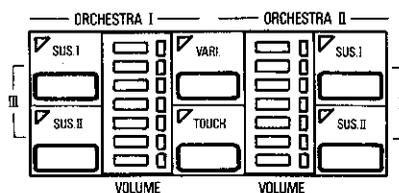
- (2) Select a tone from the ORCHESTRA I (ORCHESTRA on the SR5) section of the UPPER MANUAL control block. Only the last one pressed takes effect.



- (3) (OPTIONAL) if you wish to mix in an ORCHESTRA II tone (SR6 and SR7), simultaneously press the ORCHESTRA I and ORCHESTRA II switches in the KEYBOARD CONDUCTOR section.



- (4) (OPTIONAL) Add effects from the ORCHESTRA effect control block.



SUSTAIN (ORCHESTRA I) — This adds extra resonance (prolongs sound) to the ORCHESTRA I output. Pressing SUS I, SUS II, or both simultaneously (SUS III) provides three successively longer resonances.

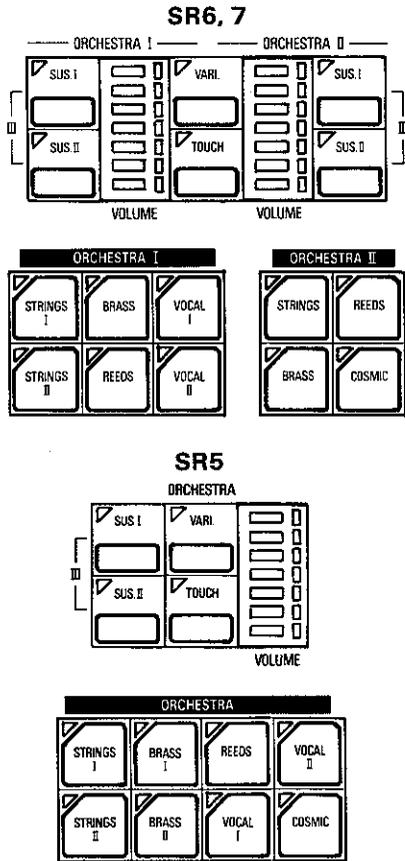
VARI — This adds variations to the output of both ORCHESTRA sections.

TOUCH — This allows you to control tone, volume and effect by varying the key force, speed, and pressure. You cannot, however, provide separate effects for the two sections.

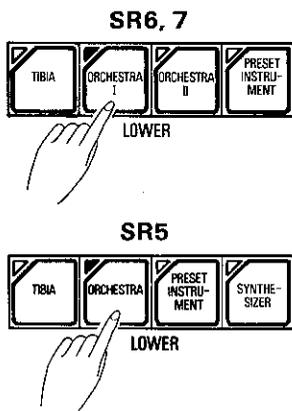
SUSTAIN (ORCHESTRA II) — This adds extra resonance (prolongs sound) to the ORCHESTRA II output. Pressing SUS I, SUS II, or both simultaneously (SUS III) provides three successively longer resonances.

- (5) Adjust the volume as necessary. There are separate volume controls for ORCHESTRA I and ORCHESTRA II.

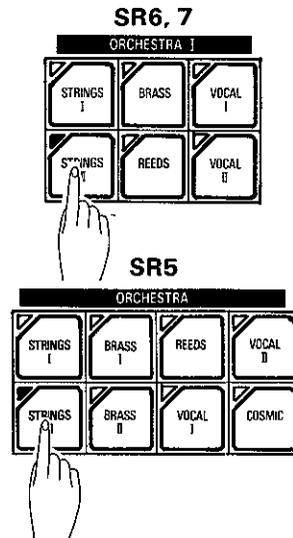
■ LOWER ORCHESTRA



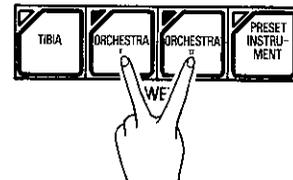
- (1) Changing registrations is as easy as pressing the LOWER ORCHESTRA I (ORCHESTRA on the SR-5) switch in the KEYBOARD CONDUCTOR section.



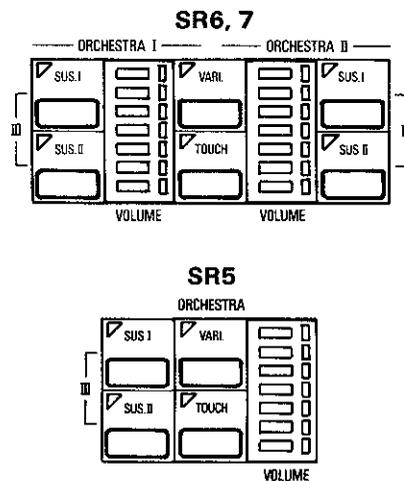
- (2) Select a tone from the switches in the ORCHESTRA I (ORCHESTRA on the SR5) section of the LOWER MANUAL control block. Only the last one pressed takes effect.



- (3) (OPTIONAL) If you wish to mix in an ORCHESTRA II tone (available only on the SR6 and SR7), simultaneously press the ORCHESTRA I and ORCHESTRA II switches in the KEYBOARD CONDUCTOR section.



- (4) (OPTIONAL) Add effects from the ORCHESTRA effect control block.



SUSTAIN — This adds extra resonance (prolongs sound) to the ORCHESTRA I output. Pressing SUS I, SUS II, or both simultaneously (SUS III) provides three successively longer resonances.

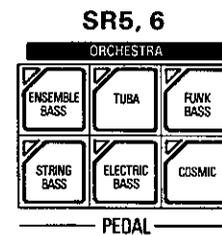
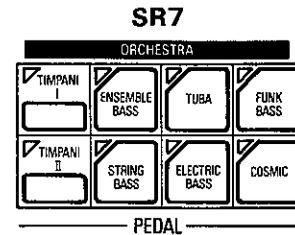
VARI — This adds variations to the output of both ORCHESTRA sections.

TOUCH — This allows you to control tone, volume and effect by varying the key force, speed, and pressure you apply to the keyboard.

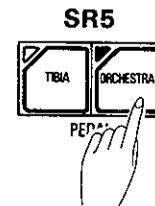
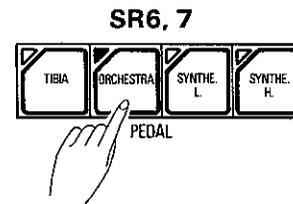
SUSTAIN (ORCHESTRA II) — This adds extra resonance (prolongs sound) to the ORCHESTRA II output. Pressing SUS I, SUS II, or both simultaneously (SUS III) provides three successively longer resonances.

(5) Adjust the volume as necessary. There are separate volume controls for ORCHESTRA I and ORCHESTRA II.

■ PEDAL ORCHESTRA



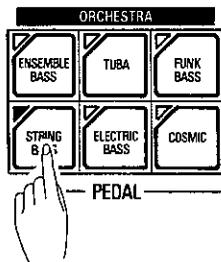
- (1) Changing registrations is as easy as pressing the PEDAL ORCHESTRA switch in the KEYBOARD CONDUCTOR section.



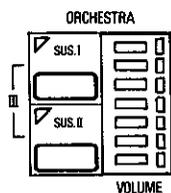
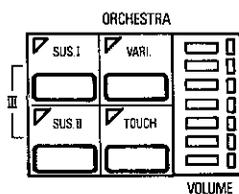
Note:

For the procedure for TIMPANI I and II, see p.17.

- (2) Select a tone from the ORCHESTRA section of the PEDAL control block. Only the last one pressed takes effect.



- (3) (OPTIONAL) Add effects from the ORCHESTRA effect control block.



SUSTAIN — This adds extra resonance (prolongs sound) to the PEDAL ORCHESTRA output. Pressing SUS I, SUS II, or both simultaneously (SUS III) provides three successively longer resonances. It does not affect TIMPANI I and II.

VARI (SR7 only) — This adds variations to the ORCHESTRA output. However, it does not effect the TIMPANI.

TOUCH (SR7 only) — This allows you to control tone and volume by varying the key force you apply on the keyboard.

- (4) Adjust the volume as necessary.

■ TIMPANI

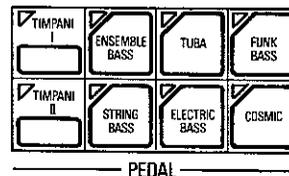
● Procedure

- (1) Press either the TIMPANI I or TIMPANI II switch so that the LED in the upper right hand corner starts flashing.

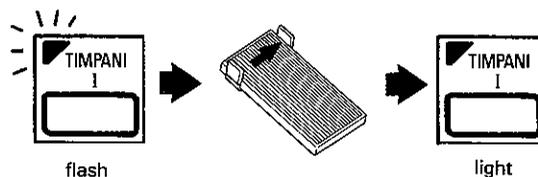
Notes:

- Pressing one TIMPANI switch automatically cancels the other.
- Unlike other tone switches, it is also possible to turn both off without using the PEDAL ORCHESTRA switches in the KEYBOARD CONDUCTOR section.

*When the LED is flashing, FILL INs and ENDING (p.26) are not available.



- (2) Press the right foot switch to light the LED and add the timpani to the PEDAL keyboard output.



- (3) Press the foot switch a second time to return the TIMPANI function to the standby mode.
- (4) To change from TIMPANI I to TIMPANI II or back again, simply press the corresponding switch. The change takes effect immediately no matter whether the TIMPANI function is active or just on standby.
- (5) To cancel the TIMPANI function, press the switch with the flashing or lit LED. The right foot switch then reverts to its normal FILL IN function. These changes take effect immediately no matter whether the TIMPANI function is active or just on standby.

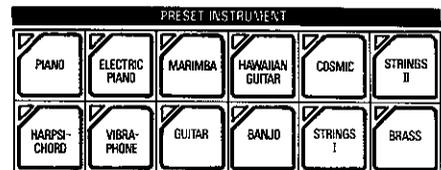
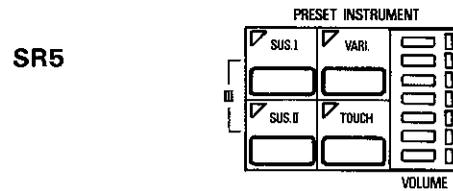
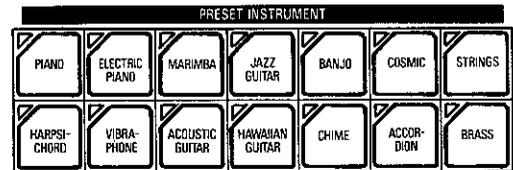
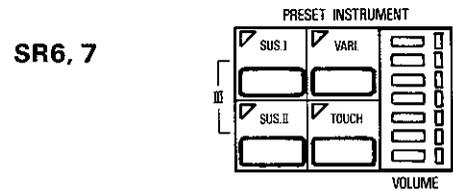
Notes:

- Timpani can be extremely effective at climaxes and other points in a musical piece, but overdone if the organist adds them to each stroke on the PEDAL keyboard. That is why Kawai engineers have provided a standby mode that allows you turn them on and off with a single touch on the foot switch.
- The timpani automatically include a fixed amount of sustain. This sustain is different from that in the ORCHESTRA sections: The length is not adjustable, and it cannot be turned off.
- If the AUTO PLAY ORCHESTRA is on, playing a note on the PEDAL keyboard automatically activates the TOUCH function. The sensitivity of the Touch function cannot be altered because the AUTO PLAY ORCHESTRA presets it.

3.3 PRESET INSTRUMENT

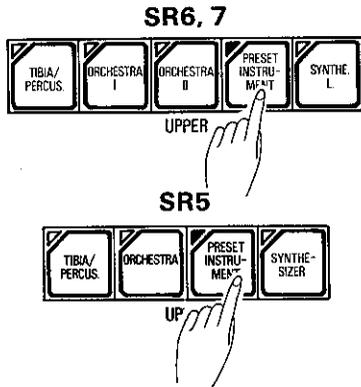
The SR Series of organs provides separate PRESET INSTRUMENT control sections for the LOWER and UPPER/SOLO (LOWER and UPPER on the SR5) keyboards.

■ UPPER/SOLO PRESET INSTRUMENT

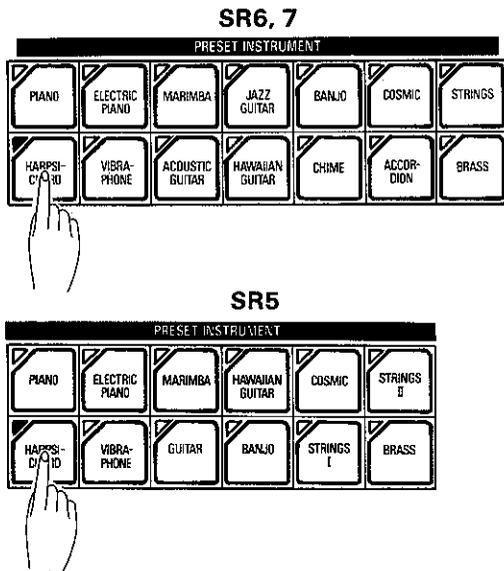


● Procedure

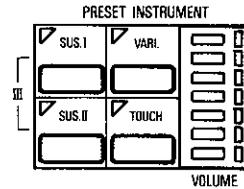
(1) Changing registrations is as easy as pressing the appropriate PRESET INSTRUMENT switch in the KEYBOARD CONDUCTOR section. There are two: UPPER PRE. INST for the SOLO keyboard (SR6 and SR7 only) and PRESET INSTRUMENT for the UPPER.



(2) Select a tone (instrument) from the ones offered in the UPPER/SOLO MANUAL section. Pressing a switch automatically cancels the preceding instrument.



(3) (OPTIONAL) Add effects.



SUSTAIN — This adds extra resonance (prolongs sound) to the PRESET INSTRUMENT output. Pressing SUS I, SUS II, or both simultaneously (SUS III) provides three successively longer resonances.

VARI — This adds a variation of sound to the PRESET INSTRUMENT output.

TOUCH — This allows you to control tone, volume and effect by varying the key force, speed, and pressure.

(4) Adjust the volume as necessary.

