KAWAI

Personal Keyboard

FS730

Owner's Manual

Thank you for your purchase of the KAWAI FS730 Personal Keyboard

Congratulations on your purchase of one of the most exciting keyboards available today! KAWAI's FS730 is a superbly engineered musical instrument designed to bring you fun and enjoyment — no matter what your level of musical experience may be. You'll have fun as this manual helps you explore the powerful and exciting features of the FS730 — particularly our exclusive ONE FINGER AD-LIB ™. So, enjoy! And again, thank you for choosing KAWAI!

■ Table of Contents:

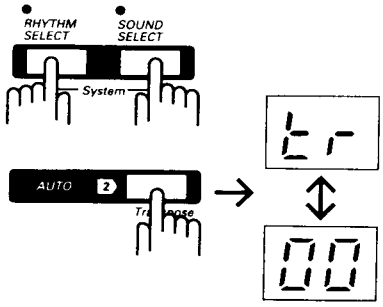
- ◆ Overall Diagram and Explanation 2
- ◆ Before Using the FS730 3
- ◆ Getting Start: Selecting Sounds 3
- ◆ Using Hand Percussion and Adding Effects 3
- ◆ Getting Started with Rhythms 5
- ◆ Changing Rhythm Tempo 5
- ◆ Using Auto-Accompaniment 5
- ◆ Using ONE FINGER AD-LIB 6
- ◆ Using SYSTEM Functions 7
- ◆ Chord Table 8
- ◆ Specifications 8

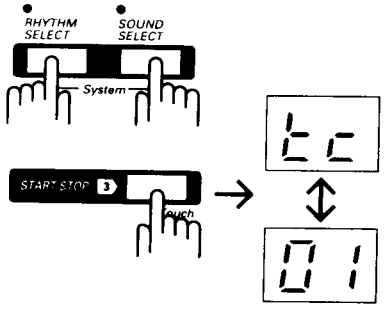
■ Notes:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced radio/TV technician for help.

■ This instrument complies with the limits for class B digital apparatus, pursuant to the Radio Interference Regulations, C.R.C., c. 1374.





2. TRANSPOSE (key change)

Press both the **RHYTHM SELECT** button and the **SOUND SELECT** button simultaneously. Then, press the **AUTO** button. The display will begin to flash, alternately showing the letters tr (short for TRANSPOSE) and the number 00.

If you press the **TEMPO UP ▲** button, the number in the display will change to read 01 and the pitch will raise by a half step. If you press the **TEMPO DOWN ▼** button instead, the number will change to -1 and the pitch will drop by a half step.

You can use the TRANSPOSE function to adjust the FS730's pitch by a maximum of 12 half steps up or down (range -12 to 12).

The SYSTEM MODE will be canceled if you press the **DEMO** button.

3. TOUCH TYPE SELECT

Press both the **RHYTHM SELECT** button and the **SOUND SELECT** button simultaneously. Then, press the **START/STOP** button. The display will begin to alternate between "tc" and "01". The "tc" stands for "TOUCH TYPE"

