

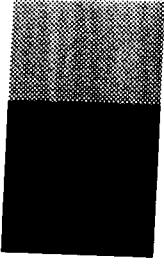
KAWAI



SUPERBOARDTM **FS800**

Owner's Manual





**Thank you for your purchase of
the KAWAI FS800 Personal Keyboard.**

How to use this manual

This manual is divided into two sections: Basic Operation and Advanced Operation.

The Basic Operation section will help you become familiar with the basic, but extremely powerful, features of the FS800. By the time you're through with this first section, you will have a clear understanding of how to select Tones and Rhythms, adjust Tempo, use Auto-Accompaniment and Recorder functions, and operate ONE FINGER AD-LIB.

The Advanced Operation section will help you explore FS800's more advanced features such as combining Tones, adding Effects, using the Synthesizer and MIDI, and programming Accompaniments or ONE FINGER AD-LIB phrases. To get the *most* from your FS800, please read this entire manual *carefully* -- beginning with the important information on page B - 1.

Should you have any trouble getting the FS800 to perform properly, please refer to the Table of Contents (on the next page) and review the pertinent section of this instruction manual.

Have fun learning to play your FS800!

■ **NOTE:**

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.

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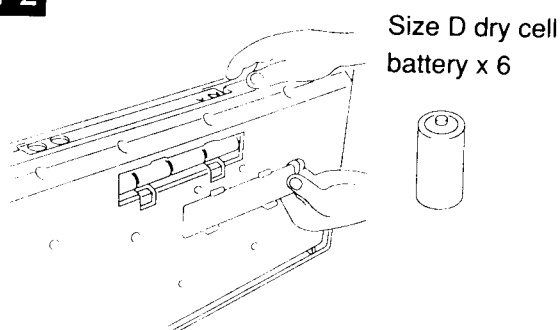
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1. Basic Operation

Before Using the FS800 SuperBoard

2-2



1. Cautions

- Do not subject the FS800 to severe shocks.
- Do not expose the FS800 to direct sunlight, or high temperatures such as inside your car on a warm day.
- Do not use the FS800 where there is excessive moisture or dust.
- Do not disassemble or attempt to modify the FS800.
- Should the FS800 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 FS800.
- Do not allow foreign matter to enter the gaps between the keys or around the buttons.

2. Connecting the Power Supply

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

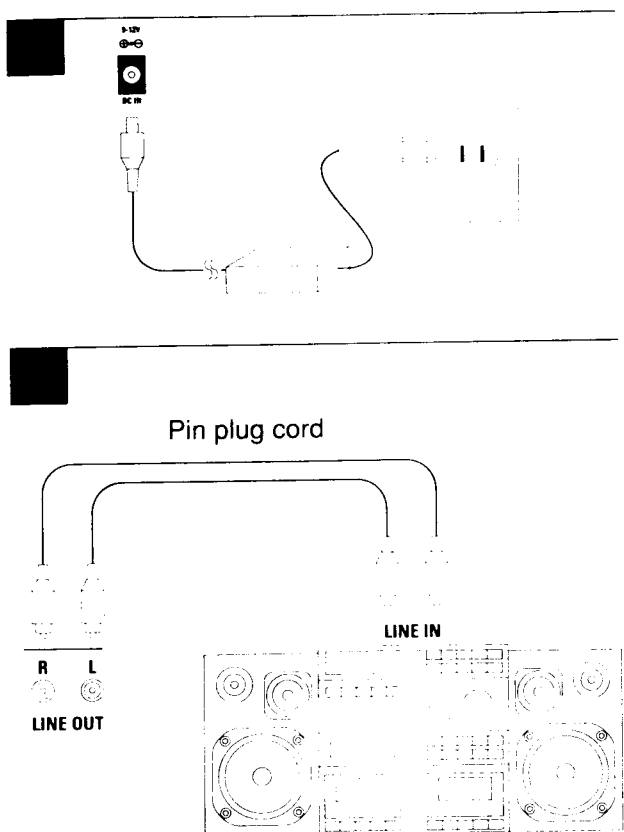
■ To insert batteries:

1. Turn the unit over and remove the battery cover.
2. Insert six Size D dry cell batteries. Be sure they are aligned in the proper direction.
3. Replace the battery cover.

Notes:

- As the batteries begin to run down, the SuperBoard will become quieter and the sound quality will begin to deteriorate. The unit may also begin to function improperly or begin to flash "bāt". The "bāt" stands for batteries. At that time, you should replace all six of the batteries.
- Do not mix battery types (or new batteries with old ones), as this may cause problems such as battery fluid leakage.
- Remove the batteries when not using the FS800 for long periods of time.

Before Using the FS800 SuperBoard



Note:

You cannot Back up the internal memory once the battery built into the FS800 is drained. So, we recommend that you save your important data into an external sequencer (see "Using the MIDI Functions" section on page A-31). For a replacement Battery, contact your authorized KAWAI dealer.

■ To use an AC power outlet:

Connect a PS-102 (or PS-101) adaptor to the adaptor terminal on the rear panel of the FS800. Then, connect the adaptor to a wall socket.

Important:

We recommend that you use a KAWAI AC adaptor (10 volt 1000 mA) with the FS800. If you decide to use a universal adaptor (from another manufacturer) be sure that the voltage selector on that adaptor is set 10 volt 1000 mA. The polarity selector must be set to "negative" (-) polarity. If your universal adaptor is set on "positive (+)", your FS800 will not operate (or will run on batteries until the batteries are drained).

■ Connecting the FS800 to an audio device

To enjoy listening to the sound of your FS800 through your home stereo system or other external audio device, purchase a standard connecting cord (Stereo RCA pins) at an electrical goods shop or an audio specialty store. Use it to connect the FS800's LINE OUT jacks to the LINE IN or AUX IN jacks on your audio system.

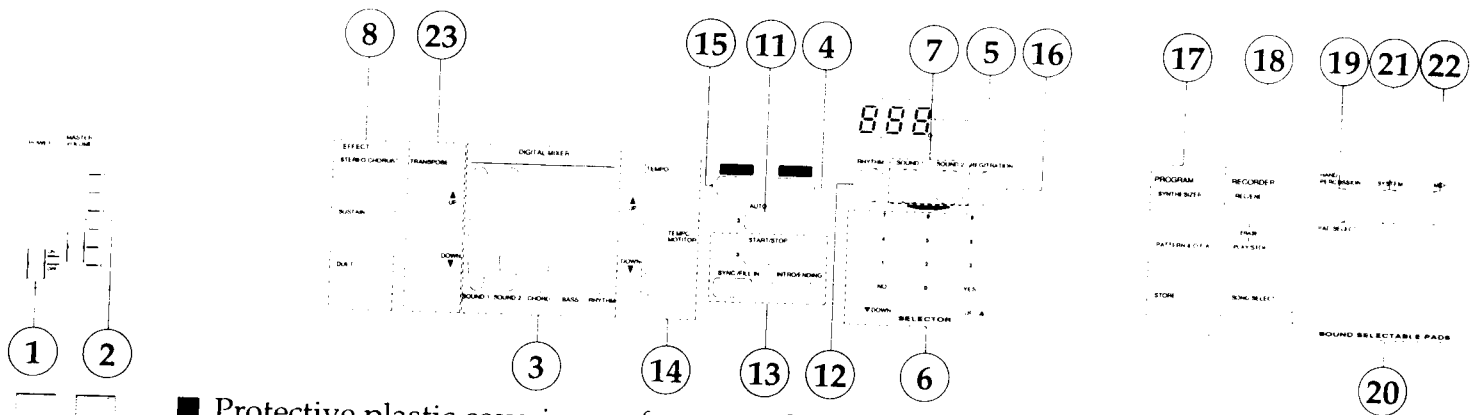
■ About the FS-800's internal memory

The contents of the FS-800's internal memory will be kept stored by a battery built into the unit for a period of up to five years. The data that are maintained by this battery are as follows:

- Song data recorded using the recorder.
- Sounds created using the synthesizer.
- Accompaniment patterns created using the pattern maker.
- Phrases created using the programmable ONE FINGER AD-LIB feature.
- Registration settings.