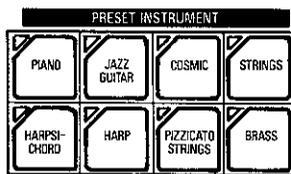
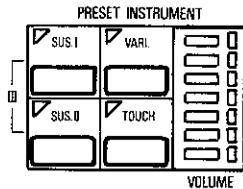
■ PRESET INSTRUMENTS

Certain instruments offer additional effects.

HAWAIIAN GUITAR — This automatically converts the right foot switch to the Glide function.

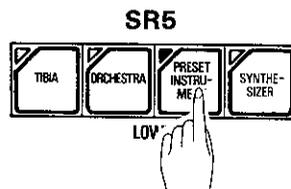
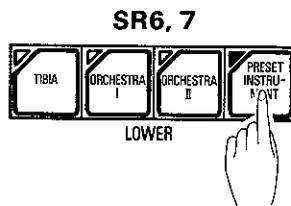
MARIMBA/BANJO — The organ continuously repeats notes. If the Touch function is on, the force applied on the keyboard determines the speed of this repetition.

■ LOWER PRESET INSTRUMENTS

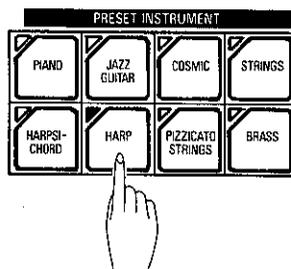


● Procedure

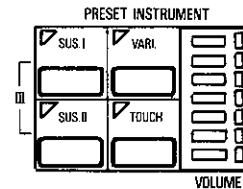
- (1) Changing registrations is as easy as pressing the LOWER PRESET INSTRUMENT switch in the KEYBOARD CONDUCTOR section.



- (2) Select a tone (instrument) from the ones offered in the LOWER MANUAL PRESET INSTRUMENT section. Pressing a switch automatically cancels the preceding instrument.



- (3) (OPTIONAL) Add effects.



SUSTAIN — This adds extra resonance (prolongs sound) to the PRESET INSTRUMENT output. Pressing SUS I, SUS II, or both simultaneously (SUS III) provides three successively longer resonances.

VARI — This adds a variation of sound to the PRESET INSTRUMENT output.

TOUCH — This allows you to control tone, volume and effect by varying the key force, speed, and pressure you apply to the keyboard.

- (4) Adjust the volume as necessary.

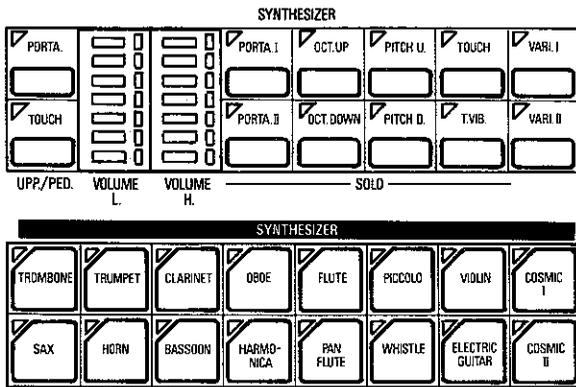
3.4 SYNTHESIZER

The SR6 and SR7 provide two synthesizers (SYNTHE. H and SYNTHE. L); the SR5, only one (SYNTHE.). Switches in the KEYBOARD CONDUCTOR section determine the synthesizer-keyboard connections.

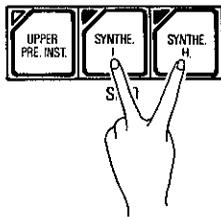
■ Restrictions

- * A synthesizer can only be used for one keyboard at a time.
- * SYNTHE. H (SR6 and SR7) can only be used with the SOLO or PEDAL keyboards; SYNTHE. L, with SOLO, UPPER, or PEDAL. The SR5 synthesizer is for the UPPER or LOWER keyboards.

■ SR6, 7

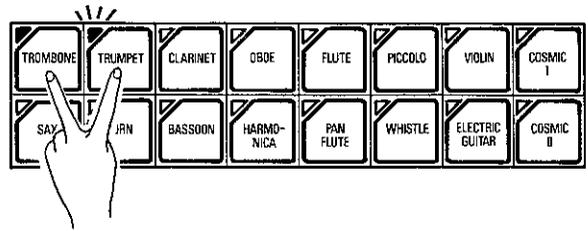


- (1) Press the SYNTHE. H and SYNTHE. L switches in the KEYBOARD CONDUCTOR SOLO section.

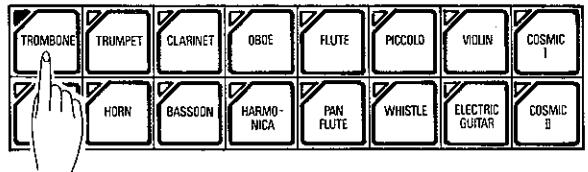


- (2) Select the tones (instruments) for both synthesizers from the SYNTHESIZER control block. If you wish the synthesizers to use different tones, hold down the switch for the SYNTHE. H tone and then press the one for SYNTHE. L. The LED in the SYNTHE. H switch will shine continuously; the one in the SYNTHE. L switch will flash. To return to the same tone for both, press a single switch so that its LED shines continuously.

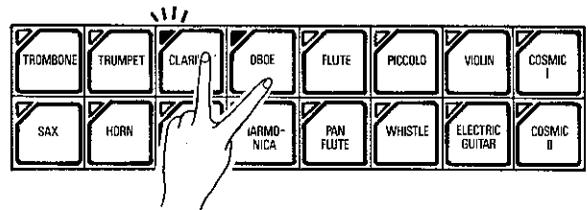
< Different tones >



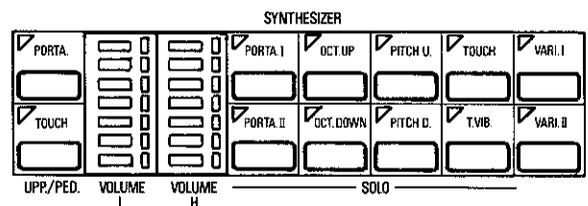
< Same tone >



- (3) To change to another pair not containing the currently lit or flashing LED, repeat the preceding step. The LEDs for the first pair will go out, and the ones in the new pair will come on.



- (4) Use the selector switches in the two EFFECT blocks on either side of the VOLUME controls to add any desired effects.



● **Left ... Effects for the UPPER and PEDAL keyboards**

PORTA — This smooths the transitions (continuous Glide) between notes for legato playing, volume and effect.

TOUCH — This allows you to control tone and volume by varying the key force, speed, and pressure you apply to the keyboard

● **Right ... Effects for the SYNTHESIZER on the SOLO keyboard**

PORTA — These smooth the transitions (continuous Glide) between notes for legato playing. Pressing PORTA I, PORTA II, or both simultaneously (PORTA III) provides three successively slower transitions.

OCT. UP and OCT. DOWN — These respectively raise and lower the synthesizer pitch one octave.

PITCH U and PITCH D — These respectively raise and lower the key pitch by up to a full tone. The pitch changes depends on the pressure applied to the key. Some pressure must be applied to the keyboard to achieve any pitch change.

TOUCH — This allows you to control tone, volume and effect by varying the key force, speed, and pressure you apply to the keyboard.

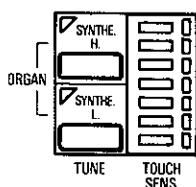
T. VIB. (Touch Vibrato) — This adds vibrato to the keyboard output. The amount and speed depend on the pressure applied to the key

VARI. I and VARI. II — These add variations of sound to the synthesizer output. they are also available for the UPPER and PEDAL keyboards and may be used in combination.

(5) Adjust the volume as necessary. The synthesizers are separately adjustable for all keyboards.

● **Synthesizer Tuning (SR7, 6)**

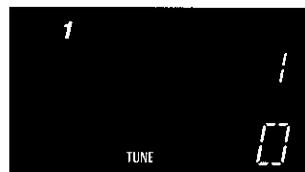
The SR Series allows you to adjust the pitch of the synthesizer relative to the other tones in increments of 1.5 cents up to a maximum of 45 cents on either side.



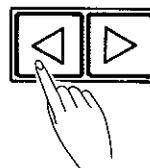
Note:

The idea behind this function is to use subtle pitch differences to add depth to the sound. It can, for example, simulate a duet by 2 individual instruments. Since no 2 musicians play perfectly in tune together, the change in pitch that you can achieve with the SR organ will give you a very authentic sound at 2 individual musicians playing a duet.

- (1) Press the SYNTH. H switch in the TUNE section to change the multifunction display to the one shown below.



- (2) Use the arrow switches in the RHYTHM section to adjust the relative pitch.



Note:

The display gives the relative pitch in units of 1.5 cents over the range 0—30 on either side.

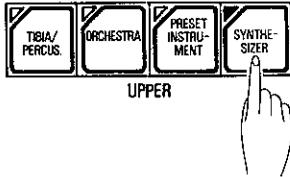
- (3) Press the SYNTH. H switch in the TUNE section a second time to return the multifunction display to the original contents.



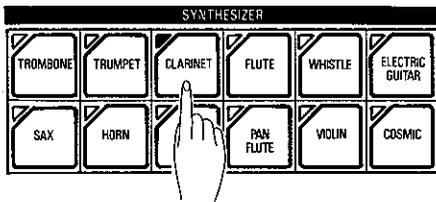
- (4) Repeat the above procedure for the SYNTH. L switch.

■ SR5

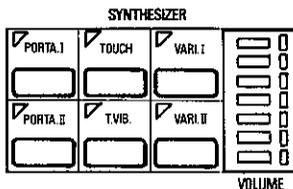
- (1) Press the SYNTHESIZER switch in the KEYBOARD CONDUCTOR section.



- (2) Select a tone from the SYNTHESIZER control block. Pressing a tone switch automatically cancels the current one.



- (3) (OPTIONAL) Add effects.



PORTA — These smooth the transitions (continuous Glide) between notes for legato playing. Pressing PORTA I, PORTA II, or both simultaneously (PORTA III) provides three successively faster transitions.

TOUCH — This allows you to control tone, volume and effect by varying the key force, speed, and pressure you apply to the keyboard.

T. VIB. (Touch Vibrato) — This adds vibrato to the keyboard output. The amount and speed depend on the pressure applied to the key.

VARI. I and VARI. II — These add variations of sound to the synthesizer output. They may also be used in combination.

- (4) Adjust the volume as necessary.

● Synthesizer Tuning (SR5)

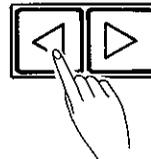
The SR Series allows you to adjust the pitch of the synthesizer relative to the other tones in increments of 1.5 cents up to a maximum of 45 cents on either side.



- (1) Press the SYNTHESIZER switch in the TUNE section to change the multifunction display to the one shown below.



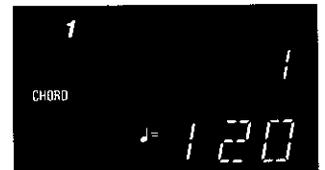
- (2) Use the arrow switches in the RHYTHM section to adjust the relative pitch.



Note:

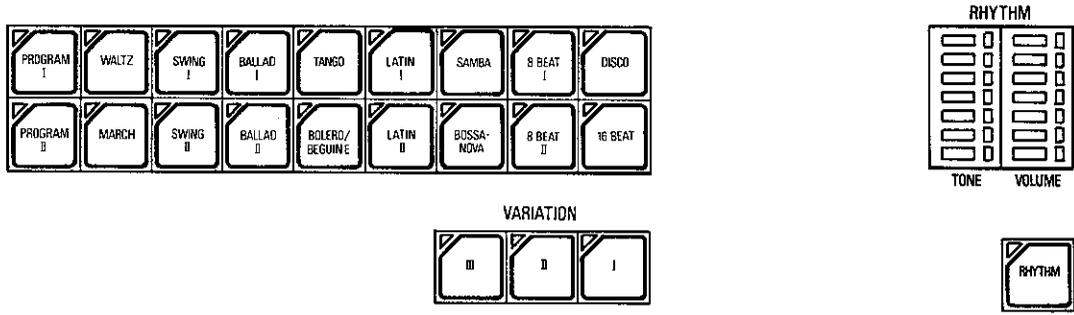
The display gives the relative pitch in units of 1.5 cents over the range 0—30 on either side.

- (3) Press the SYNTHESIZER switch in the TUNE section a second time to return the multifunction display to the original contents.



4. Rhythm Accompaniment

The rhythm section of your SR Series organ provides automatic rhythm accompaniment with a choice of 64 prerecorded rhythm patterns and eight programmable ones. Features include tempo control, special variations (intros, endings, and fill ins), hand percussion, and a multifunction display that gives the current tempo and other parameters. There are also advanced editing facilities which allow musicians to alter the standard patterns to suit their individual needs.



4.1 Procedure

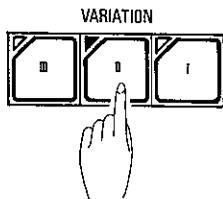
- (1) Select a rhythm pattern. Pressing one of the 18 selector switches automatically cancels the current one.



Note:

The organ ignores PROGRAM I or PROGRAM II if the corresponding programmed patterns (See p.29.) do not exist.

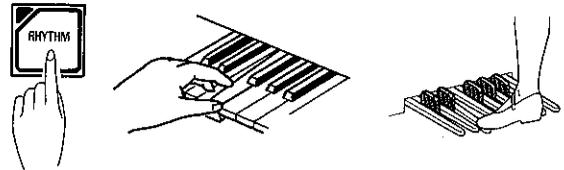
- (2) (OPTIONAL) Select a variation. The switches I, II, and III in the VARIATION section quadruple the number of patterns available to 72.



Note:

The LEDs in the selected switches light to remind you that the rhythm section is standing by.

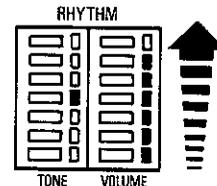
- (3) Activate the RHYTHM switch and play a note on the LOWER or PEDAL keyboards to start the rhythm accompaniment.



- (4) Adjust the volume and tone.

Note:

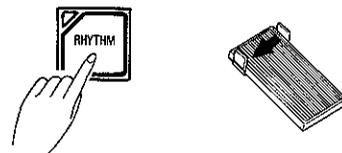
The upper end of the RHYTHM TONE control emphasizes the percussion sounds of higher pitch; while the lower end emphasizes the percussion sounds of lower pitch.