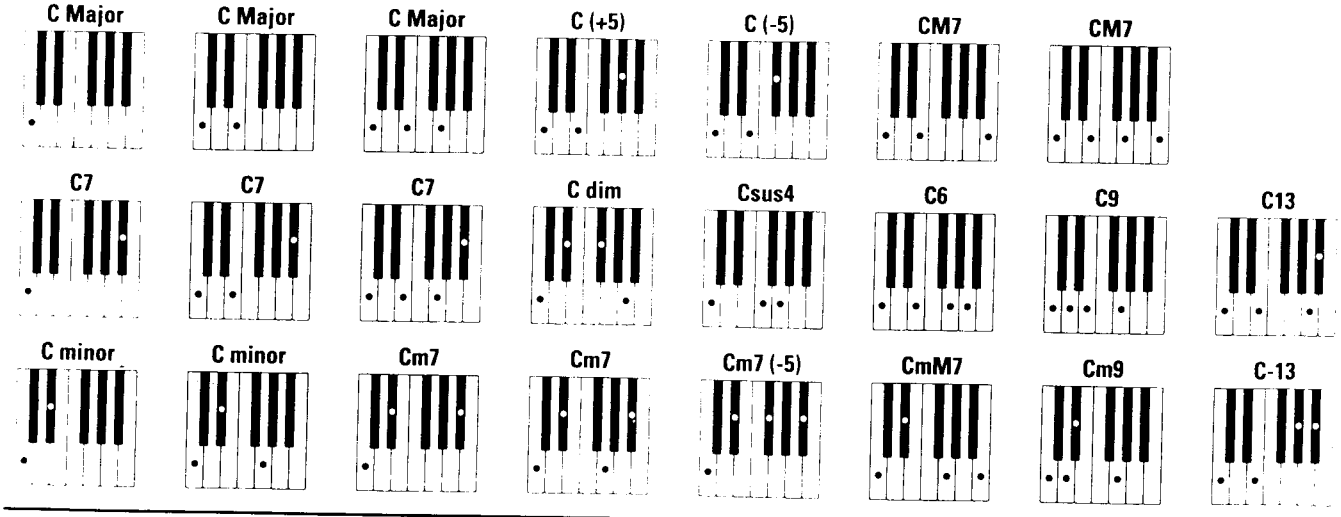
Use the **TEMPO** buttons to select one of the following three styles of touch types.

01: For a wide dynamic range, providing greater contrast between loud and soft playing.
02: Offers a narrow dynamic range with less contrast between loud and soft playing.
03: Touch Response is de-activated. Each key will play at the same volume level no matter how you strike the key.

The SYSTEM MODE will be canceled if you press the **DEMO** button.

Chord Table

How to play chords that FS730 can recognize (C root)