Note that if you turn the power switch ON while holding down keys C and E at the left end of the keyboard, all of the contents of the memory will be erased, and the keyboard's factory settings will be restored.

Overall Diagram and Explanation (Operation panel)



■ Protective plastic covering on front panel

Your FS800 comes equipped with a thin plastic covering over the front panel, designed to protect the panel from dust and scratches. If you want to remove this covering, carefully use a fingernail to lift up one of the corners. Then, slowly peel off the covering and discard it.

(1) POWER Switch

The Power Switch turns the FS800's power on and off. When the power is turned on, the display window will light, showing the number 01.

(2) MASTER VOLUME Slider

The master volume slider control overall volume of all notes played on the keyboard.

(3) DIGITAL MIXER Section

Sound 1, Sound 2, Chord, Bass, and Rhythm volumes can be adjusted individually using these buttons. Holding down the UP ▲ button for a particular part raises the volume for that part. Holding down the ▼ DOWN button, lowers the volume for that part. Pressing the middle button ■ will establish a preset volume for that part which is in "balance" with the other parts of the accompaniment.

(4) DEMO button

There are 3 Demo Songs in the FS800. When you press this button, the Demo Songs will start with Song #1. After Demo Song #1 is concluded, Demo Songs #2 and #3 will play in consecutive order and then return to Song #1 to begin the "cycle" again. The Demo Songs will continue until you press the DEMO button a second time to stop them. To select Demo Songs #2 or #3 directly, press #2 or #3 with the numeric keys just after pressing the DEMO

button. Again, that Demo Song will continue to play until you press the DEMO a second time.

(5) 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.

(6) SELECTOR buttons

(a) Numeric buttons (Ten keys)

Used to enter the number that appear in the LED display. To enter a number from 1 to 9, just press the number you desire. The SuperBoard will wait for one second to see if you're going to press another digit. After this brief pause, the display will show the number you selected (01 to 09). To enter a number from 1 to 9 without the one-second pause, put a "zero" before the number. For example, you would press "0" and "6" to select sound number "6" immediately (with no pause).

To enter a two-digit number, enter the two digits in rapid succession. For example, to enter sound number 25, press 2 followed quickly by 5. If you wait more than one second to enter the second digit, the SuperBoard will think you meant to enter a one-digit number. Referring again to the "25" example, if you wait too long to enter the second digit "5", the SuperBoard

will think you meant to enter a "2" and then changed your mind to enter "5". The display will end up showing "5" instead of "25". **BE SURE TO ENTER TWO-DIGIT NUMBERS IN RAPID ORDER.**

(b) "▼ DOWN" "UP ▲" button.

These buttons are used to increase or decrease the numbers in the display window by a value of 1. The same buttons are also used as "NO" or "YES" buttons for storing or transmitting MIDI data. This latter function will be described later in this manual

(7) **SOUND 1 and 2 buttons**

These buttons are used to select from among the one hundred sounds stored in the FS800.

(8) **EFFECT buttons**

These buttons allow you to add variety to the FS800's one hundred sounds by adding effects such as Sustain, Stereo Chorus, and Duet harmony to them.

(9) **PITCH BEND WHEEL**

Rotating this wheel up or down allows you to change the pitch of a sound.

(10) **MODULATION wheel**

This wheel can be used to apply vibrato to a sound.

(11) **AUTO button**

The **AUTO** button is used to select between two "playing modes" for the nineteen keys on the left end of the keyboard (which we will refer to as the Lower Keyboard). In "Normal Mode" (when the **AUTO** light is off), the Lower Keyboard plays the same sound selected for the Upper Keyboard.

In "AUTO Mode" (which is in effect when the **AUTO** light is lit), the Lower Keyboard can be used to control the FS800's Auto-Accompaniment.

(12) **RHYTHM button**

This button is used when selecting from among the one hundred rhythm and accompaniment patterns stored in the FS800's memory.

(13) **RHYTHM CONTROL button**

The FS800's Rhythm and Auto-Accompaniment section gives you four types of patterns to work with: Intro Patterns that can be used at the start of a song; Fill-in Patterns, to add contrast and variety during a song; Ending Patterns; and Basic Patterns which will be the foundation of any song using Auto-Accompaniment. These four types of patterns are controlled using these buttons. Lastly, the **Sync.** button lets you start when you press a key in the Lower Keyboard.

(14) **TEMPO buttons**

The **TEMPO** buttons can be used to control changes in Rhythm and Auto-Accompaniment tempo.

If you press the **TEMPO MONITOR** button, the display briefly shows the current tempo.

(15) **ONE FINGER AD-LIB button**

This feature allows you to sound like a "pro" with the touch of a finger.

(16) **REGISTRATION button**

(17) **PROGRAM buttons**

These buttons allow users of the FS800 to:

- 1) create new sounds (with the synthesizer);
- 2) create Rhythm and Auto-Accompaniment Patterns (Basic, Intro, Fill-in, and Ending) with Pattern Maker; and
- 3) create ONE FINGER AD-LIB phrases.

(18) **RECORDER Section**

These buttons allow you to record the songs you write or perform on the FS800.

(19) **HAND PERCUSSION/PAD SELECT button**

Pressing this button transforms the entire keyboard into a complete percussion ensemble. When Hand Percussion is on, you can also use the keys of the keyboard to assign a percussion sound to one of the four **SOUND SELECTABLE PADS**. Holding down a pad while pressing a key assigns that key's percussion sound to the pad.

(20) **SOUND SELECTABLE PADS**

These pads allow you to add drum solos or fills to the rhythm and automatic accompaniment. As mentioned above, these pads can be assigned any of the percussions sounds pictured above the Lower Keyboard notes.