Note:

Only one or two LEDs are available in the TONE scale.

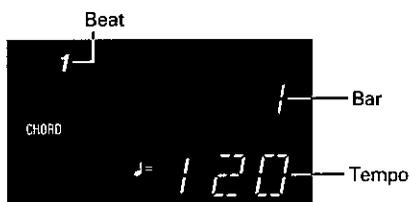
- (5) To stop the rhythm accompaniment, press either the RHYTHM switch or the left foot switch.



4.2 Additional Functions

■ Multifunction display

The display's most important function is to give the current tempo for the rhythm section, but serves other purposes as well:



- (1) **Tempo** — The lower right hand corner gives the tempo.
- (2) **Beat** — The numbers across the top light in sequence to keep pace with the beats.
1 — 2 — 3 — 4 or 1 — 2 — 3 (Waltz)
- (3) **Bar** — The two digits in the upper right hand corner indicate the bar (1 or 2) in the rhythm pattern. If the rhythm accompaniment is on, they indicate the number of the bar you are playing. Otherwise, the number "1" will always appear. (For a single-bar pattern, the number will also be just "1".)

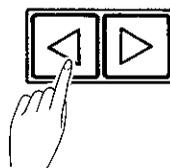
■ Tempo Control

The two arrow switches are for raising and lowering the tempo, respectively. (Left arrow — slower, Right arrow — faster)

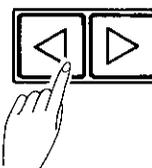
Note:

The organ's range is 50—300 beats per minute.

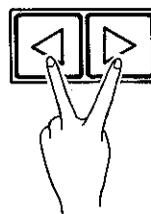
- (1) Tapping an arrow switch lightly changes the tempo by 1.



- (2) A heavy tap changes it by 5.
- (3) Continuous pressure changes it in steps of 10.



- (4) Applying greater pressure increases the rate at which the display changes.
- (5) Simultaneously pressing both keys doubles the current tempo. Pressing them a second time restores the original tempo.



Notes:

- If the tempo is above 150, the tempo after this doubling operation will be 300, the fastest available.
- If the rhythm accompaniment or the AUTO PLAY ORCHESTRA is activated, the quarter note next to the tempo display digits flashes only on the first beat of the bar. Otherwise, it flashes on every beat.

■ TAP TEMPO

The TAP TEMPO switch provides an alternate, more direct method for changing the tempo.



● Procedure

- (1) If the rhythm accompaniment is on, press the RHYTHM switch to deactivate it.
- (2) Press the TAP TEMPO switch three times at the desired tempo. The organ will measure the intervals and automatically change the value on the display. The rhythm will automatically change to the speed you tap in.

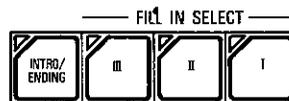


Note:

Tapping the switch while the rhythm accompaniment is on — changes the tempo from the next bar. This facility makes it much easier to change tempos during a performance.

■ FILL INs, INTRO, and ENDING

The four switches in this section offer the musician five prerecorded variations on the current rhythm pattern — a pattern which normally just repeats. The first two, INTRO and ENDING, provide an introduction and wrap-up ending, respectively. The other three produce variations of rhythm breaks or fill-ins for use during the performance.

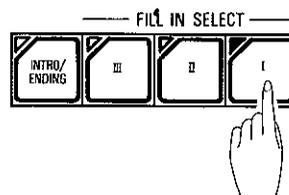


■ Procedure (FILL IN)

- (1) Make sure that the rhythm accompaniment is on standby — that is, that the LED in the RHYTHM switch is on. If the LED is off, fill-ins are not available.



- (2) Press one of the FILL IN SELECT switches. (FILL IN III provides a break pattern.)



Note:

You may also do this while the rhythm accompaniment is on.

- (3) Activate the rhythm accompaniment and play. When you need a fill-in, press the right foot switch. The rhythm pattern first switches to the fill-in pattern and then back to the regular pattern when the fill-in is over.



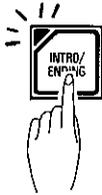
- (4) Alternatively, if the rhythm accompaniment is on standby, press the right foot switch to play the fill-in followed by the regular pattern.

■ Procedure (INTRO)

- (1) Make sure that the rhythm accompaniment is on standby — that is, that the LED in the RHYTHM switch is on. If the LED is off, intros are not available.



- (2) Press the INTRO/ENDING switch.

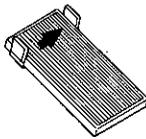


Note:

After a one-bar introduction, the rhythm accompaniment starts. The LED in the INTRO/ENDING switch flashes during the introduction and then goes out.

■ Procedure (ENDING)

- (1) Start the rhythm accompaniment by striking a key of the LOWER keyboard. The organ cannot supply an ending to a pattern that is not active.
- (2) Press the INTRO/ENDING switch.
- (3) When you near the point where you want the ending, press the right foot switch.



After the ending, the rhythm accompaniment stops. The LED in the INTRO/ENDING switch flashes during the ending and then goes out.

4.3 Hand Percussion

The SR Series provides not only prerecorded rhythm patterns, but also solo percussion instruments. These are accessible through two means: the LOWER keyboard and touch bars located just below that keyboard.

■ Procedure (LOWER keyboard)

- (1) Press the HAND PERCUS switch so that the LED lights and the message VA.0 (VARIATION 0) appears on the screen.



Note:

Switching over to hand percussion disables the automatic accompaniment, and most other functions which use the LOWER keyboard.

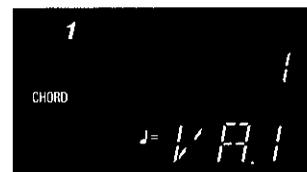
- (2) Press the keys for the desired percussion instruments.

Notes:

- The volume depends on the force of the keystroke.
 - There are four sets of labels under the keys. The top row is for the black keys. The other three are for the white keys and cover the percussion instrument and two variations (VARI. 1 and VARI. 2).
- (3) Press the special white key, labelled VARI. 1, at the right end of the keyboard to change the instrument assignments for the white keys from the second row to the third.

Note:

The message VA.1 should appear on the display.



(4) Press the VARI. 2 next to it for those in the fourth row.

Note:

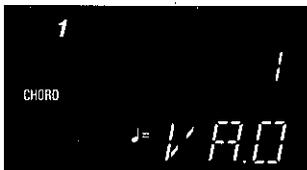
The message VA.2 should appear on the display.



(5) To return to the original assignments, press the most recent VARI key a second time.

Note:

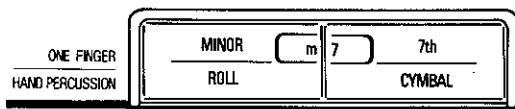
The message VA.0 should appear on the display.



Notes:

- Pressing either of the arrow switches in the RHYTHM section displays the tempo for a few seconds.
- Activating the hand percussion function does not turn off the automatic rhythm accompaniment. You must use either the right foot switch or turn off the RHYTHM switch. To restart the accompaniment, activate the RHYTHM switch and press either the INTRO/ENDING switch or a FILL IN switch and the right foot switch.
- The SR Series also allows you to modify the key assignments. (See p.35.)

■ **Touch bars**



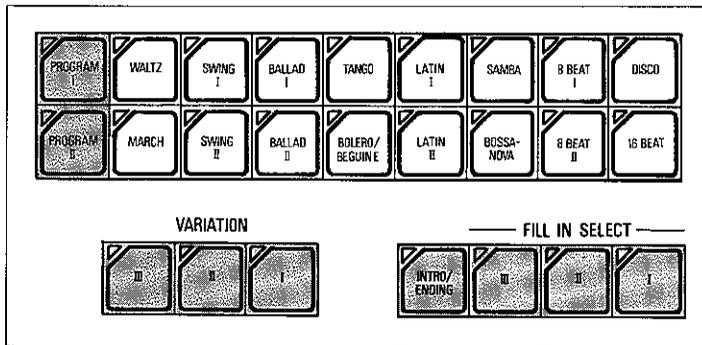
The touch bars located just below the LOWER keyboard provide instant access to a snare drum roll and cymbal crash, usually the two most popular percussion effects. The roll continues as long as the touch bar is pressed; the cymbal crash sounds only for the initial stroke. The volume of the output depends on the force of the keystroke.

Notes:

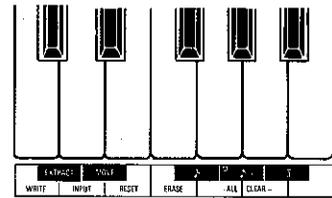
- This type of hand percussion cannot be used at the same time as the ONE-FINGER chord function. (See p.38.)
- The SR Series also allows you to change the touch bar assignments to percussion instruments other than the snare drum and cymbals. (See p.35.)

4.4 Program Rhythms

The SR Series rhythm section provides two locations, PROGRAM I and PROGRAM II, for storing edited versions of its standard, prerecorded rhythm patterns. Since there are 16 prerecorded patterns and two programmable ones, each with a standard version and three variations, you have a choice of 72 starting points. Similarly, you can also edit and store variations, FILL INs, INTROs, and ENDINGs for the new rhythm patterns in PROGRAM I and PROGRAM II.



Starting points
Storage locations



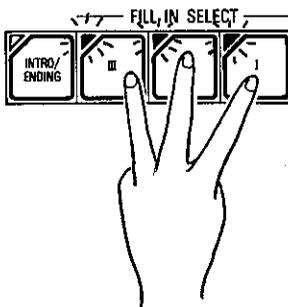
I. Basic Procedure

■ Preliminaries

- (1) Simultaneously press all three FILL-IN SELECT switches so that their LEDs all flash and those in the other selector switches go out.

Note:

The message VA.0 should appear on the display.



- (2) Try the keys on the LOWER keyboard. Note how the volume depends on the force and speed of the keystroke.

Note:

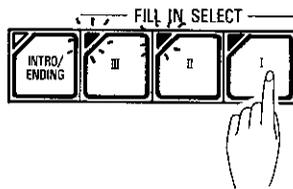
The TOUCH SENS control allows the musician to adjust the keyboard's touch response. The higher the setting, the higher the sensitivity.



- (3) Select the rhythm pattern that will serve as the starting point. (See illustration above.)

Note:

If you wish to edit the VARIATION or FILL-IN data for a particular rhythm pattern, press the base pattern switch first and then the VARIATION or FILL-IN switch. In the latter case, the LED in the selected FILL-IN switch will burn steadily, and the other two will continue flashing. (For the editing procedures for INTRO/ENDINGs and ENDINGs, see "II. Advanced Procedures" on p.32.)



Note:

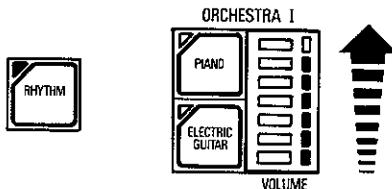
At this point, the bar length (1 or 2) appears on the top half of the multifunction display.



Note:

An F appears in the lower left hand corner of the display to remind you that you are editing a FILL-IN pattern.

- (4) Press the RHYTHM switch to start the rhythm pattern and the metronome.

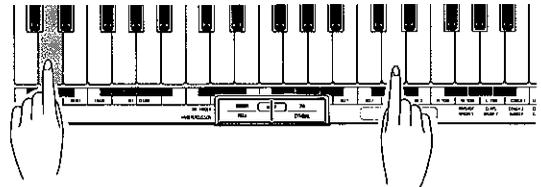


Note:

Adjust the metronome volume with the ORCHESTRA I VOLUME control in the AUTO PLAY ORCHESTRA section. The tempo appears in the lower right hand corner of the screen only if you change the tempo—and then only for a few seconds.

■ Adding Notes

- (5) To add to the pattern, hold down the key labelled INPUT (the first D on the lower keyboard) and use the hand percussion keyboard to record the instruments, their patterns, and relative volumes.

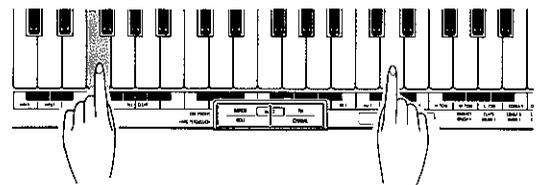


Notes:

- Any changes made to the rhythm pattern take effect immediately.
- New notes for a particular instrument already in the pattern do not replace existing ones. Rather, they are added in.
- The rhythm section supports up to six instruments for any given beat. It ignores any attempts to add a seventh instrument.
- The rhythm section does not accept touch bar input.

■ Deleting Notes

- (6) To eliminate notes for a particular instrument from the pattern, hold down the key labelled ERASE (the first F on the lower keyboard) and press the corresponding instrument key for the stretches that you wish to delete.

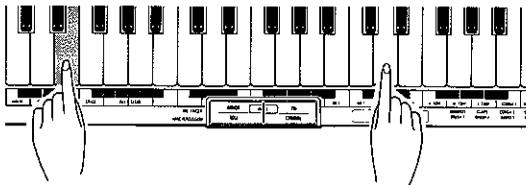


Note:

Any changes made to the rhythm pattern take effect immediately.

■ Starting Over

- (7) To restore a particular instrument to its starting pattern, hold down the key labelled RESET (the first E on the lower keyboard) and press the instrument key.

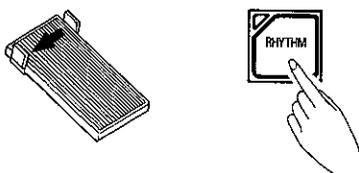


Notes:

- This function is for those situations in which errors in insertions or deletions have produced an unacceptable pattern. Unlike the ERASE key, the timing does not matter.
- Any changes made to the rhythm pattern take effect immediately.
- If this instrument was a new one that was not originally in the pattern, the RESET function will erase your entire pattern.

■ Stopping

- (8) Press the left foot switch or the RHYTHM switch to stop the rhythm accompaniment. You then have a choice:
- * Press the RHYTHM switch a second time to restart the rhythm accompaniment for more editing.
 - * Return to step 2, select another rhythm pattern or variation, and thereby abandon the results of the current editing session.