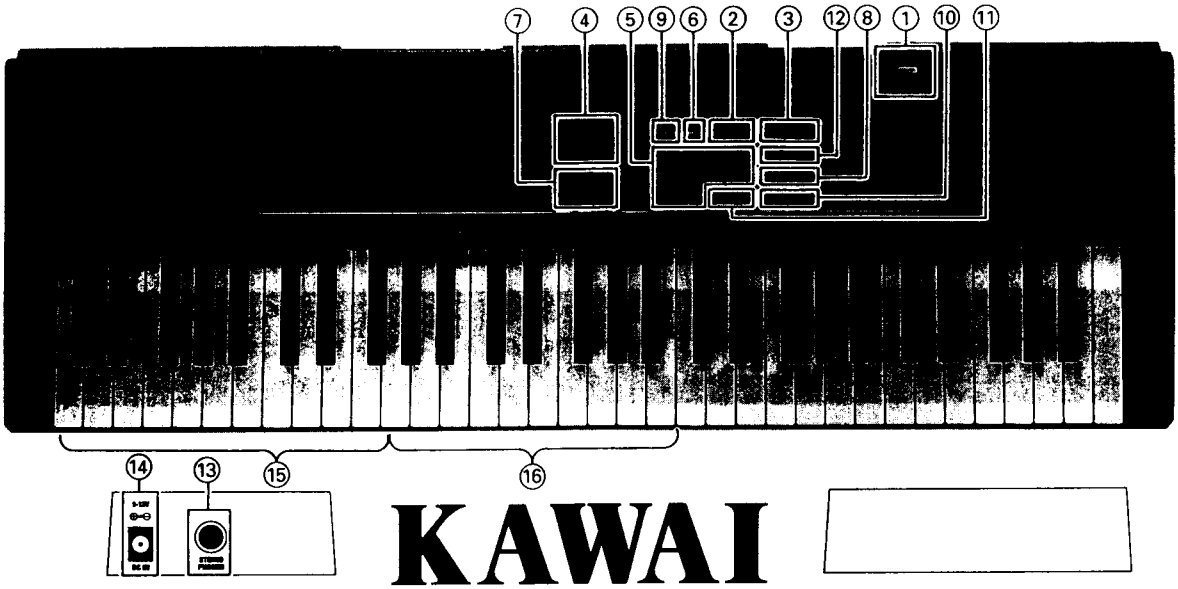
Specifications

Keyboard:	61 keys, Standard full-size (touch sensitive)
Sounds:	100
Rhythms:	30
Effects:	Stereo Chorus, Sustain
Rhythm controls:	START/ENDING and STOP, TEMPO
Volume controls:	MASTER Volume
Other functions:	ONE FINGER AD-LIB, DEMO, Pitch Adjustment, Transpose, Touch Type Select
Speakers:	12 cm x 2 (Stereo)
Rated voltage:	9-12V DC: Six size C dry cell batteries or Power adapter (PS-121 or PS-123)
Accessory jacks:	DC (9-12V) IN, STEREO PHONES
Accessories:	Six size C dry cell batteries, Music rest

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

OW322E-C
Printed in Japan

Overall Diagram and Explanation



◆ Operation Panel

① **POWER** switch
This switch turns the power on and off. When the power is turned on, the display window will light, showing the number 0 1.

② Master Volume Control buttons
The master volume buttons control overall volume of all notes played on the keyboard.

③ **DEMO** button
Pressing this button starts the built-in demo song contained in the FS730's memory. Press it again at any time to stop the demo song.

④ Display
The display window shows which sound or rhythm is currently selected. The window is also used to display a wide variety of other information which will be described later in this manual.

⑤ **SELECTOR** buttons
Used to enter the number that appears in the LED display.

⑥ **SOUND SELECT** button
This button is used to select from among the one hundred sounds stored in the FS730.

⑦ **EFFECTS** buttons
These buttons allow you to add variety to the FS730's one hundred sounds by adding effects such as Sustain and Stereo Chorus to them.

⑧ **AUTO** button
This button is used to select the playing mode for the nineteen keys on the left end of the keyboard (the Lower Keyboard). There are two playing modes: Normal mode in which the Lower Keyboard plays the same sound selected for the Upper Keyboard; and AUTO mode which lets the Lower Keyboard control FS730's Auto-Accompaniment.

⑨ **RHYTHM SELECT** button
This button is used when selecting from among the thirty rhythms and accompaniment patterns stored in the FS730's memory.

⑩ **START/STOP** button
This button starts and stops the rhythm or automatic accompaniment.

⑪ **TEMPO** buttons
These buttons control the tempo of the rhythm pattern or automatic accompaniment.

⑫ **ONE FINGER AD-LIB** button
This button activates KAWAI's exclusive ONE FINGER AD-LIB feature which allows you to sound like a "pro" with the touch of a finger.

◆ Rear Panel

⑬ Stereo Headphone jack
When stereo headphones are connected to this jack, the sound from the speakers is cut off. This allows you to play the FS730 at night and at other times when you might be concerned about disturbing others.

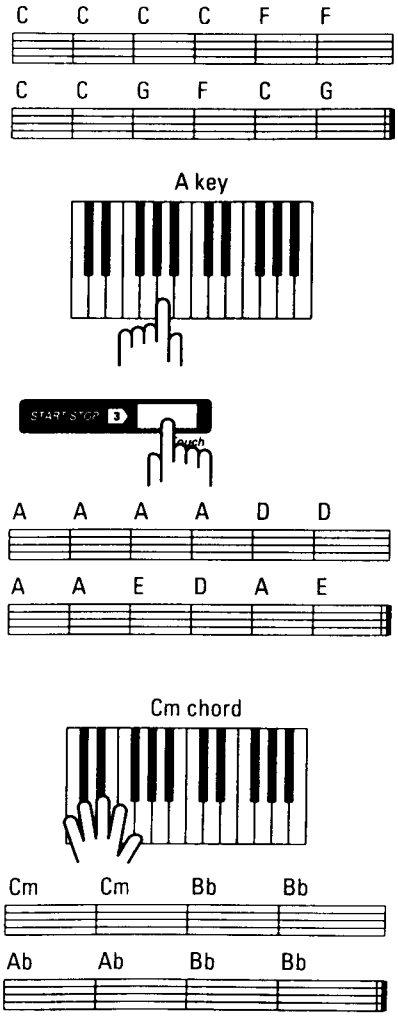
⑭ Power Adaptor jack
This jack is used when connecting a power adaptor (model PS-121 or PS-123, available separately).