(21) **SYSTEM button**

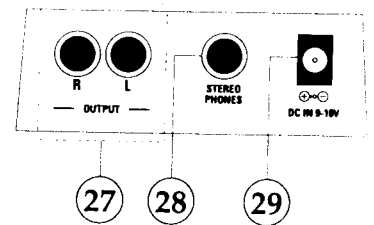
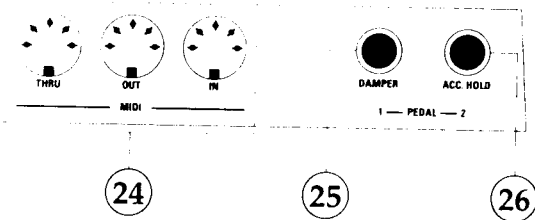
(22) **MIDI button**

(23) **TRANSPOSE buttons**

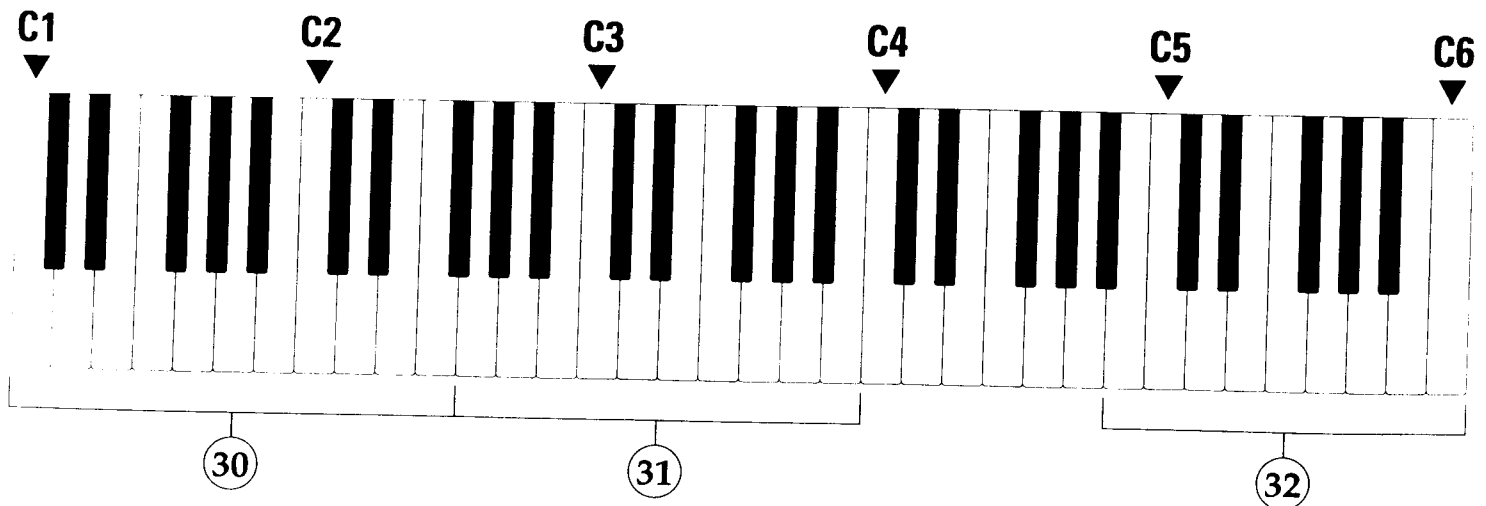
You can use the **TRANSPOSE** function to adjust the FS800's pitch by one full octave upward or downward (that is, -12 half steps to +12 half steps). As you press the **UP** or **DOWN** buttons in the **TRANSPOSE** Section, the display will briefly flash to tell you the number of half-steps you've moved above or below the "normal key". When you press the middle **TRANSPOSE** button (between the **UP** and **DOWN** buttons), the FS800's pitch goes back to the "normal key".

Overall Diagram and Explanation (Rear panel and Keys)

[Rear Panel]



[Keys]



[Rear Panel]

(24) MIDI IN/OUT/THRU jacks

These jacks are used to connect the SuperBoard to other MIDI instruments and equipment.

(25) Pedal 1 (DAMPER Pedal) jack

This jack allows you to connect an optional footswitch (model F-1, available separately) to the SuperBoard. When the footswitch is depressed, notes played on the keyboard will play continuously for as long as the footswitch is held down. It operates like a sustain pedal on a piano.

(This pedal has no effect on Rhythm and Auto-Accompaniment performance.)

(26) Pedal 2 (Accompaniment Hold) jack

The jack allows you to use the optional F-1 footswitch in a different way from above. When connected to the Accompaniment Hold jack, the F-1 footswitch can be depressed to add variety to Rhythm and Auto-Accompaniments. The jack can also be programmed to let the F-1 function as a "SYNC./FILL-IN" pedal (with the same capabilities as the SYNC./FILL-IN button on the front panel).

(27) Output jacks

These jacks are used to send the SuperBoard's sound through external speakers or a home stereo system.

(28) 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 FS800 at night and at other times when you might be concerned about disturbing others.

(29) Power Adaptor jack

This jack is used when connecting a Power Adaptor (model PS-101 or PS-102, available separately).

Important:

See page B-2 for special instructions if you are using a universal AC adaptor or other brand of adaptor.

[Keys]

(30) Lower Keyboard (C1 ~ F#2)

Used as a specific set of keys when the AUTO (chord detection) or Hand Percussion functions are selected.

(31) ONE FINGER AD-LIB keys (G2 ~ B3)

Used to play One Finger Ad-Lib phrases when the ONE FINGER AD-LIB function is selected.

(32) User program keys (B4 ~ C6)

Used for programming Synthesizer sounds, Auto-Accompaniments (with Pattern Maker), and ONE FINGER AD-LIB phrases.

Note:

Of course, the keys in the special keyboard sections named above also function as a normal keyboard when all automatic settings are off.

Important:

Throughout this manual, the keys on the FS800 will be referred to in the following manner:

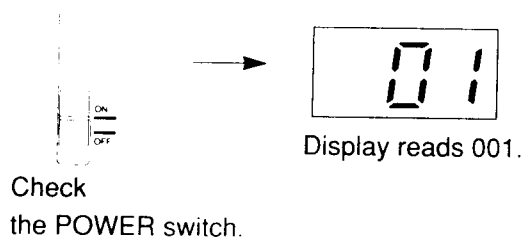
C1 stands for "the first C" on the keyboard, counting from the left.

B2 stands for "the second B" on the keyboard from the left.

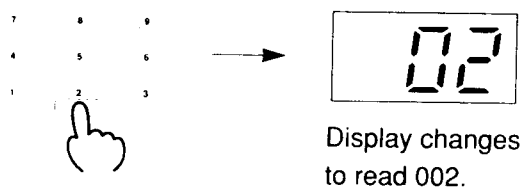
The total range of the FS800 is C1 to C6.

Getting Started on your FS800: Selecting Sounds

1

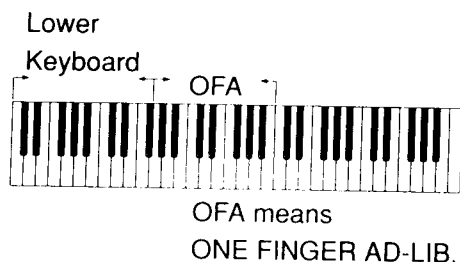
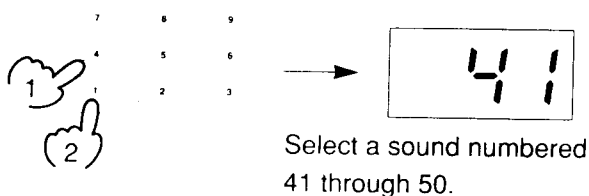


2



3

Press #4, then press #1.



This section will show you how to select and play any of the sounds listed in the "100 SOUND LIBRARY" on the FS800'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 (PIANO 1).

2. Next, look at the **numeric** keys and find the button marked #2. If you press it, the number shown in the display should change to 02.

When you press one of the keys on the keyboard, you will hear sound number 02 (PIANO 2).

You can use the **numeric** keys to choose any of the FS800's one hundred sounds quickly and easily. The **UP ▲** button adds one to the number in the display, while the **DOWN ▼** button subtracts one from the number. The number shown in the display is the number of the sound currently selected.