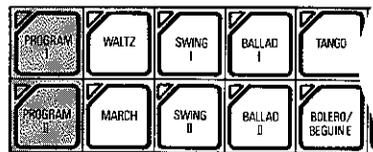
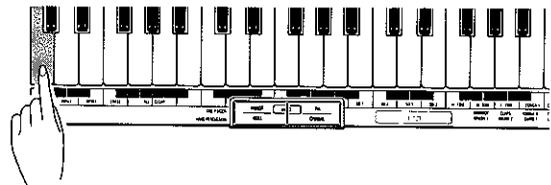


Note:

Pressing the foot switch turns off the LED in the RHYTHM switch.

■ Writing

- (9) Holding down the key labelled WRITE (the first C on the lower keyboard), press the switches for the desired storage location: PROGRAM I or PROGRAM II switch with possibly the FILL IN switch or the INTRO/ENDING switch.



Notes:

- Pressing the WRITE key turns off the LEDs in the rhythm and variation selector switches and sets those in the three FILL IN switches flashing.
- If you press a FILL IN switch before pressing the PROGRAM I or PROGRAM II switch, its LED will not light. If you press the wrong switch, you may, if you are still holding the WRITE key down, recover from the error by pressing the correct switch.
- Cancelling the WRITE command, returning to step 3, and selecting another rhythm pattern or variation erases the results of the current editing session. You may, however, change the FILL IN, INTRO, or ENDING specification without losing your work.

● WARNING

The above WRITE procedure automatically overwrites the current memory contents with the new pattern. If you plan to make extensive use of this programming capability, we recommend that you maintain careful records of what you have saved and where.

- (10) Release the WRITE key to start the WRITE operation. The process takes only a few seconds.

Note:

The message OK appears on the display when the operation is complete.



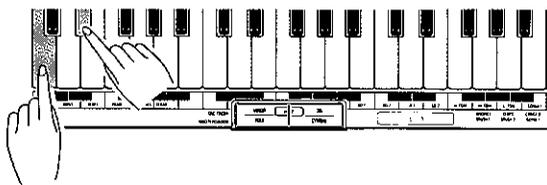
- (11) If the message OK does not appear, go back to step 9.

Note:

The organ will not allow you to store a FILL-IN, INTRO, or ENDING pattern as PROGRAM I or PROGRAM II. Neither will it let you store patterns for these two areas in the areas designated for these rhythm variants.

■ Exchanging the Data of PROGRAM I and II

- (12) Press the rhythm selector and VARIATION, FILL-IN and/or INTRO/ENDING switches which LEDs are lighting so that they all will go out.
 (13) Simultaneously press the MOVE and WRITE keys on the lower keyboard.

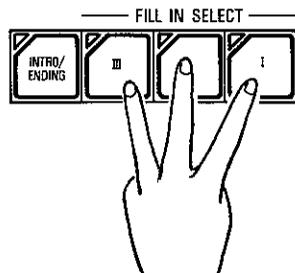


■ Quitting

- (14) Simultaneously press all three FILL IN SELECT switches so that their LEDs stop flashing and go out.

Note:

This command is available at all times during the editing session.



II. Advanced Procedures

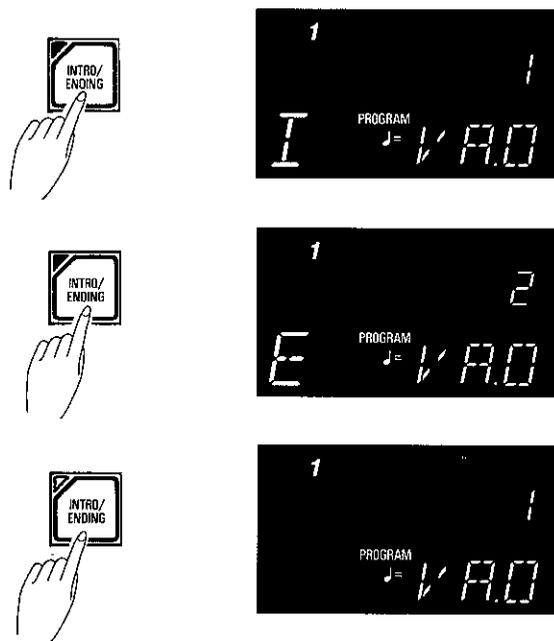
■ Editing INTROs and ENDINGS

Repeat steps 1-3 of the basic pattern (p.29).

- (1) Specify INTRO or ENDING: Press the INTRO/ENDING switch once for INTRO, twice for ENDING, or a total of three times to cancel.

Note:

The lower left hand corner of the display indicates the three possible states with an I, E, and blank, respectively.



- (2) Press the RHYTHM switch and edit with the basic procedure.



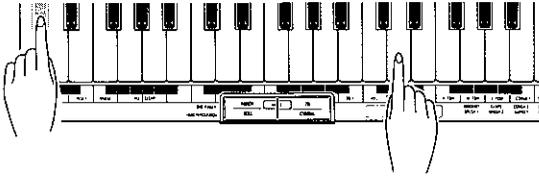
- (3) To store the results, hold down the key labelled WRITE (the first C on the lower keyboard), press the switches for the appropriate storage area, and then release the WRITE key.

Note:

The WRITE operation automatically clears the INTRO/ENDING switch setting.

■ Listening to a Particular Instrument

- (1) To limit the rhythm pattern to a particular instrument, hold down the key labelled EXTRACT (the first C# on the lower keyboard) and press the key corresponding to that instrument.



- (2) To add other instruments, keep the EXTRACT key switch pressed and press the appropriate keys corresponding to the instruments you would like to add.
- (3) Release the EXTRACT key to return to the complete pattern.

■ Correcting Timing Errors

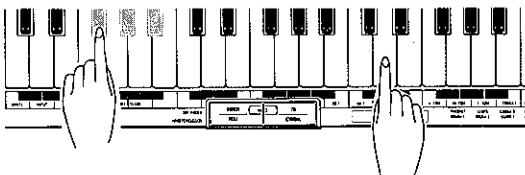
It is often difficult to ensure precise timing when the pattern contains a number of instruments. The SR Series therefore provides facilities for automatically adjusting note positions so that they line up at regular intervals within the bar.

<During Input>

- (1) Specify the timing interval by holding down the appropriate key combination — ♪ (the first F# on the lower keyboard) or ♪ (the first G#) plus the optional triplet (the first A#) — as you add notes to the pattern. The organ will then automatically shift notes that are not at the exact positions. (See chart on the next page for examples.)

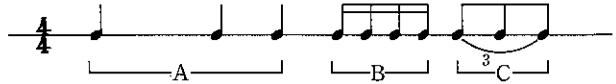
Note:

This function does not affect the position of any existing notes for the same instrument.



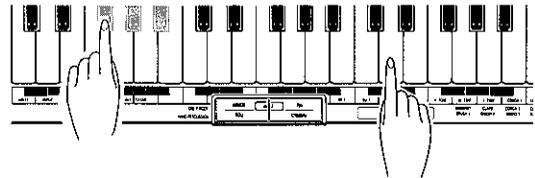
● Compound Example

This pattern requires the use of three different timing intervals: ♪ for the part labelled A, ♪ for B, and ♪ and triplets for C.



<After Input>

- (1) Stop the rhythm.
- (2) Specify the timing interval by holding down the appropriate key combination — ♪ (F#) or ♪ (G#) plus the optional triplets (A#).

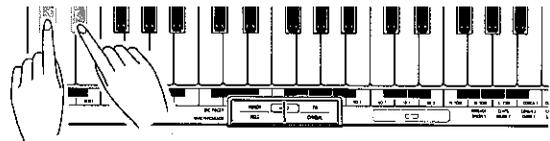


- (3) Without releasing this combination, press the key for an instrument to automatically align the entire pattern for that instrument.

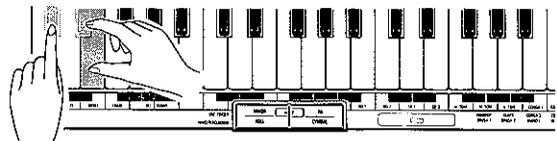
■ Delays

A built-in function allows you to introduce a slight delay between an instrument and the others.

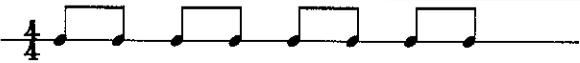
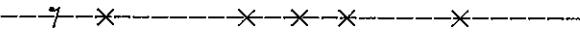
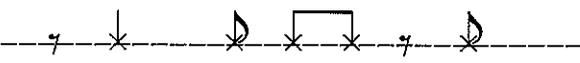
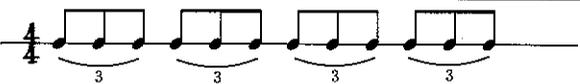
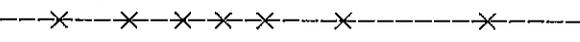
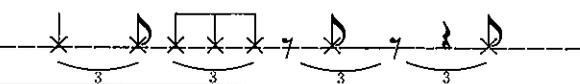
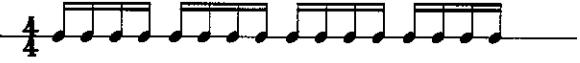
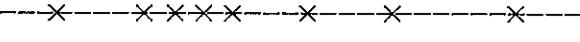
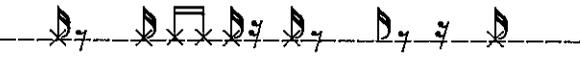
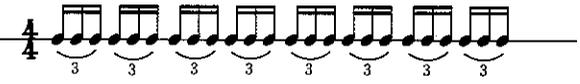
- (1) Use the EXTRACT key to select the desired instruments.
- (2) Hold down the EXTRACT key and press the MOVE key to introduce slight delays for particular segments. The delay time depends on the tempo.



- (3) To shift the instrument back to the original position for a particular segment, hold down the EXTRACT key and press both the MOVE and RESET keys.



<Examples>

	<p>Desired Timing </p> <p>Input </p> <p>Corrected Version </p>
	<p>Desired Timing </p> <p>Input </p> <p>Corrected Version </p>
	<p>Desired Timing </p> <p>Input </p> <p>Corrected Version </p>
	<p>Desired Timing </p> <p>Input </p> <p>Corrected Version </p>

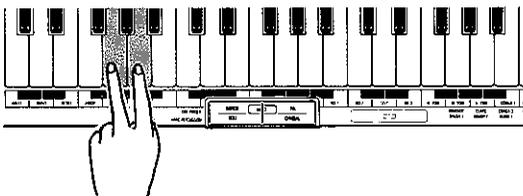
■ Starting from Scratch — ALL CLEAR

- (1) For the first two steps of the general procedure, choose a prerecorded pattern with the same time signature and length in bars.

Note:

These parameters automatically appear on the multi-function display whenever you select a rhythm pattern.

- (2) Simultaneously press the two keys labelled ALL CLEAR (the first G and A on the lower keyboard).



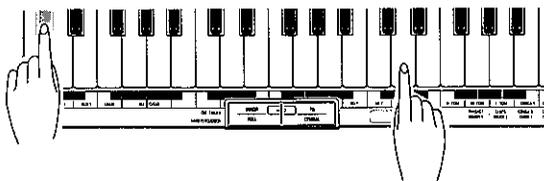
- (3) Press the RHYTHM switch to start the metronome.
- (4) Record and edit the new pattern with the same techniques as the basic procedure.

■ Changing Hand Percussion Assignments

The RHYTHM section's programming capabilities can extend as far as allowing you to change the hand percussion keyboard assignments.

<LOWER keyboard>

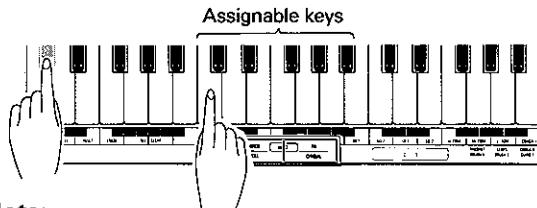
- (1) Repeat step 1 of the basic procedure.
- (2) Hold down the EXTRACT (C#) key and press the key for the instrument that you wish to reassign.



Note:

If you press more than one, the organ chooses the last key pressed.

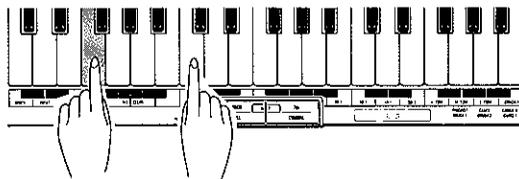
- (3) Without releasing the EXTRACT key, press the key to receive this new assignment.



Note:

If you press more than one, the organ assigns the instrument to them all.

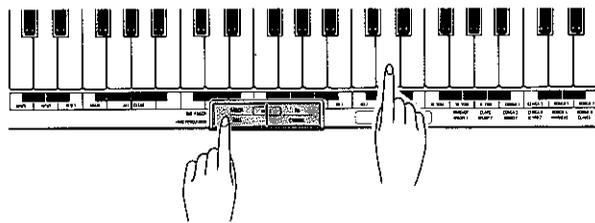
- (4) To cancel the assignment, hold down the ERASE (F) key and press the key to be cleared.



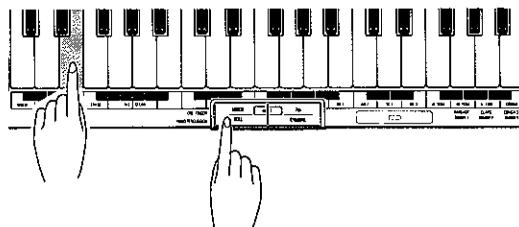
- (5) Quit the programming mode with step 14 of the basic procedure.

<Touch bars>

- (1) Repeat step 1 of the basic procedure.
- (2) Hold down the key for the desired instrument and press the touch bar to which you wish to assign it.



- (3) To return a touch bar to its standard setting (snare drum roll or cymbal crash), hold down the RESET key and press the touch bar.



- (4) Quit the programming mode with step 14 of the basic procedure.