◆ Keys

⑮ Lower keys (C1 ~ F#2)
Used to play chord forms and trigger Auto-Accompaniments when the FS730 is in AUTO mode.

⑯ ONE FINGER AD-LIB keys (G2 ~ B3)
Used to play ad-lib phrases when the ONE FINGER AD-LIB function is selected.

⚠ *When the AUTO and ONE FINGER AD-LIB functions are turned off, all the keys of the FS730 operate in the NORMAL playing mode.*



f) To return to the preset chord progression, press the **ONE FINGER AD-LIB** button twice. This turns the ONE FINGER AD-LIB function off and then back on again — restoring the preset chord progression.

■ A note about the ONE FINGER AD-LIB chord progressions.

When you start the Auto-Accompaniment with the ONE FINGER AD-LIB function turned ON, the chord progression that plays is in the key of C. For example, the progression for rhythm number 08 (R&R) is as shown left.

The section below will show you how to change the key of the ONE FINGER AD-LIB chord progression.

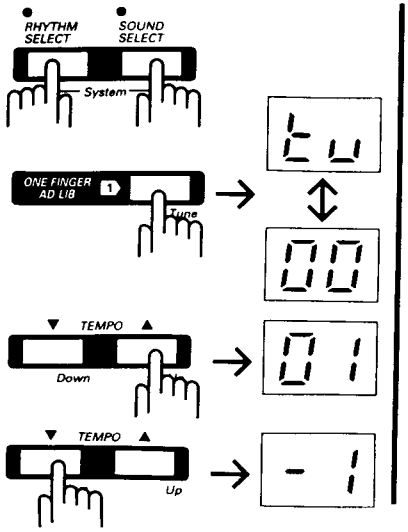
■ Changing Keys

1. Those of you who won't be happy unless the chord progression for R&R is in the key of "A" should perform the following operation (after stopping the rhythm for a moment):
   1) Check to be sure that the **ONE FINGER AD-LIB** button and the **AUTO** button have both been turned ON.
   2) Before starting the rhythm, press the A key shown in the illustration at left.
   3) Then press the **START/STOP** button to start the Rhythm and Auto-Accompaniment. The chord progression should now be in the key of A Major as shown at left.
2. Some of you might be happier if the chord progression for R&R were in a minor key. To do this, perform the operation described below (again, you should stop the rhythm first):
   1) Check to be sure that the **ONE FINGER AD-LIB** button and the **AUTO** button have both been turned ON.
   2) Play a Cm chord. (Play C, Eb, and G at the same time.)
   3) Then press the **START/STOP** button to start the Rhythm and Auto-Accompaniment. The chord progression should now be in the key of C minor as shown at left.

There are two ONE FINGER AD-LIB chord progressions for each Rhythm – one in a major key and one in a minor key. If you would prefer the chord progression to play in the key of Am, just perform the operation above playing an Am chord instead of the Cm chord we used in the example.

Now select different Rhythms and begin exploring the 510 ONE FINGER AD-LIB phrases built into the FS730!

■ Using the SYSTEM Functions



In this section we will outline the FS730's SYSTEM functions (which deal with the overall control of the FS730).