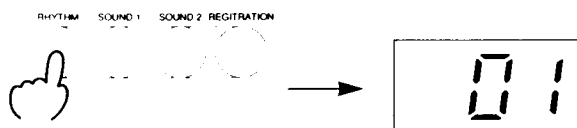
3. Press #4 and then #1 with the **numeric** keys to select sound number 41. If you select one of the **SPLIT** sounds, which are numbered 41 through 50 in the "100 SOUND LIBRARY," you will find that the 19 keys on the left end of the keyboard (the Lower Keyboard) produce a different sound from the rest of the keys to their right.

Note:

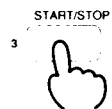
When you use the **numeric SELECTOR** buttons to select a two-digit number, enter the two numbers in rapid succession. A single-digit number will be automatically entered if you take too long to enter the second digit.

Getting Started with Rhythms

1

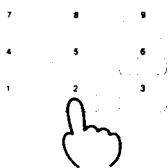


2



Start rhythm.

Then press. . .



3

4

SYNC/FILL IN



A Fill-in Pattern plays.

INTRO/ENDING



The Ending Pattern plays, and the rhythm ends.

This section will show you how to select and play any of the rhythms listed under the "100 RHYTHM LIBRARY" on the FS800's front panel.

1. Begin by pressing the **RHYTHM** button. The lamp above the switch 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 1) will begin to play. Now find the **numeric** keys and press the #2 button. The display will change to read 02 and the rhythm will change to number 02 (DANCE 2).

You may use the **numeric** keys 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. Try pressing the **SYNC./FILL-IN** button at this point. The rhythm should play a "Fill-in" pattern suited to the rhythm currently selected. The Fill-in function is very effective when used to add variety within a song.
4. Next, press the **INTRO/ENDING** 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 an ending. Or, if you want the rhythm to end *without* the Ending Pattern, you can simply press the **START/STOP** button.

Other Important Rhythm Functions

1

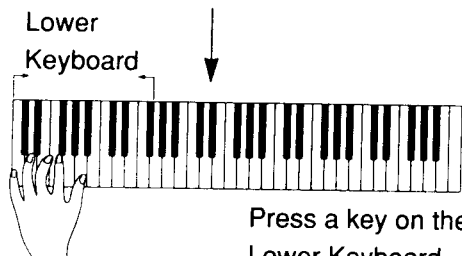
Rhythm is stopped.



Pressing this button starts the Intro Pattern.

2

Rhythm is stopped.



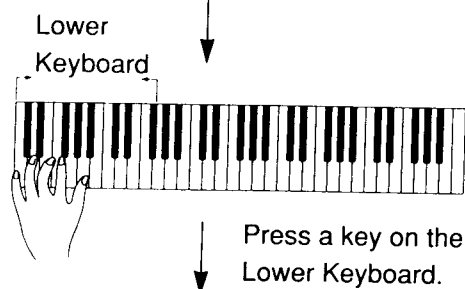
Press a key on the Lower Keyboard.

Rhythm starts simultaneously.

3



Then press. . .



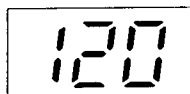
Press a key on the Lower Keyboard.

Rhythm starts simultaneously with Intro Pattern.

1. If you press the **INTRO/ENDING** button while the rhythm is off, you will hear an Intro Pattern, after which the Basic Pattern for the rhythm selected will begin to play.
2. If you press the **SYNC./FILL-IN** button while the rhythm is off, the button functions as a **SYNC** button only. When **SYNC** button is pressed, the rhythm will begin to play the moment you press a key on the Lower Keyboard. The rhythm will synchronize with your touch of the keyboard.
3. If you press the **SYNC./FILL-IN** button and then the **INTRO/ENDING** button, the rhythm will begin to play (starting with the appropriate Intro Pattern) the moment you press one or more of the keys on the Lower Keyboard.
4. Try pressing the **INTRO/ENDING** button while the rhythm is playing. In this case, it operates as an **ENDING** button. You will hear an Ending Pattern in a few seconds after pressing the button.

Changing Rhythm Tempo

1



You can use the **TEMPO** buttons to change the tempo of a rhythm pattern. The **UP ▲** button causes the display to read "UP" and the tempo to increase. The **▼ DOWN** button causes the display to read "DN" and the tempo to decrease. The longer you hold a button down, the more the tempo will change.

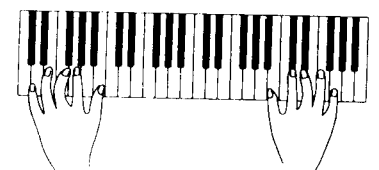
Pressing either of the **TEMPO** buttons once (immediately after selecting a new rhythm) will change the tempo to a "standard" rate that suits that new rhythm. The display will briefly show " - - - " to indicate that the standard tempo for that rhythm has been selected. If necessary, you can use the **TEMPO** buttons to further adjust the tempo.

If you continue to press the **TEMPO ▼ DOWN** button to minimum tempo, the display will change to read "SYNC" which is an abbreviation for "Sync" or "synchronized". This setting is a MIDI-related function and is discussed on page A-37 in the Advanced Operation section of this manual.

The small LED lamp at the bottom right of the display will blink in time with the tempo.

Pressing the **TEMPO MONITOR** button (in the center, between the **UP** and **DOWN** buttons) briefly flashes the current tempo value in the keyboard display.

Using Auto-Accompaniment for easy ensemble playing



Chords with
left hand.

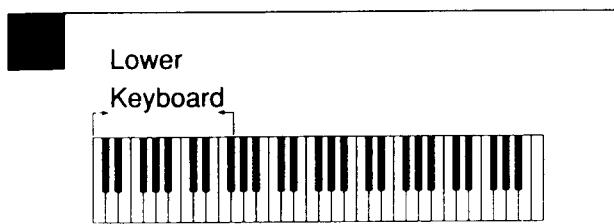
Melody with
right hand.

The FS800's Auto-Accompaniment section is one of the most powerful found on any portable keyboard. It has the capability of working in four different "modes". In this Basic Operation section of the manual, however, we will deal only with the first mode called "AUTO 1".

When your FS800 is turned on, it is automatically set to AUTO 1 operation. In AUTO 1 mode, you can play chords with your left hand (which will generate full accompaniment) while playing the melody with your right hand. Let's try the Auto-Accompaniment section in this mode.

Using Auto-Accompaniment

Section: AUTO 1



This Auto-Accompaniment mode (AUTO 1) allows you to create a realistic ensemble performance by simply pressing and holding left hand chords as you play the melody.

The nineteen keys on the left end of the keyboard (which we call the Lower Keyboard) are used to play the chords which control the Auto-Accompaniment. Up until now we have used the Lower Keyboard as a regular keyboard.

1. First, prepare the Lower keyboard for chord use.

Find the **AUTO** button and press it. The display will briefly change to read **AUT** and the small lamp beside the button will light up.