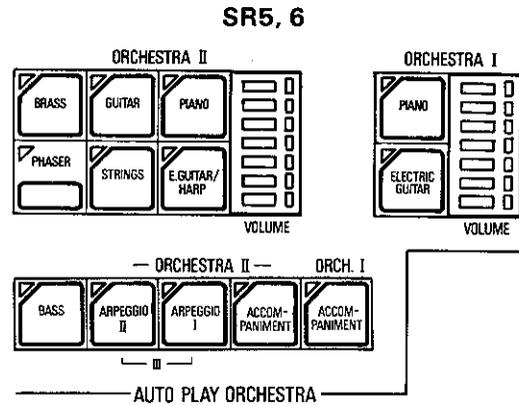
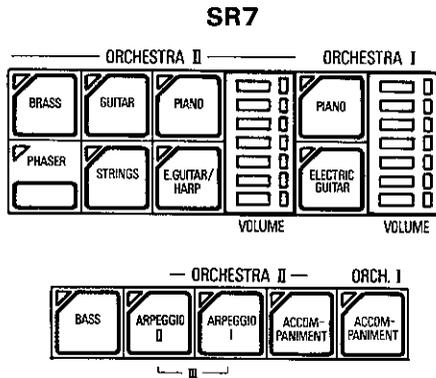
5. Auto Accompaniment System

5.1 AUTO PLAY ORCHESTRA

This section offers automatic bass accompaniment as well as automatic accompaniment by piano, guitar, harp, brass and other instruments. It also contains the ORCHESTRA I and ORCHESTRA II, two automatic chord accompaniment systems which may be used separately or together.

Note:

This function is not available, if program rhythm I or II is selected.



■ **Tone/Effect Blocks**

ORCHESTRA I section — These switches control the tone and volume for ORCHESTRA I.

ORCHESTRA II section — These switches control the tone and volume for ORCHESTRA II.

PHASER — This switch adds a phaser effect to the ORCHESTRA II output. It doesn't take effect for the STRINGS.

■ **Pattern Selection Switches**

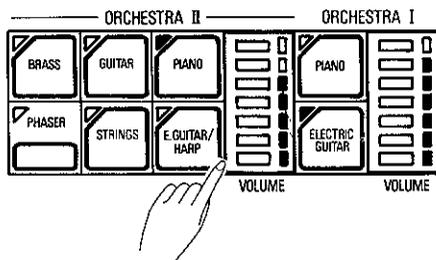
BASS — This switch adds an automatic bass accompaniment based on the KEYBOARD CONDUCTOR and tone settings for the PEDAL TIBIA and PEDAL ORCHESTRA.

ARP I and ARP II — These switches, singly or together as ARP III, add ORCHESTRA II arpeggios.

ACCOMPANIMENT — These switches add ORCHESTRA I and ORCHESTRA II chord accompaniments that match the chosen rhythm.

● **Procedure**

- (1) Select the tones for the ORCHESTRA I and ORCHESTRA II sections and adjust the volumes.



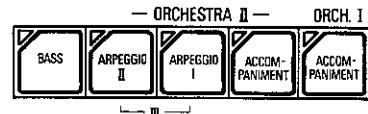
Notes:

- Although each section normally uses only a single tone — selecting a new one automatically cancels the old — you may add the PHASER effect to the ORCHESTRA II tone.
- The E. GUITAR/HARP switch in the ORCHESTRA II section produces an electric guitar tone when the ACCOMPANIMENT II switch is on and a harp voice when the arpeggios function (I, II, or III) is on.

Note:

The ORCHESTRA II BRASS tone is not one tone, but five. The organ automatically selects the one best matching the rhythm pattern.

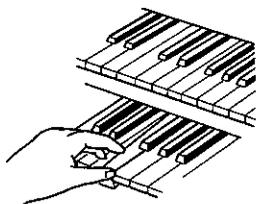
- (2) Select patterns to place them on standby. (The LEDs light to indicate this status.)



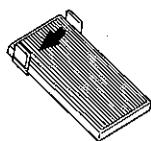
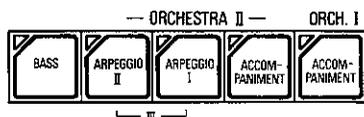
Note:

It is not possible to mix ORCHESTRA II patterns.

- (3) Play a chord on the LOWER keyboard to start the automatic accompaniment.



- (4) To turn off the automatic accompaniment, press either the pattern switch or the left foot switch.

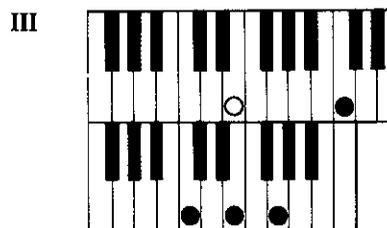
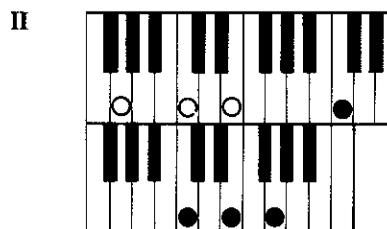
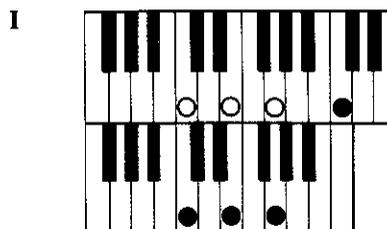


5.2 AUTO MELODY CHORD

These three functions add harmony to the UPPER keyboard melody line in the form of a note or notes from the LOWER keyboard chord. The first adds the complete chord to the octave immediately below the lowest note on the UPPER keyboard. The second spreads the chord over a wider area (open harmony). The third is a duet effect which adds just a single note.

Note:

This duet effect is not available on the SR5.



Note:

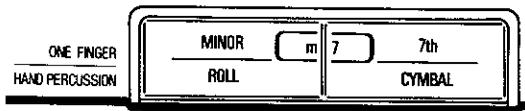
The black circles indicate the notes actually played; the white, notes added by the AUTO MELODY CHORD function.

5.3 ONE FINGER, MEMORY, and CONSTANT Functions

These three functions respectively tell the organ to fill in the rest of a chord from a single note (ONE FINGER), continue playing chords even after you have removed your hand from the lower keyboard (MEMORY), and change the chord accompaniment to solid (continuous sound — no strumming effect) chords (CONSTANT).



ONE FINGER — This function, which applies to the AUTO PLAY ORCHESTRA and AUTO MELODY CHORD allows you to play a complete major chord with only one finger and others with at most two fingers: one on the base note and the other on the touch bars located under the LOWER keyboard. The touch bars change the major chord into a minor one; a seventh chord, or the combination, minor seventh.



Note:

Activating the ONE FINGER function disables the touch bars' hand percussion function.

MEMORY — This function, which applies to the AUTO PLAY ORCHESTRA and AUTO MELODY CHORD functions, repeats the current chord pattern even after you remove your hand from the LOWER keyboard. It is therefore only necessary to give the organ the chord changes.

CONSTANT — This function changes the automatic accompaniment to solid chords which sound continuously. It automatically sets ORCHESTRA I to BRASS and ORCHESTRA II to STRINGS. The bass part offers a choice of all tones available for the PEDAL TIBIA and PEDAL ORCHESTRA, but only TIBIA, ENSEMBLE BASS, and TUBA provide continuous chords. For the others, the chord stops when you release the keys.

Note:

Pressing this switch disables the tone/effect switches for the ORCHESTRA I and II.

5.4 ONE TWO PLAY

The ONE TWO PLAY function automatically selects an appropriate registration for the current rhythm pattern.



Note:

This function is not available for programmed rhythms. Pressing the ONE TWO PLAY switch for the PROGRAM I and PROGRAM II patterns produces no changes.

● Procedure

- (1) Press the ONE TWO PLAY switch to automatically change the panel settings to ones appropriate for the current rhythm pattern.



Note:

The function automatically changes the drawbar settings as well, lighting the LED in the DRAWBAR switch in the REGISTRATION MEMORY section, but treats them somewhat differently. (See next note.)

- (2) Adjust the registration as necessary.

Note:

At this point, the drawbar settings are not adjustable. The only way to change them is to press the DRAWBAR switch (lamp goes out) to return them to the actual manual settings and then adjust the drawbars.



6. Registration Memory

The registration memory section, which is located between the upper and lower keyboards, allows you to store up to seven (five on the SR5) of your own registration combinations for instant recall. These combinations consist of not just the organ registration, but also rhythm, volume, automatic accompaniment, and other parameters. This section also provides an equal number of permanent, built-in combinations.

SR6, 7



SR5



Numbered switches — These indicate the memory areas available. The user combinations share these switches with the preset ones, but the areas are, in fact, different.

PRESET — This switches between the user combinations and the preset ones.

WRITE — This copies the current combination to your choice of memory area.

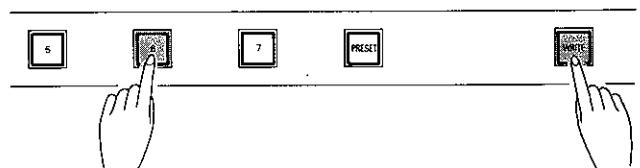
RHYTHM FIX — Activating this switch tells the organ to leave the rhythm and automatic accompaniment at the current settings so that pressing a numbered switch changes only the tone settings.

DRAWBAR — This copies the drawbar settings from the registration section to the organ. This switch is automatically activated, when one of the numbered switch is pressed.

■ Storing a Registration

● Procedure

- (1) Adjust the drawbars and set the desired selector switches.
- (2) Hold down the WRITE switch and press a number switch.



● **Memory contents**

- (1) User-programmed — Each area holds the following set of data:
 - * All panel settings except TOTAL VOLUME, MULTIPHONIC, LIGHT, and TUNE
 - * SYNTHETUNE setting(s)
 - * KEYBOARD CONDUCTOR settings
 - * ALL RHYTHM, automatic accompaniment, TEMPO, and AUTO MELODY CHORD settings except ONE TWO PLAY
 - * Drawbar settings

Note:

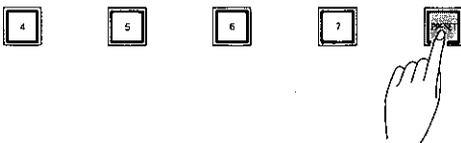
It is not possible to store user-programmed rhythms themselves.

- (2) Preset registrations — Each memory area holds the following set of data:
 - * All panel settings except TOTAL VOLUME, MULTIPHONIC, LIGHT, and TUNE
 - * SYNTHETUNE setting(s)
 - * KEYBOARD CONDUCTOR settings
 - * Drawbar settings

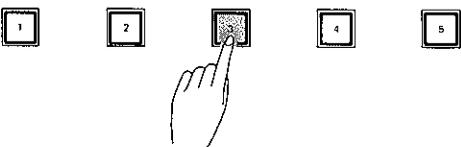
■ **Recalling a Registration**

● **Procedure**

- (1) If necessary, press the PRESET switch to change between the preset and user-programmed data areas.



- (2) Press the appropriate number switch so that it lights

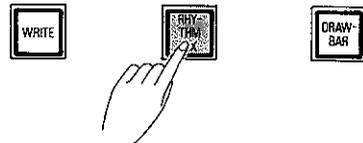


- (3) Adjust the registration settings as desired. To change the loaded drawbar settings, press the DRAWBAR switch so that the lamp goes off, and adjust the drawbars.

Note:

Once loaded, these drawbar settings cannot be altered.

- (4) (OPTIONAL) Press the RHYTHM FIX switch to lock the rhythm and automatic accompaniment sections at the current settings so that subsequent recalls change only the tones



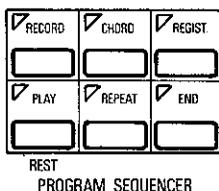
- (5) (OPTIONAL) Press the RHYTHM FIX switch a second time and then the appropriate number switch to recall rhythm and automatic accompaniment settings.



- (6) To return to the settings in effect before recalling the stored data, press the number switch to turn it off.

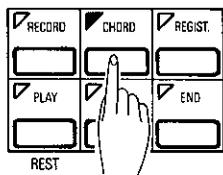
7. Program Sequencer

SR Series organs feature a program sequencer which allows you to save chord and registration sequences for later playback. If a particular piece is too difficult or too complicated for you to play all at one, you can store the chords and registrations and have the organ assist you. You can even build a library of such data on IC cards. (See p.46.)

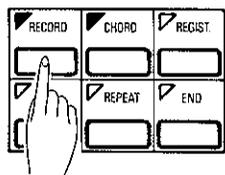


7.1 Storing Chords

- (1) Set the rhythm, automatic accompaniment, and other desired parameters.
- (2) Press the CHORD switch.

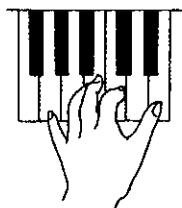


- (3) Press the RECORD switch.

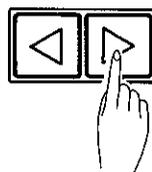


Note:
The word PROGRAM should appear on the multi-function display along with the bar and beat number.

- (4) Strike the chord for the first beat of the first bar on the LOWER keyboard and check the name that appears in the lower left hand corner of the display.

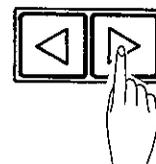
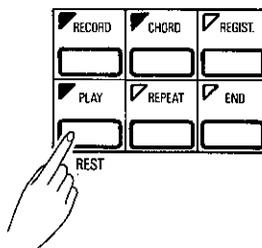


- (5) Without releasing the chord, press the right arrow switch to store the chord and advance the display from the first beat to the second.

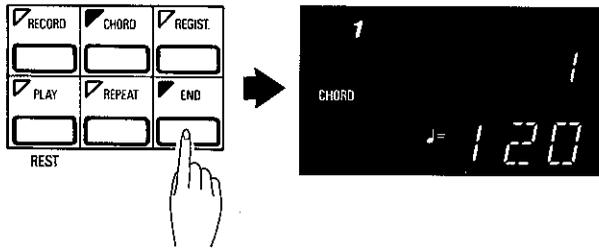


Note:
The organ gives a short beep as the display changes.

- (6) To record a rest, press the REST (PLAY) switch instead of a chord.



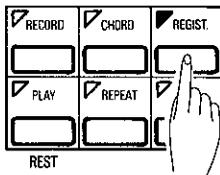
- (7) Repeat steps 4-6 as often as necessary.
- (8) Press the END key to terminate the sequence, deactivate the RECORD switch, and return the display to the normal setting.