■ SYSTEM functions

The SYSTEM functions include:

1. TUNING CONTROL (pitch adjustment)

Press both the **RHYTHM SELECT** button and the **SOUND SELECT** button simultaneously. Then, press the **ONE FINGER AD-LIB** button. The display should begin to flash, alternately showing the letters tu (short for TUNE) and the number 00.

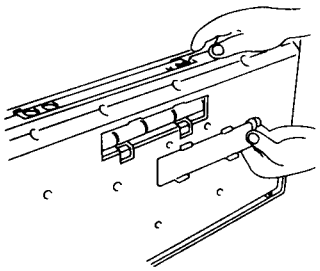
If you press the **TEMPO UP ▲** button once, the number in the display will change to read 01 and the pitch will raise slightly. If you press the **TEMPO DOWN ▼** button instead, the number will change to - 1 and the pitch will drop. You can use the TUNE function to adjust the FS730's pitch within a range of -8 to 7.

Press the **DEMO** button to leave the SYSTEM Mode.

■Before Using the FS730

◆ Cautions

- Do not subject the FS730 to severe shocks.
- Do not expose the FS730 to direct sunlight, or high temperatures(such as inside your car on a warm day).
- Do not use the FS730 where there is excessive moisture or dust.
- Do not disassemble or attempt to modify the FS730.
- Should the FS730 become soiled, clean it using a soft, dry cloth. If this does not remove the stain, wet the cloth slightly before wiping. Never use alcohol or thinner to clean the FS730.
- Do not allow foreign matter to enter the gaps between the keys or around the buttons.



◆ Connecting the power supply

The FS730 can use either your home AC power outlet or dry cell batteries as a power source.

■ **To insert batteries:**

1. Turn the unit over and remove the battery cover.
2. Insert the six Size C dry cell batteries included with your FS730. Be sure that they are aligned correctly.
3. Replace the battery cover.

⚠ *As the batteries reach the end of their usable lifespan, the volume of the FS730 will become quieter and the sound quality will begin to change or deteriorate. The unit may also begin to function improperly. At that time you should replace all six of the batteries.*

Do not mix battery types, as this may cause problems such as battery fluid leakage.

Remove the batteries when not using the FS730 for long periods of time.

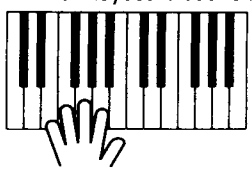
■ **To use an AC power outlet:**

Connect a PS-121 (or PS-123) adaptor (available separately) to the adaptor terminal on the rear panel of the FS730. Then, connect the adaptor to a wall socket.

■Trouble shooting on your FS730

Problem	Check the following
No sound from your FS730.	1) Check your power adaptor. We recommend that you use a KAWAI 9- or 12-volt adaptor. 2) If using another brand of adaptor: – Does the voltage range from 9-12 volts? – Is it set to negative (–) polarity? – Is it rated above 500 mA? 3) Have you tried six fresh batteries? 4) Are all the batteries aligned in the proper direction?
You notice that the front panel has a "cloudy" finish or has begun to "bubble" or "peel". This is not a defect.	There is a thin plastic film applied to the glossy panel (where the sounds and rhythms are printed) for protection during shipping. You can remove this film at any time. Use a fingernail to carefully lift up one of the edges, then peel off the protective film.
You are using the numeric **SELECTOR** buttons to select a two-digit number, but a single-digit number appears in the display.	You may be taking too long to enter the second digit. Once you enter one digit, the FS730 waits for four seconds to see if a second digit follows. If the second digit is not entered within that time, the FS730 assumes that you meant to enter a single-digit number. Be sure to enter all two-digit numbers in rapid succession.
The keyboard only plays drum sounds.	The DRUM SET sound (#90) has probably been selected. Use the **SOUND SELECT** and **SELECTOR** buttons to select a different sound (refer to the section of the manual which describes "Getting Started Selecting Sounds").