2. Start the rhythm.

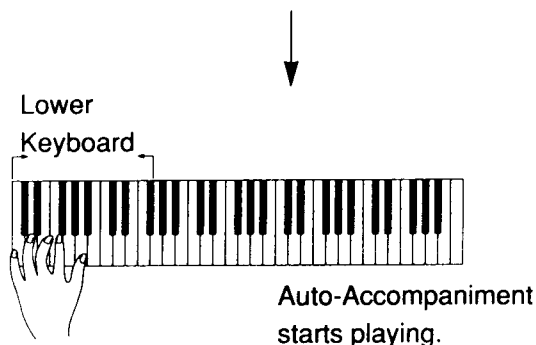
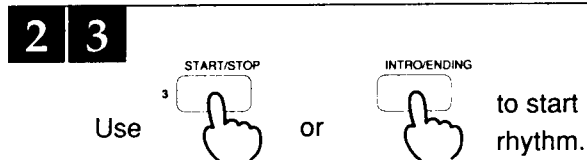
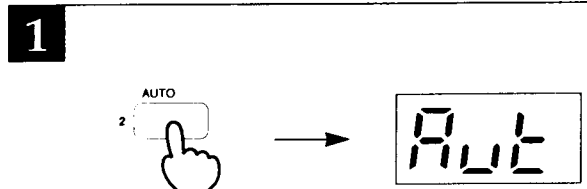
Select a rhythm using the **RHYTHM** button and the **SELECTOR** buttons. Then, start the rhythm by pressing the **START/STOP** button or the **INTRO/ENDING** button.

3. Using the Lower keyboard to activate Auto-Accompaniment.

Now, try pressing one or more of the keys on the Lower Keyboard. You should hear the Auto-Accompaniment begin to play.

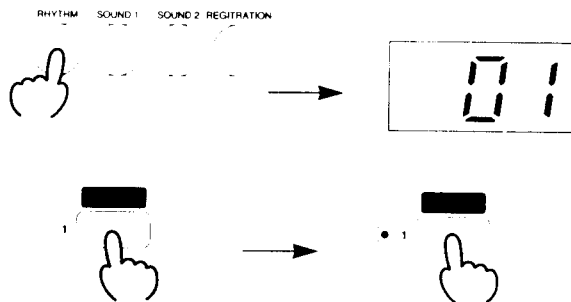
Try using the **SYNC./FILL-IN** button and the **INTRO/ENDING** button. The tempo of the Auto-Accompaniment can be controlled using the **TEMPO** buttons.

The other three modes of Auto-Accompaniment are discussed in the Advanced Operation section of this manual.

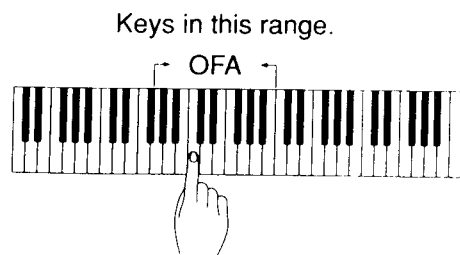


Using ONE FINGER AD-LIB to play like a pro!

2-a



2-b



By now, we hope you've become very familiar with the Auto-Accompaniment function of the FS800. 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 feature separates KAWAI keyboards from all others.

1. What is ONE FINGER AD-LIB?

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

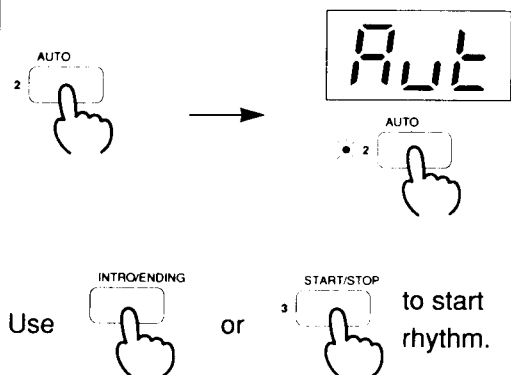
The ONE FINGER AD-LIB phrases are determined by rhythm you select. For example, there are funky ad-lib phrases for rhythm number 07 (SLAP FUNK), and some exciting rock'n roll phrases that go well with number 29 (R&R1). There are seventeen preset ONE FINGER AD-LIB phrases for each of the FS800's one hundred rhythms: a total of 1,700 phrases in all!

2. How does ONE FINGER AD-LIB work?

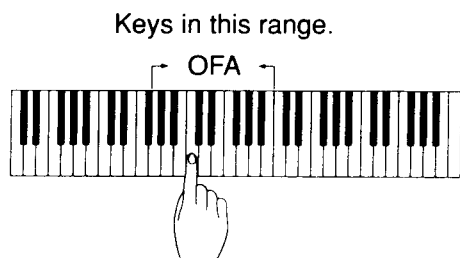
- Use the **RHYTHM** button and the **SELECTOR** buttons to select a rhythm. Next, press the **ONE FINGER AD-LIB** button. The small dot lamp beside the button will light up. (See illustration 2-a).
- Now, press and hold down one of the keys in the ONE FINGER AD-LIB section of the keyboard (shown in 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 and that some keys use different sounds than other keys.

Using ONE FINGER AD-LIB to play like a pro!

2-c



2-d



c) Adding Rhythm and Auto-Accompaniment. Next, press the **AUTO** button. The display should change briefly to read **Aut** and the small dot lamp beside the button will light up.

Start the Rhythm using the **INTRO/ENDING** button or 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 FS800 has been programmed so that each Rhythm is accompanied by an authentic sounding 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. If you hold the AD-LIB key down, 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. Then, the ONE FINGER AD-LIB phrases will change to match your own chords.

f) To return to the preset chord progression, press the **ONE FINGER AD-LIB** button twice.

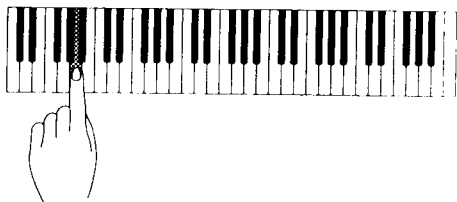
A note about the ONE FINGER AD-LIB chord progressions.

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 32 (50'S ROCK) is as shown at left.

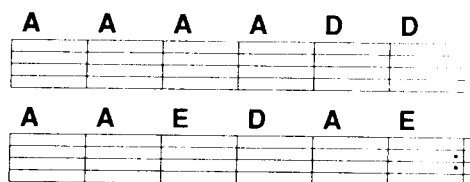
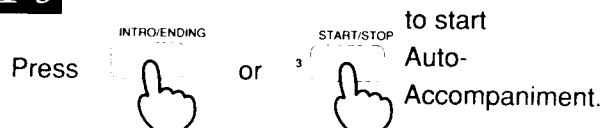
The next page will describe how you can play ONE FINGER AD-LIB music in a different key.

Using ONE FINGER AD-LIB to play like a pro!