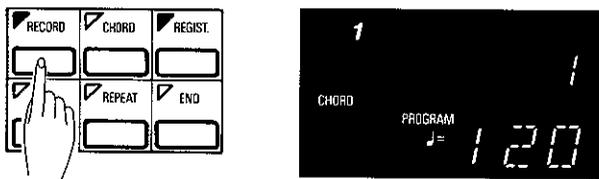
Note:
The END switch signals the end of the sequence, not the end of the session. At this point, there is no difference between the two, but the distinction is important to editing.

7.2 Storing Registrations

- (1) Press the REGIST switch.



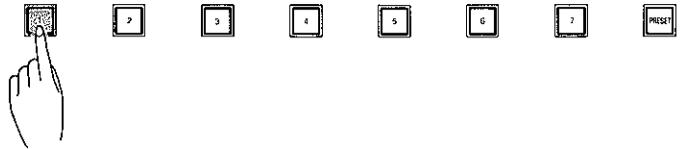
- (2) Press the RECORD switch.



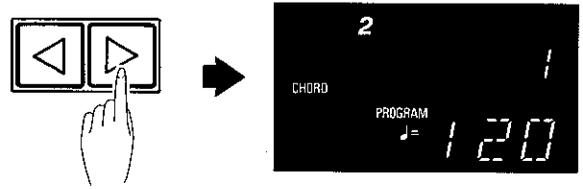
Note:
The word PROGRAM should appear on the multi-function display along with the bar and beat number.

- (3) Press the registration number for the first beat of the first bar.

Note:
Unlike a chord, it is not necessary to hold the number switch down because the lamp inside remains lit even after you release the switch.

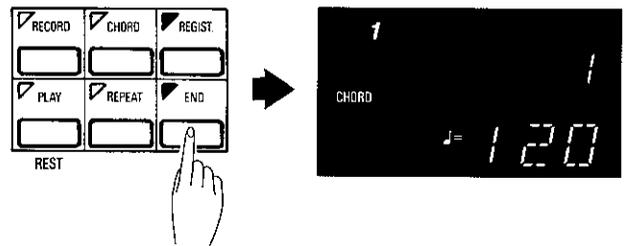


- (4) Press the right arrow switch to store the registration and advance the display from the first beat to the second.



Note:
The organ gives a short beep as the display changes.

- (5) Repeat steps 3 and 4 as often as necessary.
- (6) Press the END key to terminate the sequence, deactivate the RECORD switch, and return the display to the normal setting.



Note:
The END switch signals the end of the sequence, not the end of the session. At this point, there is no difference between the two, but the distinction is important to editing.

Notes

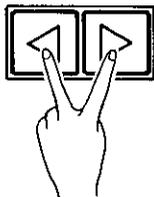
- (1) When the two-digit display reaches bar 99, it displays bar 100 as 00.
- (2) It is important to remember that the sequencer stores only the registration numbers and not the actual registrations. If you subsequently alter the stored registrations, the sequence may not be exactly what you intended. On the other hand, however, if you discover that you have made an error in a particular registration used in various places throughout the sequence or would like to modify it, you have only to change it once. It is not necessary to alter the sequence.

● Storing Both Registrations and Chords

Storing registrations and chords together in the same sequence is a simple matter of pressing both the CHORD and REGIST switches and the appropriate chords and registration numbers for each beat. The sequencer will, however, give precedence to the rhythm and automatic accompaniment settings of the latter.

● Filling an Entire Bar

If the chord or registration remains constant for the entire bar, there is a shortcut available: Instead of pressing the right arrow switch to advance to the next beat, hold the right arrow switch down and press the left arrow switch. The organ automatically stores the chord, registration, or both for all remaining beats in the bar.

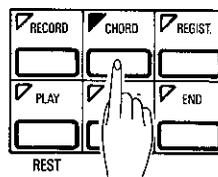


● Correcting Mistakes

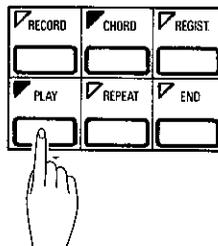
If you should discover that you have made a mistake, use the left arrow switch to return to that bar and that beat, press the correct chord, registration, or both, and then press the right arrow switch to store the new settings.

7.3 Playing Stored Sequences

- (1) Use the CHORD and REGIST switches to specify what you wish to play back: chords, registrations, or both.



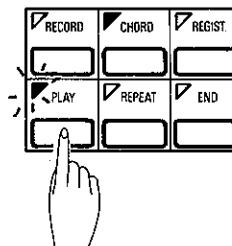
- (2) Press the PLAY switch and, if you wish the sequence to repeat, the REPEAT switch.



Notes:

- If there is no recorded sequence, the PLAY switch cannot be turned on.
- As it plays back the sequence, the program sequencer gives the bar and beat numbers on the multifunction display.
- You may turn the REPEAT switch on and off during the playback.

- (3) Press the PLAY switch a second time to introduce a pause in the playback.



Notes:

- The LED in the switch flashes to indicate that the sequencer's playback function is activated, but on standby.
- You may adjust the bar count with the arrow keys.

- (4) Press the PLAY switch a third time to restart the playback.
- (5) Press the END switch to terminate the playback.

Note:

The LED in the switch goes out to indicate that the playback function is inactive. Pressing the PLAY switch again therefore starts the sequence from the beginning rather than from the point at which you stopped the playback.

● **End of sequence**

When the sequencer reaches the end of the sequence, it checks the status of the REPEAT switch. If the LED in the switch is on, the sequencer automatically restarts from the beginning. Otherwise, it stops and turns off the LED in the PLAY switch. If you are using the Repeat switch you may terminate the sequence by either pressing the END switch or pressing the REPEAT switch and waiting for the sequence to end.

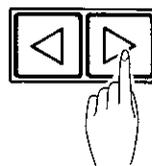
7.4 Editing Functions

■ Replace — Correcting entries

The procedure for correcting sequence entries during input has already been described above. This editing procedure is available at all other times as well.

● **Procedure**

- (1) Use the CHORD and REGIST switches to specify what you wish to edit: chords, registrations, or both.
- (2) Press the RECORD switch.
- (3) Use the arrow switches to advance to the bar and beat to be edited.



- (4) Press the correct chord, registration, or both, and then press the right arrow switch to store the new data.

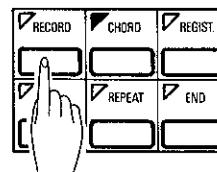
Note:

Remember that you must hold down a chord, but the number switch remains activated (with the lamp inside lit) up until the end of the bar even after you release it.

- (5) Turn the RECORD switch off to terminate the editing session.

Note:

DO NOT PRESS THE END SWITCH. The END switch signals the end of the sequence, not the end of the session. Pressing it here will erase all data after the current bar.



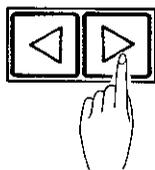
■ Append — Adding to the End

Note:

It is impossible to add or delete material in the middle of a sequence. Such changes are only possible at the end.

● Procedure

- (1) Use the CHORD and REGIST switches to specify what you wish to edit: chords, registrations, or both.
- (2) Press the RECORD switch.
- (3) Use the right arrow switch to advance to the bar after what is currently the last bar.



- (4) Add new entries in the normal fashion.
- (5) Press the END key to terminate the sequence.

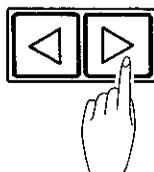
■ Truncate — Shortening the Sequence

Note:

It is impossible to add or delete material in the middle of a sequence. Such changes are only possible at the end.

● Procedure

- (1) Use the CHORD and REGIST switches to specify what you wish to edit: chords, registrations, or both.
- (2) Press the RECORD switch.
- (3) Use the right arrow switch to advance to the first undesired bar.



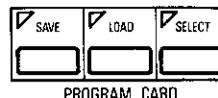
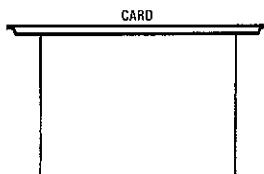
- (4) Press the END switch to erase that and all subsequent bars.

■ Erase — Delete the Entire Sequence

- (1) Use the CHORD and REGIST switches to specify what you wish to edit: chords, registrations, or both.
- (2) Press the RECORD switch.
- (3) Press the END switch to erase the data for all bars.

8. Program Card

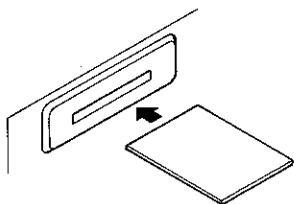
The SR Series has adopted the IC card as the medium for storing programmable rhythm, program sequencer, and program registration data. This exciting new storage medium allows you to expand your library of sounds far beyond the immediate capacity of the organ yet still have rapid access to this data. You may order additional IC cards from your Kawai dealer.



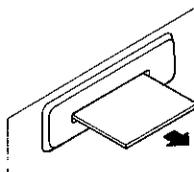
8.1 Inserting the Card

● Procedure

- (1) Gently insert the card into the slot with the arrow label facing upward.



- (2) Always remove the card from the organ after use. Pull it out straight without bending or twisting it.



- (3) Always use genuine Kawai cards. Other cards may present compatibility problems.

■ TAKE CARE OF YOUR DATA CARDS!

- *When not using a card, keep it in its protective case and store away from dust, heat, moisture, and direct sunlight.
- *Never touch the card contacts. They may corrode and produce errors.
- *Never use force to insert or remove the card from the organ. Such force can damage both the card and the connectors inside the organ.
- *Wipe only with a clean cloth. Never use water, detergent, alcohol, or any other liquid cleaning agents.

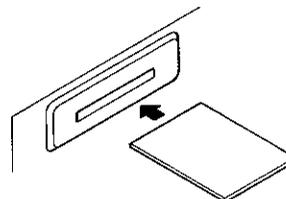
8.2 Saving to the Card

The card has room for the following data:

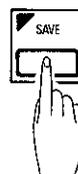
- PROGRAM I, PROGRAM II, VARIATION I, VARIATION II, VARIATION III, FILL IN, INTRO, and ENDING data from the programmable rhythm section
Programmed registrations 1-7 (1-5 on the SR5), hand percussion key assignments, and all panel settings except the drawbars
Program sequencer chords and registrations

● Procedure

- (1) Gently insert the card into the slot.



- (2) Press the SAVE switch. If the card is properly inserted, the LED in the switch lights and the word "CARD" appears on the multifunction display. If the card contains data, the lower right hand corner of the display gives the block name. If the organ detects something wrong with the card contents, the word "ERR" appears for a few seconds.



REG = Registrations
SEQ = Program Sequencer
RHY = Programmable rhythm
ALL = All the above

If the card is unformatted or otherwise not usable by the organ, the message "NEW" appears on the screen. If you do not wish to continue, extract the card, and start again with another.



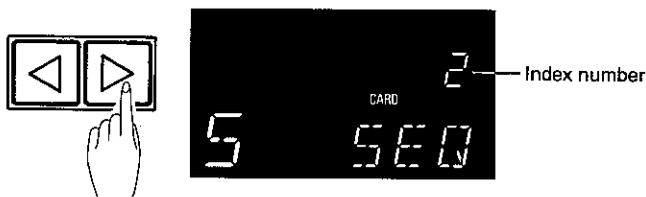
- (3) Press the SELECT switch until the appropriate block name appears in the lower right hand corner of the display. (If the name is already on the display, simply proceed to the next step.)



WARNING

If the block name on the card differs from the one you have selected, the save operation will erase all previous data.

- (4) Use the arrow keys to specify the index number, the number in the upper right hand corner of the display. (See accompanying chart for ranges available.)



Block name	32k card	16k card
ALL	1	1*
REG	1-30	1-15
RHY	1-2	1
SEQ	1-6	1-3

Note: Saving All Data

A 16-kilobyte card does not have enough room for all data, so the organ omits the data for PROGRAM RHYTHM II. There is no such space problem for 32-kilobyte cards.

- (5) Press the WRITE switch in the registration memory section to start the save operation.



- (6) Wait for the organ to give a short beep, for the message "OK" to appear on the display and for the LED in the SAVE switch to go out, signaling the successful completion of the operation.



Note:

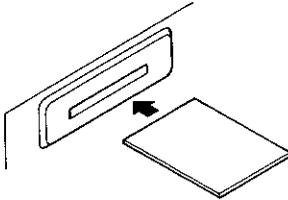
If the card's write protect switch is on, the save operation will fail and the word "ERR" appears for a few seconds. Change the switch setting (p.50) and start again.

Index Numbers

Since an IC card can hold multiple sets of data, each one needs a reference number so that the organ can find the data for reloading. Storing a second block of data over a block with the same type and index number automatically destroys the original version. We recommend that you keep careful records of card contents so as to avoid the loss of your valuable data.

8.3 Loading All Data from a Card

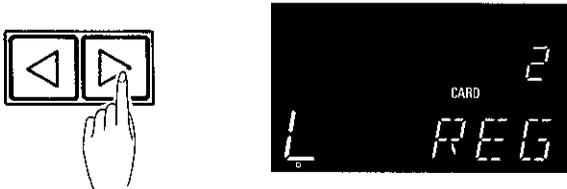
- (1) Gently insert the card into the slot.



- (2) Press the LOAD switch.
If the card is properly inserted, the LED in the switch lights and the word CARD appears on the multi-function display. If the LED does not light, pull out the card and start again.
If the card contains data, the lower right hand corner of the display gives the block name. If the card is unformatted, the message "NEW" appears on the screen. Press the LOAD switch a second time, extract the card, and start again with another.



- (3) Use the arrow keys to select the index number in the upper right hand corner of the display.



- (4) Press the WRITE switch in the registration memory section to start the load operation.



- (5) Wait for the organ to give a short beep, for the message "OK" to appear on the display, and for the LED in the LOAD switch to go out, signaling the successful completion of the operation.

8.4 Loading a Program Registration by Itself

- (1) Repeat steps 1-3 of the preceding procedure.



- (2) Press the SELECT switch to select a program registration number (1 ~ 7, P (Panel)).

Note:
There are five number switches on the SR5, seven on the SR6 and SR7.



- (3) Press the WRITE switch in the registration memory section to start the load operation.

Note:
The select registration is always loaded as programmable registration No. 1.