Lower Keyboard section



3. Use the Lower Keyboard to activate Auto-Accompaniments. Try pressing one or more of the keys on the Lower Keyboard. You should hear the Auto-Accompaniment begin to play.
   The tempo of the Auto-Accompaniment can be controlled using the **TEMPO** buttons.
4. Auto-Accompaniment chords will change as you press different keys in the Lower Keyboard. The Chord Table on page 8 will show you which notes can be played to generate specific chords.

■ Using ONE FINGER AD-LIB

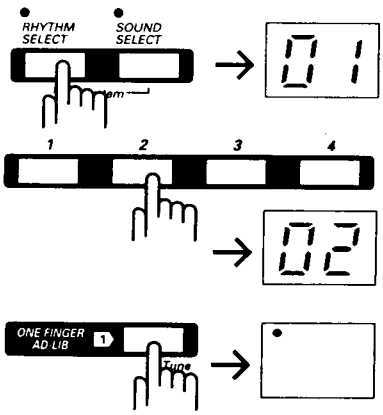
By now you've become familiar with the Auto-Accompaniment function of the FS730. But you may be wondering what you can do to spice up the melody a bit. Well, the ONE FINGER AD-LIB function is just for you! This exclusive feature separates KAWAI keyboards from all others.

■ What is ONE FINGER AD-LIB?

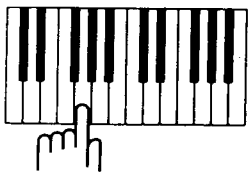
ONE FINGER AD-LIB is a feature which allows anyone, at any level of musical ability, to sound like a "pro". With the touch of a finger, you can play hundreds of impressive ad-lib melodies with full Auto-Accompaniment and chord progressions. It's great fun!

The ONE FINGER AD-LIB phrases are determined by the rhythm you select. For example, there are funky ad-lib phrases for rhythm number 03 (FUNK), and some exciting rock'n roll phrases that go well with number 08 (R&R). There are seventeen ONE FINGER AD-LIB phrases preset for each of the FS730's 30 rhythms — a total of 510 phrases in all!

■ How does ONE FINGER AD-LIB work?



ONE FINGER AD-LIBsection



a) Use the **RHYTHM SELECT** button and the **SELECTOR** buttons to select a rhythm. Next, press the **ONE FINGER AD-LIB** button. The small dot lamp on the upper left side of the display will light up.

b) Now, press and hold down one of the keys in the ONE FINGER AD-LIB section of the keyboard (shown in the drawing at left). By holding down a single key, you can play an entire ad-lib phrase! Try other ONE FINGER AD-LIB keys. Note that each key plays a different phrase. Make sure you hold down each key for several beats.

c) Next, you can add Rhythm and Auto-Accompaniments. Press the **AUTO** button. The display should change briefly to read Au.

   Start the Rhythm using the **START/STOP** button. The Rhythm and Auto-Accompaniment should begin to play. Listen closely! Notice that the Auto-Accompaniment chords are changing automatically. The FS730 has been programmed so that each Rhythm is accompanied by an appropriate chord progression that plays automatically.

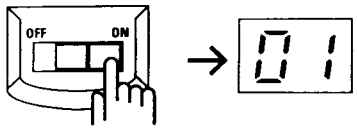
d) Now hold down one of the keys in the ONE FINGER AD-LIB section of keyboard. The ad-lib phrase will play. With one finger, you become the soloist with a complete back-up band! For best results, be sure to press the ONE FINGER AD-LIB keys <u>on</u> the beat (rather than "in-between" beats).

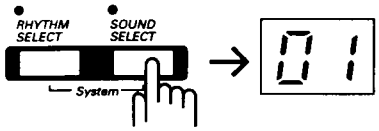
   This will ensure that your ad-lib playing stands "in time" with the accompaniment. Also, if you hold an AD-LIB key down for a long time, you'll notice that the phrase changes automatically with the chord progression!