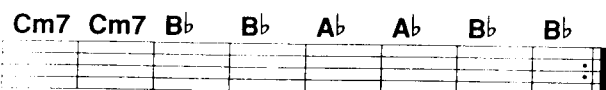
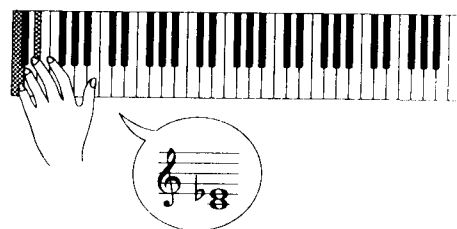
1-2



1-3



2-3



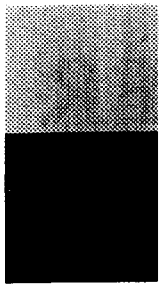
Changing Keys

- Those of you who won't be happy unless the chord progression for 50'S ROCK is in the key of "A" should perform the following operation (after stopping the rhythm for a moment):
 - Check that the **ONE FINGER AD-LIB** button and the **AUTO** button have both been turned ON.
 - Before starting the rhythm, press the A key shown in the Illustration 1-2 at left.
 - Then press the **INTRO/ENDING** button or the **START/STOP** button to start the Rhythm and Auto-Accompaniment. The chord progression should now be in the key of "A" as shown at left.
- Some of you might be happier if the chord progression for 50'S ROCK were in a minor key. To do this, you can perform an operation like the one described below (again, you should stop the rhythm first):
 - Check that the **ONE FINGER AD-LIB** button and the **AUTO** button have both been turned ON.
 - Play a Cm chord as shown in Illustration 2-3 at left.
 - Then press the **INTRO/ENDING** button or 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 that the chord progression play in the key of Am, just perform that 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 1700 ONE FINGER AD-LIB phrases built into the FS800!

Have fun!



Special use of ONE FINGER AD-LIB

We've recorded some special melodies into the FS800 for use with ONE FINGER AD-LIB. These melodies can be found on the ONE FINGER AD-LIB notes associated with Rhythms 91 through 94 (Ballet, Bolero, Campanella, and Nocturne). Here's how to play them:

1. First, select a rhythm. Let's try #92 (BOLERO).
2. Next, make sure that the ONE FINGER AD-LIB function is turned on -- and the AUTO function is on.
3. Press **START** button to get the rhythm going. You may want to set the "standard tempo" for BOLERO by pressing either of the **TEMPO** buttons at this time.
4. Now, *hold down* the lowest ONE FINGER AD-LIB key (G2). Make sure that your initial hit of the G2 key is *on the main beat* (if you listen to the rhythm for awhile, you'll hear this main beat). Can you hear the first melody notes of BOLERO playing when you hold down G2?
5. The rest of the melody can be played as you move up the ONE FINGER AD-LIB keys in chromatic fashion (G2, G#2, A2, A#2, etc). Each successive key is programmed with three full beats of the BOLERO melody.
6. Now, let's try putting the whole melody together. Make sure the BOLERO rhythm is playing. On the *main beat*, hold down the G2 key for three beats. Then, immediately hold down the G#2 key for the next three beats; then the A2 key for the next three beats; and so on, until the entire melody is played. By the time you reach the end of the ONE FINGER AD-LIB region, you should have played BOLERO!

Special use of ONE FINGER AD-LIB

This same process works for Rhythms #91, #93, and #94 with the following changes in the process:

Rhythm #91 (Ballet)

The "Swan Lake" theme used on these notes is based on four-beat phrases. So, hold down each ONE FINGER AD-LIB notes for *four* beats instead of three. Also, the BALLET rhythm requires that you press the G2 key *at the same time* that you press the **START** button. If you press these at different times, the ONE FINGER AD-LIB melody notes will not match the preset chords.

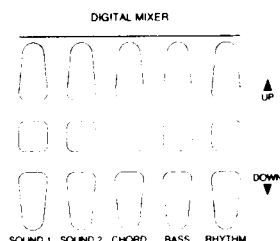
Rhythm #93 (Campanella)

Campanella is based upon "three-beat" phrases. So, hold down each note for three beats. Do not use the G2 and G#2 notes with this rhythm. Start with the A2 key. Again, the Campanella rhythm requires that you press the A2 key *at the same time* that you press **START** button.

Rhythm #94 (Nocturne)

Start on G2. Hold each ONE FINGER AD-LIB note for *six* beats, since NOCTURNE is based on six-beat phrases. Press the G2 key at the same time that you press **START** button.

The Digital Mixer Section



So far, we have covered the basics of the FS800's Rhythm, Auto-Accompaniment, and ONE FINGER AD-LIB functions. This section will show you how to use the Digital Mixer.

The volume of each individual part can be adjusted using the **VOLUME** buttons in this section. The **UP ▲** button increases the volume of a part when it is held down. The **▼ DOWN** button decreases volume. The middle button sets a "normal" volume for that part which is "in balance" with the other parts of that accompaniment.

Volumes may be set to any of seventeen levels ranging from 0 to 16 (16 being the loudest). The current volume for a specific part will appear briefly on the display each time a volume button is pressed.

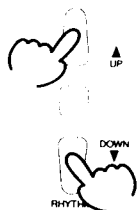
1. **SOUND 1 volume** buttons
These buttons control the volume of Sound 1.
2. **SOUND 2 volume** buttons
These buttons control the volume of Sound 2.
3. **CHORD volume** buttons
These buttons control the volume of the Auto-Accompaniment Chords.
4. **BASS volume** buttons
These buttons control the volume of the Auto-Accompaniment Bass part.
5. **RHYTHM volume** buttons
These buttons control the volume of the Rhythm (drum) part.

The Digital Mixer will help you keep the various "parts" of your music in "balance" with each other.

The next page will show you how to use the Digital Mixer to eliminate any of the five parts (Sound 1, Sound 2, Chords, Bass, or Rhythm).

The LED lamps in the Digital Mixer section are divided into five segments to show the volume levels for each part. When musical parts are being played (either by hand or with automatic accompaniment) the volume levels for each part are shown in real-time (that is, as you hear them).

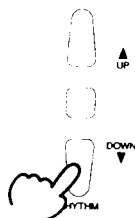
The Digital Mixer Section

A

Press
simultaneously.

B

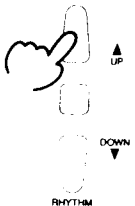
After
turning OFF



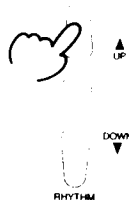
The Volume goes
back as before turning
OFF, when the DOWN
button is pressed.

C

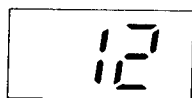
After
turning OFF



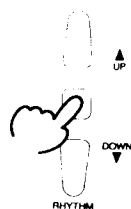
The Volume goes up
from 0, when the UP
button is pressed.

D

When you press
a Volume button. . .



The current volume
is displayed.

E

This selects the most
appropriate voltage
for the selected
rhythm.

Muting a part:

Simultaneously pressing both the **UP** and **DOWN** volume buttons for any part (Sound 1, Sound 2, Chords, Bass or Rhythm) causes the volume of that part to be turned off. This procedure for turning the volume of a particular part off is called "muting" a part. (See illustration A).

You can immediately return a muted part to its original volume (the volume just prior to muting) by pressing the **▼ DOWN** button for that part (see Illustration B).

Pressing the **UP ▲** button also restores the muted part, but its volume will be at near zero. Holding down the **UP ▲** button for that part lets you increase the volume gradually (see Illustration C).

- * The volume can also be controlled by MIDI input, as shown in the following chart: (See page A-35 for the detail)

SOUND 11 ch (N ch)
volume

SOUND 22 ch (N+1 ch)
volume

CHORD3 ch (N+2 ch)
volume

BASS4 ch (N+3 ch)
volume

RHYTHM10 ch (D ch)
volume

Using the Middle Button

Pressing the middle buttons between the **UP** and **DOWN** buttons on the mixer will establish a preset volume for that part which is in "balance" with the other parts of the accompaniment.



Using REGISTRATION Memory

What does the REGISTRATION memory do?