- (4) Wait for the organ to give a short beep, for the message "OK" to appear on the display, and for the LED in the LOAD switch to go out, signaling the successful completion of the operation.

8.5 Loading Only Part of a Set Saved with ALL

- (1) Repeat steps 1-3 of the preceding procedure.



- (2) Use the SELECT switch and the multifunction display to specify the portion to be loaded.



Notes:

- Pressing the SELECT switch cycles the display through the following options.

→ ALL → REG → RH → SEQ →

- Panel settings are not loaded by this method. (See 8.4 Loading a Program Registration by itself, page 48.)
- (3) Press the WRITE switch in the registration memory section to start the load operation.
 - (4) Wait for the organ to give a short beep, for the message "OK" to appear on the display, and for the LED in the LOAD switch to go out, signaling the successful completion of the operation.

8.6 Loading Only Program 1 or 2 of Set Saved with RHY

- (1) Repeat steps 1-3 of the preceding procedure.



- (2) Use the SELECT switch and the multifunction display to specify the portion to be loaded.



Note:

Pressing the SELECT switch cycles the display through the following options.

→ RHY → RH.1 → RH.2 → RH.1=PROGRAM 1
RH.2=PROGRAM 2

- (3) Press the WRITE switch in the registration memory section to start the load operation.

Note:

The selected portion is always loaded to PROGRAM 1.

- (4) Wait for the organ to give a short beep, for the message "OK" to appear on the display, and for the LED in the LOAD switch to go out, signaling the successful completion of the operation.

8.7 Cancelling a Load or Save Operation

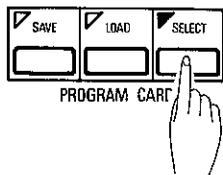
In the above procedures, you may cancel the operation at any point before pressing the WRITE switch simply by deactivating the SAVE or LOAD switch or removing the card from the organ.

8.8 Memory Protect Switch

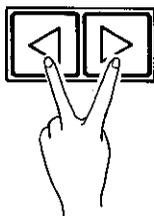
This switch is a safety device that protects the contents of an IC card from accidental erasures. Attempting to save data to the card while this switch is on produces the error message (ERR) on the display. Nevertheless, there is an easy way to alter the switch setting.

● Procedure

- (1) Gently insert the card into the slot.
- (2) Press the SELECT switch to light the LED and display the name of the block stored on the card.



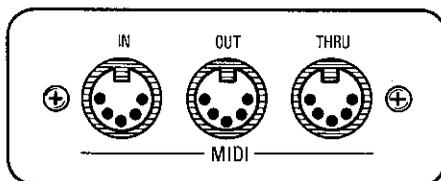
- (3) To change the memory protect switch setting, simultaneously press the left and right arrow keys.



- (4) Press the SELECT switch to turn off the LED inside.

9. MIDI

The letters MIDI stand for the Musical Instrument digital Interface, an international standard for connecting synthesizers, drum machines, and other electric/electronic musical instruments so that they can exchange keyboard and program data. Through this interface, the organist can play a variety of instruments from a single instrument. (The exact types of data that may be exchanged and the functions that may be controlled vary with the instruments connected through this interface.)



9.1 Introduction

■ Connectors

Instruments with the MIDI interface feature the following three receptacles which accept the DIN plugs on MIDI cables.

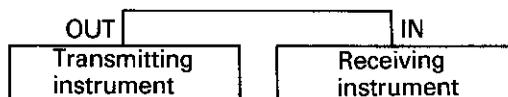
IN Accepts the incoming keyboard, program, and other types of data.

OUT Transmits keyboard, program, and other types of data.

THRU Passes the data received on to another instrument.

■ Connections

The MIDI interface allows electric/electronic musical instruments to exchange keyboard, program, and other types of data. The instruments can be connected so that the data flows only one way — with only one instrument transmitting and the other(s) receiving — or so that data flows both ways. The organist specifies the data pathways by connecting the MIDI OUT terminal of the transmitting instrument to the MIDI IN terminal of the receiving one.



The data received may also be retransmitted to other instruments through the MIDI THRU terminal.

■ Channels

Since the MIDI interface can connect several instruments at once, the organist needs a way to specify which instrument is to play. This is done by assigning channel numbers, numbers between 1 and 16, to the instruments.

■ Features

The MIDI interface on the SR Series of organs transmits the following types of data.

(a) Keyboard data

By connecting the organ to a synthesizer, the organist can play the organ from the synthesizer keyboard and vice versa.

(b) Channel specifications

The organ always assigns the following MIDI channels to the keyboard.

- Ch. 1. UPPER
- Ch. 2. LOWER
- Ch. 3. PEDAL
- Ch. 4. SOLO (Not available on the SR5)

The registration memory section can receive on any MIDI channel between 1 and 16.

(c) Program change

The organist can send a command from the organ to a synthesizer to change the program number. (For the procedure, see p.53.)

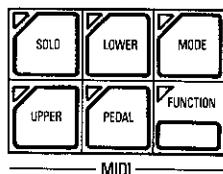
(d) Volume control

The organist can control the synthesizer volume from the organ and vice versa.

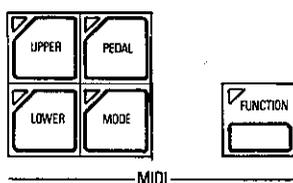
(e) Clock signals

Signals from the organ can synchronize the drum machine tempo and rhythm with those of the organ. Other signals start and stop the drum accompaniment. (For the procedure, see p.55.)

SR6, 7



SR5



- **SOLO** — Controls the transmission and reception of solo keyboard data.
- **UPPER** — Controls the transmission and reception of upper keyboard data.
- **LOWER** — Controls the transmission and reception of lower keyboard data.
- **PEDAL** — Controls the transmission and reception of pedal keyboard data.
- **MODE** — Allows the organist to change the synthesizer volume without changing the organ volume.
- **FUNCTION** — Allows the organist to specify program and channel numbers etc.

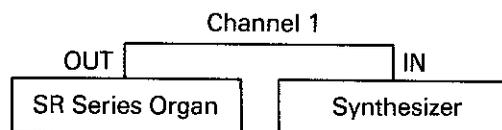
■ Example: Connecting the Organ to a Synthesizer

• Procedure

- (1) Using a MIDI cable, connect the MIDI OUT terminal on the organ to the MIDI IN terminal on the synthesizer so that the organ can control the synthesizer. (This example has the organist playing the synthesizer from the upper keyboard on the organ.)
- (2) set up the synthesizer to receive on channel 1. (Refer to the synthesizer's Instruction Manual for the procedure.)

When the LED in the UPPER switch is on, all notes played on the upper keyboard will sound on the synthesizer.

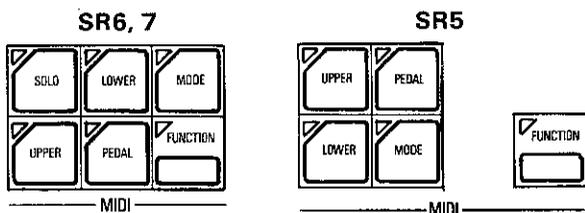
To change the synthesizer's program number, press the FUNCTION switch to enter the PROGRAM mode and then use the arrow keys. (See p.53.)



9.2 Operation

■ Switching the interface on and off

When the LED in the FUNCTION switch is off, the SOLO, UPPER, LOWER, and PEDAL switches (UPPER, LOWER, and PEDAL) serve to connect and disconnect the keyboards from their assigned channels. When the LED is lit, the organist can use that keyboard to play another instrument or, in the reverse direction, play that keyboard from another instrument.



Note:

Some notes may be lost if the organ and the other instrument have a different number of keys on their keyboards.

● WARNING

Turning off the power or disconnecting the interface cable while a key is pressed and the interface is operative may cause the receiving instruments to sound continuously. Cut the power to silence the instrument.

In certain situations (described below), deactivating the MIDI interface while a key is pressed may also produce the same undesired effect. This only happens when (a) the receiving instrument is in the OMNI ON mode and (b) the two instruments have been assigned different channels. The best way to prevent this is to ignore the OMNI ON mode and assign both instruments to the same channel. If it does occur, however, either turn off the receiving instrument or turn the MIDI interface back on and play something on the keyboard.

■ Choosing the Program Number

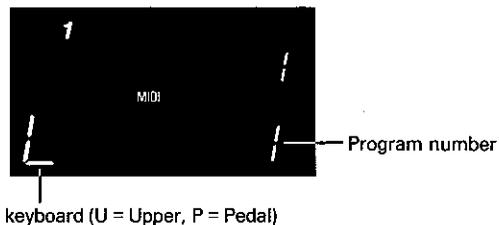
● Procedure

- (1) Press one or more of the SOLO, UPPER, LOWER and PEDAL switches.
 - (2) Activate the FUNCTION switch.
- If two or more of SOLO, UPPER, LOWER, and PEDAL switches are activated, the LED in the one with the highest priority will light. The order of precedence is:

SOLO → UPPER → LOWER → PEDAL

Otherwise, the organist has to select one.

The multi-function display then shows the program number and keyboard.



- (3) Use the arrow switches to raise (right arrow) or lower (left arrow) the program number. This display shows that the program number 26 will be sent to the instrument connected to the lower keyboard.



Notes

- This number, a three-digit number between "1" and "128", is the program number for data stored in the receiving instrument.
- The order is cyclic: The next number after "128" is "1", the one before "1" is "128".

■ Changing the Volume

When an SR Series organ is transmitting, there are two methods for changing the volume of the receiving instruments attached to the channels for which the LEDs in the SOLO, UPPER, LOWER, and PEDAL switches are lit:

- (1) Use the expression pedal to simultaneously adjust the volume of both the electric organ and the instruments.
- (2) Activate the MODE switch and adjust the TOTAL VOLUME without changing the volume of the organ.



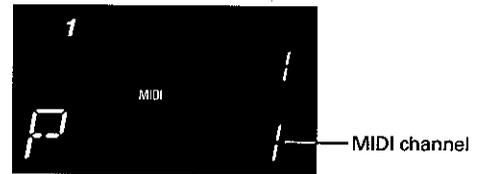
Note:

Both methods assume, of course, that the receiving instrument's implementation supports the MIDI volume change and expression pedal messages. Check the owner's manual for the instrument.

When an SR Series organ is receiving, it reacts to all messages on the channels for which the LEDs in the SOLO, UPPER, LOWER, and PEDAL switches are lit.

■ Assigning Registration Memory Channel Number

- (1) Deactivate all four switches: SOLO, UPPER, LOWER, and PEDAL.
- (2) Press the FUNCTION switch twice to display the current MIDI channel assignment.



- (3) Use the arrow switches to change the assignment.
- (4) Press the FUNCTION switch a third time to register the change.

● Results

When the organ is receiving on a channel on which another instrument is transmitting, a tone change at the transmitting instrument produces the registration memory change for the organ.

PROGRAM NO.	REGISTRATION BUTTON	
	SR6, 7	SR5
1	PROGRAM 1	PROGRAM 1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	PRESET 1
7	7	2
8	PRESET 1	3
9	2	4
10	3	5
11	4	All Button OFF
12	5	Ignored
13	6	Ignored
14	7	Ignored
15	All Button Off	Ignored
16 or higher	Ignored	Ignored

■ Specifying the Tempo

The MIDI interface allows the organist to synchronize another instrument — a drum machine, for example — with the organ or the organ with another instrument.

● Procedure

- (1) Turn off the SOLO, UPPER, LOWER, and PEDAL switches and turn on the FUNCTION switch.

Note:

The order does not matter. The important thing is that only the LED in the FUNCTION switch should be lit.

The word "INT" (for "Internal") indicates that the organ and all instruments connected to it are using the organ's built-in clock.



- (2) Press one of the arrow switches to change the clock.

The word "EXT" (for "External") indicates that the organ is using a tempo supplied by another instrument.

Since the organ expects an external clock signal, its MIDI IN terminal must be connected to the MIDI OUT terminal on the drum machine or other instrument supplying a clock signal.



- (3) To return to the internal clock, press one of the arrow switches again.

If the automatic rhythm accompaniment, AUTO PLAY ORCHESTRA, or PROGRAM SEQUENCER or any combination thereof is in operation, pressing the arrow switches cancels them all.

Notes

- The tempo is an exception to the rule that the MIDI channels for the transmitting and receiving instruments must be the same.
- When the power is turned off, the clock is automatically returned to INT (Internal).
- When all four switches (SOLO, UPPER, LOWER, and PEDAL) are off, successive presses of the FUNCTION switch cycle through the following functions.



- Once you set to the external clock, the word "EXT" always appears on the display, even when the FUNCTION switch is turned off.

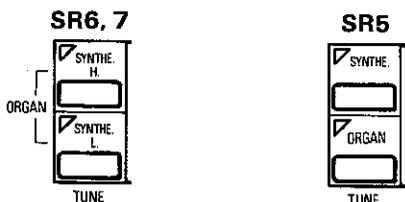
10. Other Functions

10.1 TUNE Function

The TUNE switches allow you to adjust the organ's pitch to match recordings or other instruments in an ensemble.

Note:

When the power is first applied, the value is always 0.



• **Procedure**

- (1) On the SR6 and SR5, simultaneously press the SYNTH. H and SYNTH. L switches. On the SR5, press the ORG. switch.

Note:

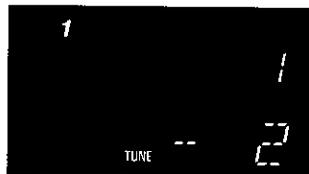
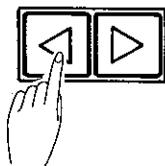
The word TUNE should appear on the multifunction display.



- (2) Use the arrow keys to raise or lower the pitch.

Note:

The display gives the relative pitch in units of 1.5 cents over the range 0-30 on either side.



- (3) Press twice either SYNTH. H. or SYNTH. L. (on the SR5, ORG.) to set the desired pitch and return to the normal tempo display.



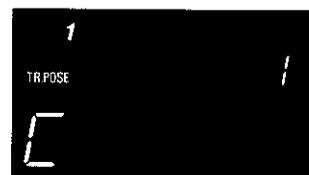
10.2 TRANSPOSE Function

The TRANSPOSE switches allow you to adjust the keyboard key you are playing in up half an octave or down half an octave in semitone increments. It therefore eliminates the need to transpose from one key to another to match a vocalist or other instrument.