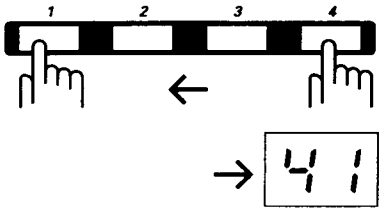
e) If you decide that you'd like to change the preset chord progression, play any chord on the Lower Keyboard.

   This will override the preset progression. The ONE FINGER AD-LIB phrase will then change to match the chords you play with your left hand.

Getting Started: Selecting Sounds







This section will show you how to select and play any of the sounds listed in the "100 SOUND LIBRARY" on the FS730's front panel.

1. First, check to be sure that the **POWER** switch is turned ON. The display should be lit, showing the number 01.
   Try pressing one of the keys on the keyboard. You should hear the sound which is numbered 01 (SOFT PIANO1). The FS730 features Dynamic Touch Response which allows you to control the volume of each note by playing hard or soft. Try playing a few notes. You'll notice that the harder you strike the keys, the louder they will sound. The overall volume for the entire keyboard can be controlled with the **MASTER VOLUME** buttons.

2. Check to be sure that the lamp above the **SOUND SELECT** button is lit. (If not press the **SOUND SELECT** button). Next, press **#4** and then **#1** with the **SELECTOR** buttons to select sound number 41 (STRINGS/FLUTE). The number in the display should change to read 41.
   If you select one of the SPLIT sounds, which are numbered 41 through 50 in the "100 SOUND LIBRARY," you will find that the 19 keys on the left end of the keyboard (which we will refer to as the Lower Keyboard) produce a different sound from the rest of the keys to their right. The FS730 is "split" into two sections with a separate sound assigned to each section.

☼ *Two-digit numbers must be entered in rapid succession. A single-digit number will be automatically entered if you take too long to enter the second digit.*

Single-digit numbers (1-9) can be entered in two ways. For example, to enter the number "5", you can press either "5" or "05".

If you press "5", the FS730 will wait for four seconds to see if you plan to enter a second digit. After waiting four seconds, the display will change to read "05".

If you press "05", the number in the display will immediately change to read "05". This information will be helpful when you want to make a quick sound or rhythm change in the middle of a song.

Using Hand Percussion and Adding Effects

Key	Instruments
G2	Bass Drum
G#2	Rim Shot
A2	Low Snare
A#2	Hi Clap
B2	Hi Snare
C3	Synthe Percussion 1
C#3	Hi-hat Close
D3	Low Tom
D#3	Low Clap
E3	Low Conga
F3	Hi-hat Open
F#3	Mid Tom
G3	Hi Conga
G#3	Crash Cymbal
A3	Hi Tom
A#3	Ride Symbal
B3	Low Cymbal
C4	Synthe Percussion 2
C#4	Small Cymbal

Using Hand Percussion

The keys can also be used to play percussion instruments.
First, select sound number 90 (DRUM SET) in "100 SOUND LIBRARY".
Now, when you press one of the keys on the keyboard, you will hear the sound of an assigned percussion instrument . This feature allows you to enjoy playing simple drum solos in time with the rhythm. The drum sounds are assigned to the keys on the Lower Keyboard as shown by the picture above each key.
The keys of the Upper Keyboard will also produce drum sounds – even though there are no pictures above them. The chart on the left shows you which drum sounds have been assigned to these keys.
Note that "G2" means the second G key from the left side of the keyboard. "C3" is therefore the third C key from the left.
The chart shows 19 drum sounds assigned to keys G2 through C#4. Starting with the next note, D4, the same 19 drum sounds are assigned to the next 19 keys in identical order. Each of the 61 notes on the FS730 has a drum sound assigned to it — making the FS730 a pretty impressive drum set!