Imagine that you want to use a quiet sixteen beat pattern for the majority of your song, but need to switch to another rhythm for the climax. Of course, it would be nice to raise the volume at that time, too. Such variations are not uncommon and add a lot to a song -- but you might find it hard to press all of those buttons! In these types of situations, you will find the REGISTRATION memory: very useful.





Up to 20 front panel set-ups can be stored in REGISTRATION memory. The following musical elements can be stored in REGISTRATION memory.

1. Volume for each part
2. Sound number to be selected
3. Rhythm number to be selected
4. The "on or off" status of the **AUTO** button
5. The "on or off" status of the **ONE FINGER AD-LIB** button
6. The "on or off" status of the **EFFECT** buttons
7. **TEMPO** setting

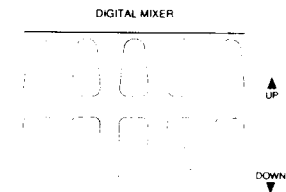
The next page will show you how to operate the REGISTRATION memory feature.

Using REGISTRATION Memory

1


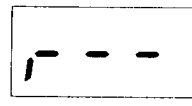
Use  and  and  to select .

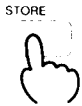
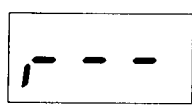
Press 6, then press 8.

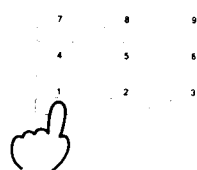
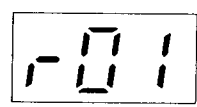




Adjust the volume of each part.

2

 → 

 →  begin to flash.

 → 

 →  stop flashing.

Press again.

How to use the REGISTRATION memory:

As an example of the way REGISTRATION memory can be used, we will show you how to set the FS800 so that you can use the Rhythm and Auto-Accompaniment patterns for Tango and Habanera in a single song.

1. Establish your panel setting (REGISTRATION).

Use the **RHYTHM** button and the **SELECTOR** buttons to select rhythm number 68 (TANGO). Start the Auto-Accompaniment, and use the **VOLUME** buttons to adjust the volume of each part to a level that balances with the others. Also, select the number of the sound which you would like to use for the melody. Now press the **STOP** button to stop the accompaniment before going to step 2.

2. Storing your panel setting in REGISTRATION memory.

Press the **REGISTRATION** button. The lamp above the button will light up and the display should change to read *r - -*. The "r" stands for REGISTRATION.

The FS800 can remember twenty settings using the REGISTRATION memory. These settings are given a number from 01 to 20. Press the **STORE** button and the *r - -* in the display will begin to flash.

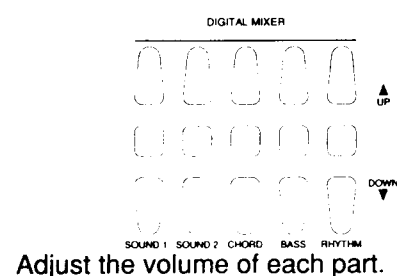
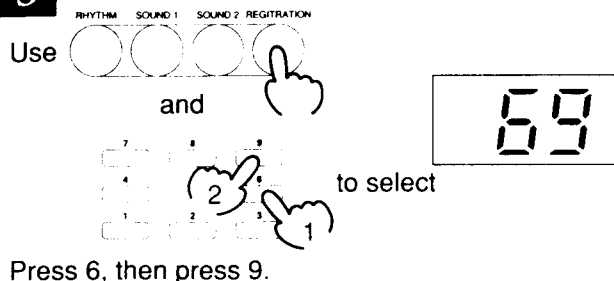
Now press the **#1** button of the **numeric** keys. The display should change to read *r-01*.

You are now ready to store the current panel setting to REGISTRATION memory number 01.

Press the **STORE** button a second time and the display will stop flashing. This means that the rhythm number, sound number, and volume settings that you selected in step 1. above have been stored as REGISTRATION number 01.

Using REGISTRATION Memory

3



3. Storing a second REGISTRATION setting

Next, select rhythm number 69 (HABANERA1). Choose the melody sound number and set the volume of each part as you did in step 1. Stop the rhythm using the **STOP** button. Then press the **REGISTRATION** button once again. Press the **STORE** button and the **r - -** in the display will begin to flash. Use the **numeric** keys to change the display to read **r 02**. Press the **STORE** button once again, and the display will stop flashing. The new rhythm number, sound number, and volume settings that you just selected have been stored as REGISTRATION number 02.

4. Using your REGISTRATION setting in a song.

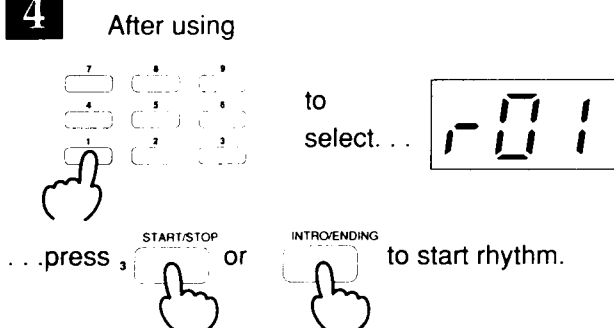
Now try using the **numeric** keys to change the display to read **r 01** once again. Press either the **START/STOP** button or the **INTRO/ENDING** button to start the Rhythm pattern.

The rhythm that you hear should be rhythm number 68 (TANGO). When you press one or more of the keys on the Lower keyboard, you will hear the Auto-Accompaniment for that pattern at the volume you set in step 1. above.

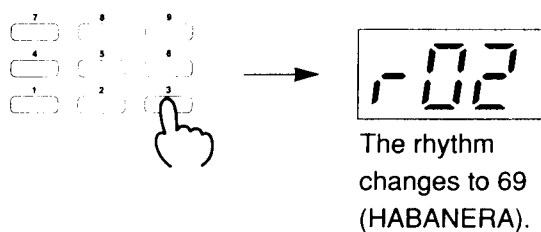
5. Now, while the TANGO rhythm is playing, press the #2 button or ▲ UP button. The display should change to read r 02, and the HABANERA rhythm should begin to play. The volume levels should be as you set them in step 3. above.

6. Once you have stored several "set-ups" in the REGISTRATION Memory, you can access then at any time by simply pressing the REGISTRATION button and using the numeric keys to select the Registration number that you want to use (r 01 through r 20).

4



5



Using the Real-Time RECORDER

2

Press



and the metronome will begin.

4

Press



to stop recording.

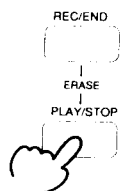
5

Press



to start playback.

Press



to stop playback.

To record your performances:

This section will show you how to record the songs you perform using the FS800's RECORDER feature. The RECORDER allows you to record up to three different songs.

Here are the steps:

1. First, set up the FS800 for your performance.

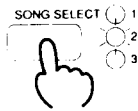
Begin by selecting the Sound, Rhythm, and Lower Keyboard mode settings that you will require to perform your song. If you want to make changes in Sounds, Rhythm and Auto-Accompaniment patterns, or Volume during your song, you should use the REGISTRATION function.