• **Procedure**

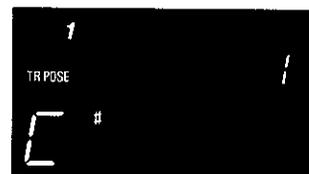
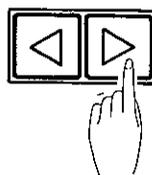
- (1) Press the TRANSPOSE switch.



Note:

The word TRANSPOSE should appear on the multifunction display.

- (2) Use the arrow keys to raise or lower the key.



Note:

The range is half an octave on either side (G-F#).

- (3) Press the TRANSPOSE key to return to the normal tempo display.



Note:

The LED in the TRANSPOSE switch flashes whenever the key is other than the standard, C.

- (4) To return to the standard key, use the procedure in steps 1-3 above.

10.3 TOUCH SENS Control

This set of switches controls the sensitivity of the organ's key touch (speed). The higher the setting, the greater the sensitivity.



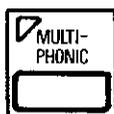
10.4 DIGITAL REVERB Switches

These two switches, singly or both together as DIGITAL REVERB. III, add reverberation of three different lengths to the organ output.



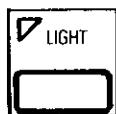
10.5 MULTIPHONIC Switch

Pressing the MULTIPHONIC switch connects the extra speakers inside the organ and feeds the same output to the MULTIPHONIC OUT jack on the rear panel.



10.6 LIGHT Switch

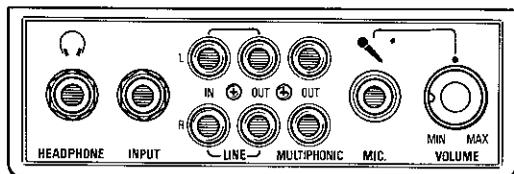
This switch controls the keyboard illumination.



11. Front and Rear Panel Connectors

11.1 Front Panel Connectors

Your KAWAI is equipped with the following features located under the right side of the lower keyboard.



■ HEADPHONE JACK

With a headphone plugged in this jack, you can enjoy playing your organ without disturbing others.

■ INPUT JACK

You can play an additional instrument such as a synthesizer through your organ by plugging it into this jack. The volume is controllable by the TOTAL VOLUME and the EXPRESSION PEDAL.

■ LINE IN & LINE OUT

Connect your cassette tape decks, for example, into those jacks. You can control the signal level of the LINE IN by the TOTAL VOLUME and that of the LINE OUT by the EXPRESSION PEDAL.

Do not connect both jacks at the same time, however —there will be howling.

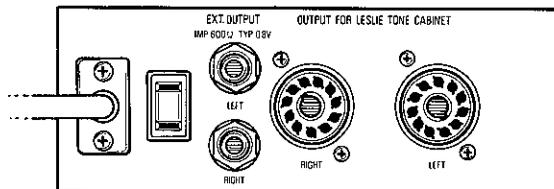
■ MULTIPHONIC OUT

It provides the same signal output as Multiphonic speakers inside the organ.

■ MIC

While you are playing the organ, you or your family can sing to your playing and enjoy the vocals together. To control the volume, regulate the dial control VOLUME.

11.2 Rear Panel Connectors



■ EXT. OUTPUT

These three jacks provide 600Ω, 0.8V (typical) outputs on channels for amplification by an external tone cabinet.

■ OUTPUT FOR LESLIE TONE CABINET

These two connectors provide LEFT and RIGHT channel outputs for Leslie tone cabinets.

12. Specifications

		SR7	SR6	SR5
KEYBOARDS (Solo/Upper/Lower/Pedal)		44/61/61/25	44/49/49/13	—/49/49/13
KEYBOARD CONDUCTOR	Solo	Synthe. H., L., Upper Pre. Inst.		
	Upper	Tibia/Percus, Orchestra I, II, Preset Instrument, Synthe. L.		Tibia/Percus, Orchestra, Preset Instrument, Synthesizer
	Lower	Tibia, Orchestra I, II, Preset Instrument		
	Pedal	Tibia, Orchestra, Synthe. H., L.		Tibia, Orchestra
TIBIA DRAWBAR/PERCUS	Upper	16', 8', 5 1/3', 4', 22/3', 2' 13/5', 11/3', 1' Percus 5 1/3', 4', 22/3', 2', Click		16', 8', 5 1/3', 4', 22/3', 2', 1' Percus 5 1/3', 22/3'
		Sus., Subtone (Tibia), Forte, Decay (Percus)		
	Lower	16', 8', 5 1/3', 4', 22/3', 2' 13/5', 11/3', 1'	16', 8', 5 1/3', 4', 22/3', 2', 1'	8', 4', 22/3', 2'
	Pedal	16', 8'		
ORCHESTRA	Upper	<◇> Strings I, II, Brass I, II, Reeds I, II, Vocal, Cosmic <◇> Strings I, II, Brass I, II, Reeds, Cosmic		Strings I, II, III, IV, Brass I, II, III, Reeds I, II, Vocal, Cosmic I, II
		Sus. I, II, III (Orch. I), Sus. I, II, III (Orch. II), Vari., Touch, Volume I, II		Sus. I, II, III, Vari., Touch, Volume
	Lower	<◇> Strings I, II, Brass, Reeds, Vocal I, II <◇> Strings, Brass, Reeds, Cosmic		Strings I, II, Brass I, II, Reeds, Vocal I, II, Cosmic
		Sus. I, II, III (Orch. I), Sus. I, II, III (Orch. II), Vari., Touch, Volume I, II		Sus. I, II, III, Vari., Touch, Volume
	Pedal	Ensemble Bass, String Bass, Tuba, Electric Bass, Funk Bass, Cosmic <2nd Tone> Timpani I, II		Ensemble Bass, String Bass, Tuba, Electric Bass, Funk Bass, Cosmic
		Sus. I, II, III, Vari., Touch, Volume		Sus. I, II, III, Volume
PRESET INSTRUMENT	Upper	Piano, Harpsichord, Electric Piano, Vibraphone, Marimba, Acoustic Guitar, Jazz Guitar, Hawaiian Guitar, Banjo, Chime, Cosmic, Accordion, Strings, Brass		Piano, Harpsichord, Electric Piano, Vibraphone, Marimba, Guitar, Hawaiian Guitar, Banjo, Cosmic, Strings I, II, Brass
		Sus. I, II, III, Vari., Touch, Volume		Sus. I, II, III, Vari., Touch, Volume
	Lower	Piano, Harpsichord, Jazz Guitar, Harp, Cosmic, Pizzicato Strings, Strings, Brass Sus. I, II, III, Vari., Touch, Volume		
SYNTHESIZER	<H&L> Trombone, Sax, Trumpet, Horn, Clarinet, Bassoon, Oboe, Harmonica, Flute, Pan Flute, Piccolo, Whistle, Violin, Electric Guitar, Cosmic I, II		Trombone, Sax, Trumpet, Horn, Clarinet, Oboe, Flute, Pan Flute, Whistle, Violin, Electric Guitar, Cosmic	
	Porta. I, II, III, Oct. Up, Down, Pitch U., D., Touch, Touch Vib (Solo), Porta, Touch (Upper & Pedal), Vari I, II, III, Volume H., L.		Porta. I, II, III, Touch, Touch Vib., Vari. I, II, III, Volume	
EFFECT	Upper Tibia Chorus (Leslie), Lower Tibia Chorus (Leslie), Tibia Tremolo (Leslie), Digital Reverb I, II, III		Upper Tibia Chorus, Lower Tibia Chorus, Tibia Tremolo, Digital Reverb I, II, III	
RHYTHM SECTION	Preset	Waltz, March, Swing I, II, Ballad I, II, Tango, Bolero/Beguine, Latin I, II, Samba, Bossanova, 8 Beat I, II, Disco, 16 Beat, Variation I, II, III		
		Fill In I, II, III, Intro/Ending		
	Program	Program I, II, Write, Input, Reset, Erase, All Clear, Extract, Move, ♯, ♭, ̄		
	Hand Percussion	BD1, 2, SD1, 2, H. Tom, M. Tom, L. Tom, Ride Cym., Crash Cym., H. Hat 1, 2, 3, Brush 1, 2, Rim Shot, Claps, Conga, 1, 2, 3, 4, Bongo 1, 2, 3, 4, Timbales 1, 2, 3, Agogo 1, 2, Cuica 1, 2, Guiro 1, 2, Triangle 1, 2, Tambourine, Cowbell, Maracas, Claves, Cabasa, Surdo, Castanets, Roll (Touch Bar), Cymbal (Touch Bar)		
Controls	Rhythm, Tone, Volume			
AUTOMATICS	Auto Play Orchestra	Accompaniment (Orch. I), Accompaniment, Arpeggio I, II, III (Orch II), Bass <Orchestra I> Piano, Electric Guitar, Volume <Orchestra II> Piano, E. Guitar/ Harp, Guitar, Strings, Brass, Phaser, Volume		
	Auto Melody Chord	I, II, III		I, II
	Others	One Finger, Memory, Constant, minor (Touch Bar), 7th (Touch Bar)		
ONE TWO PLAY	64 Preset Registrations			
REGISTRATION MEMORY	Preset 1 ~ 7, Program 1 ~ 7, Drawbar, Rhythm Fix, Write		Preset 1 ~ 5, Program 1 ~ 5, Drawbar, Rhythm Fix, Write	
PROGRAM SEQUENCER	Record, Play/Rest, Chord, Regist., Repeat, End			
PROGRAM CARD	Save, Load, Select			
MULTI DISPLAY	Rhythm, Chord, Program Sequencer, Program Card, MIDI, Tune, Transpose			
MIDI	Solo, Upper, Lower, Pedal, Mode, Function		Upper, Lower, Pedal, Mode, Function	
TUNE	Synthe. H., L., Organ		Synthe., Organ	
OTHER CONTROLS	Transpose, Touch Sens., Multiphonic, ◀ (Down), ▶ (Up), Tap Tempo, Right Foot Switch, Left Foot Switch, Sustain Knee Lever, Light, Total Volume, Expression Pedal, Power Switch			
OTHER FITTINGS	Headphone Jack (Stereo), Input Jack, Line In (L, R), Line Out (L, R), Multiphonic Out (L, R), Microphone Jack, Microphone Volume, Ext. Output (L, R), Leslie Output (L, R), MIDI In, Out, Thru, Card Slot			
SOUND SYSTEM	Power	60 W x 3, 10 W x 2		55 W x 2, 10 W x 2
	Speakers	6.5cm x 2, 8cm x 2, 12cm x 2, 30cm x 2, 20cm Leslie x 1		6.5cm x 2, 8cm x 2, 12cm x 2, 30cm x 2
DIMENSIONS (W/D/H)	1338 x 744 x 1159 mm 52 3/4" x 29 1/4" x 45 3/4"		1228 x 744 x 1093 mm 48 3/8" x 29 1/4" x 43 3/8"	
			1228 x 710 x 1052 mm 48 3/8" x 28" x 41 3/8"	
WEIGHT (Pedal) <Bench>	143 kg (30 kg) <15 kg> 315 lbs (66 lbs) <33 lbs>		142 kg <6.5 kg> 313 lbs <15 lbs>	
			125 kg <6.5 kg> 275 lbs <15 lbs>	

Specifications are subject to change with or without notice.

MIDI Implementation Chart

Function ...		Transmitted				Remarks
		Solo	Upper	Lower	Pedal	
Basic Channel	Default	4	1	2	3	
	Changed	X	X	X	X	
Mode	Default	—	—	—	—	
	Messages	X	X	X	X	
	Altered	—	—	—	—	
Note Number	: True voice	48—102 —	31—102 ¹⁾ 43—102 ²⁾ —	31—102 ¹⁾ 31—90 ²⁾ —	31—66 ¹⁾ 35—54 ²⁾ —	
Velocity	Note ON Note OFF	○ X	○ X	○ X	○ ¹⁾ X ²⁾ X	○: V=1—127, X: V=64
After Touch	Key's	X	X	X	X	
	Ch's	○	○	○	○	
Pitch Bender		X	X	X	X	
Control Change	7	○	○	○	○	Volume Expression Pedal
	11	○	○	○	○	
Prog Change	: True #	0—127 *****	0—127 *****	0—127 *****	0—127 *****	
System Exclusive				○		
System Common	: Song Pos			X		
	: Song Sel			X		
	: Tune			X		
System Real Time	: Clock			○		
	: Commands			○		(FA, FC)
Aux Messages	: Local ON/OFF			X		(123)
	: All Notes OFF			○		
	: Active Sense			○		
	: Reset			X		
Notes		1) SR7 2) SR5, 6 Each keyboard has a MIDI On/Off switch. Solo keyboard is not available on SR5.				

Function ...		Recognized					Remarks
		Solo	Upper	Lower	Pedal	Registration	
Basic Channel	Default	4	1	2	3	1-16*	*Memorized
	Changed	×	×	×	×	1-16	
Mode	Default	3	3	3	3	3	
	Messages	×	×	×	×	×	
	Altered	×	×	×	×	×	
Note Number	: True voice	0-127	0-127	0-127	0-127		
		36-96	36-96	36-96	36-96		
Velocity	Note ON	○	○	○	○		
	Note OFF	×	×	×	×		
After Touch	Key's	×	×	×	×		
	Ch's	○	○	○	○		
Pitch Bender		×	×	×	×		
Control Change	7	○	○	○	○		Volume Expression
	11	○	○	○	○		
Prog Change	: True #					○ 0-10 ¹ 0-14 ²	
System Exclusive				○			
System Common	: Song Pos			×			
	: Song Sel			×			
	: Tune			×			
System Real Time	: Clock			○			
	: Commands			○			
Aux Messages	: Local ON/OFF			×			
	: All Notes OFF			○			
	: Active Sense			○			
	: Reset			×			
Notes		1) SR7 2) SR5, 6 Each keyboard has a MIDI On/Off switch. Solo keyboard is not available on SR5.					

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

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

○ : Y
× : N

KAWAI

Kawai Musical Instruments Manufacturing Co., Ltd.
200 Terajima-cho, Hamamatsu, Japan