Adding Effects

The FS730 has two effects which can enhance sounds. Both are described below:

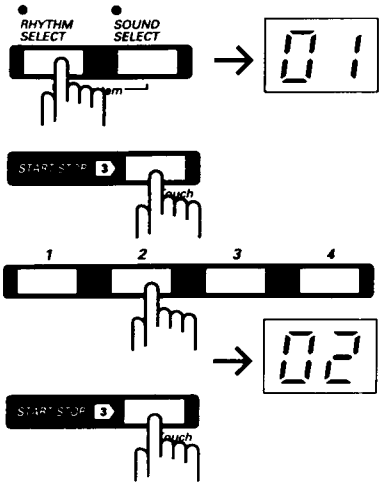
1. **Sustain:**
   Sustain is an effect which lets notes "sound" for a longer duration.

Pressing the **SUSTAIN** button activates the effect. Pressing it a second time cancels the effect.

2. **Stereo Chorus:**
   Pressing the **STEREO CHORUS** button activates an effect which adds a deep stereo richness to the currently selected sound. Pressing the button a second time cancels the effect.

⚠ *When you choose the stereo chorus effect, the number of notes that can be heard at one time will be reduced.*

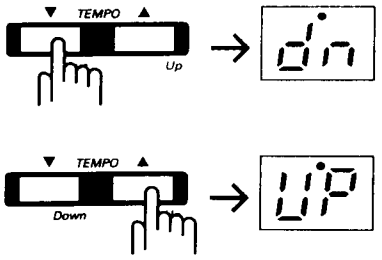
■ Getting Started with Rhythms



This section will show you how to select and play any of the rhythms listed under the "30 RHYTHM LIBRARY" on the FS730's front panel.

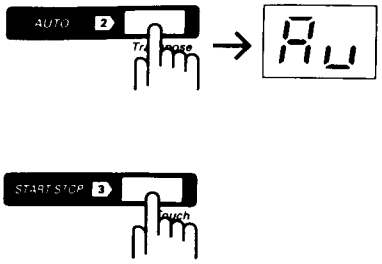
1. Begin by pressing the **RHYTHM SELECT** button. The lamp above the button will light, and the display will change to read 01.
2. If you press the **START/STOP** button at this point, rhythm number 01 (DANCE) will begin to play (drums only). Now find the **SELECTOR** buttons and press the **#2** button. The display will change to read 02 and the rhythm will change to number 02 (FUSION).
   You may use the **SELECTOR** buttons in this way to select any rhythm you desire. The number in the display will change to indicate the number of the rhythm currently selected.
3. Next, press the **START/STOP** button. An ending pattern which matches the currently selected rhythm will play, and the rhythm performance will end. You can use this Ending Pattern to bring a song to a close. Or, if you want the rhythm to end without the Ending Pattern, press the **START/STOP** button quickly two times.

■ Changing Rhythm Tempo



You can use the **TEMPO** buttons to change the tempo of any rhythm pattern. The **TEMPO ▼** button makes the tempo slower. The **TEMPO ▲** button makes the tempo faster. The longer you hold down each of these buttons, the more the tempo will change.
When you press and hold down either of the **TEMPO** buttons, the display will change to read dn (short for "down") or UP depending on which **TEMPO** button you are pressing. When the tempo reaches maximum (216) or minimum (52), the letters in the display (dn or UP) will disappear.
The small lamp at the top of the display will also blink in time with the tempo.

■ Using Auto-Accompaniment



The Auto-Accompaniment mode allows you to create a realistic ensemble performance simply by pressing and holding left hand chords as you play the melody.

The nineteen keys on the left end of the keyboard (the Lower Keyboard) are used to play the chords which control the Auto-Accompaniment. Up until now we have used the Lower Keyboard only for normal keyboard operation. Here's how you can use the Lower Keyboard notes to control Auto-Accompaniments:

1. First, prepare the Lower Keyboard for chord use by pressing the **AUTO** button. The display will change briefly to read Au.
2. Select a rhythm using the **RHYTHM SELECT** button and the **SELECTOR** buttons. Then, start the rhythm by pressing the **START/STOP** button.