2. Press the **REC/END** button. You will hear the sound of the metronome. (If the metronome does not start, see step 7. on the following page).
3. Start playing! Everything you play including ONE FINGER AD-LIB phrases and changes in Sounds or Rhythms, will be recorded *as you played it*. That's what we mean by "Real-Time". What you play is what you get.
4. When you are done with your song, press the **REC/END** button once more. The recording will end, and your song will be recorded as SONG 1.
5. Now let's try playing the song back. Press the **PLAY/STOP** button. The song you just recorded should begin to play. If you would like to stop the performance without listening through to the end, just press the **PLAY/STOP** button once more.

Using the Real-Time RECORDER

6

Press



and the lamp
will change.

7



REC/END



Check to be sure you're erasing the right
song before pressing.

(The above illustration shows SONG 2.)

6. Next, if you would like to record a different song, press the **SONG SELECT** button. Check that the lamp above the **PLAY/STOP** button changes to indicate **SONG 2**. Then record your next song using the procedure described on the previous page.
7. If you would like to record over a song which has already been recorded, it is necessary to erase that song first. If, for example, you would like to record over **SONG 1**, you might try pressing the **REC/END** button; but you would find that the metronome will not start. (This is to prevent you from accidentally recording over a song which you would like to keep!)

In order to erase a song, use the **SONG SELECT** button to change the lamp so that it indicates the song you want to erase. Then, press the **REC/END** button and the **PLAY/STOP** button simultaneously. The song will be erased instantly.

Note:

When recording songs using the RECORDER, the tempo information will not be recorded. This allows you to record songs at a slow tempo and play them back at a fast tempo.



Congratulations!

**You've finished learning the FS800's Basic Operations.
*Now have more fun exploring the Advanced Operations
section.***

This completes the Basic Operation section of the FS800 instruction manual.

We trust that this first section has given you a good basic knowledge of FS800's powerful features.

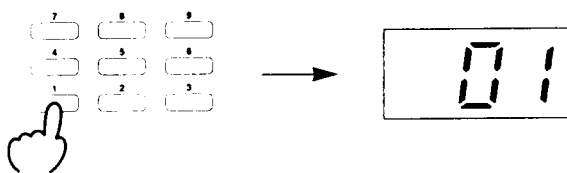
But you've only just begun to explore the full capability of the FS800!

The Advanced Operation section will help you to learn how much more can be done with this powerful instrument.

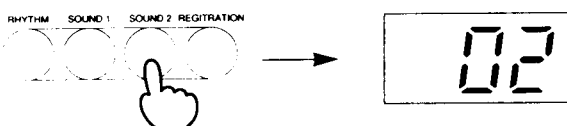
2. Advanced Operation

Advanced Use of Sounds: Combining Two Sounds

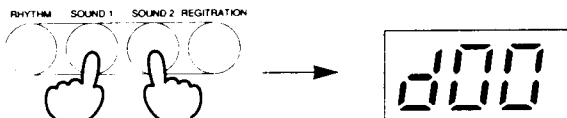
1



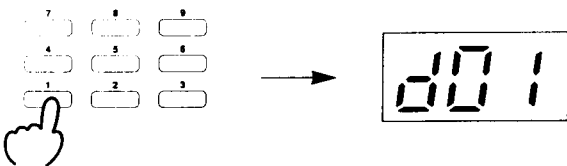
2



3



4



As a first step in this Advanced Operation section, let's try combining two of the sounds listed in the FS800's "100 SOUND LIBRARY," for a rich DUAL sound effect.

1. First, select any sound you like using the **numeric** keys. As an example, we will choose sound number 01 (PIANO 1).
2. Next, press the **SOUND 2** button. The lamp above the button will light up. Now, select another sound. [We will choose number 02 (PIANO 2) for our example.]
3. Now press both the **SOUND 1** button and the **SOUND 2** button *simultaneously*. The lamps above these buttons should start blinking and the display should change to read **d00**.
If you press one of the keys on the keyboard, you will hear the combination of sounds 01 and 02, PIANO 1 and PIANO 2.

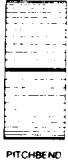
— What does **d00** mean? —

When two sounds are played at once, varying the pitch of the sounds slightly with respect to each other makes the combined sound much richer. This varying of the pitch of two sounds is called "Detuning." The FS800 allows you to detune two sounds when combining them using the DUAL effect. The "d" in the display therefore stands for "Detune," and the "00" following it represents the difference in pitch between SOUND 1 and SOUND 2.

4. Press the **#1** button. The display should change to read **d01**. Now, when you press a key on the keyboard, you will hear a slightly richer sound. You can use the **numeric** keys to set a detune value of 00 to 07. The higher the number is, the greater the difference in pitch becomes. When our PIANO 1/PIANO 2 combination is set to a detune value of 07 (**d07**), the result is a "honkytonk" sounding piano. Using the DUAL effect with 7 levels of detune, you have up to 32,400 different DUAL sound variations available.

Advanced Use of Sounds: Adding Effects

1



2



3

STEREO CHORUS

4

SUSTAIN

5

DUET

The FS800 has a variety of effects which can add realism or excitement to your selected sound.

1. PITCH BEND Wheel:

Pitch bend is an effect by which the pitch of a sound is bent smoothly up or down. It is useful for copying the sound of a guitar being played with a "Choking" technique. Try rotating the Pitch Bend Wheel while holding down one of keys on the keyboard. The pitch of the sound should bend smoothly.

2. MODULATION Wheel:

The Modulation Wheel is used to add vibrato depth of a sound. When you do not want to use vibrato, rotate the Modulation Wheel downward (toward you) as far as possible. This minimizes the vibrato effect. Turn the wheel upward (away from you) to increase vibrato depth.

3. STEREO CHORUS:

Pressing the **STEREO CHORUS** button adds a deep stereo richness to the currently selected sound. Pressing the button a second time cancels the effect.

4. SUSTAIN:

Pressing the **SUSTAIN** button lengthens the duration of notes played on the keyboard. Pressing the button a second time cancels the effect.

5. DUET:

When the **DUET** button is pressed, the FS800 will add a harmonizing note to each melody note that is played on the keyboard, so you can enjoy a duet performance while playing only one melody note at a time. This function is extremely effective when used together with the Auto-Accompaniment function. Pressing the button a second time cancels the **DUET** effect.

Notes:

1. When you choose the **DUAL** sound effect, the **STEREO CHORUS** effect, or the **DUET** effect, the number of notes that can be heard at the same time (polyphony) will be reduced.
2. The **DUAL** sound effect is not possible when one of the **SPLIT** sounds, numbered 41 through 50, is chosen as **SOUND 1** or **SOUND 2**.
3. If you press the **STEREO CHORUS** button while using the **DUAL** sound effect, the **STEREO CHORUS** effect will be applied only to the sound selected as **SOUND 1**.
4. If you press the **DUET** button while using the **DUAL** sound effect, the harmonizing note will be **SOUND 1**.

Advanced Use of Auto-Accompaniment Section:

The FS800's Auto-Accompaniment section is one of the most powerful found on any portable keyboard. It has the capability of working in four different modes. In the Basic Operation section, we discussed only the first mode, AUTO 1, which is the standard operational mode for most portable keyboards. In this Advanced Operation section, we will introduce the remaining three modes: AUTO 2, AUTO 3, and AUTO 4.

Having four different Auto-Accompaniment modes allows the FS800 to be enjoyed by people at all levels of musical of musical ability -- from beginners to experienced professionals.

Let's outline the four modes of Auto-Accompaniment offered by the FS800:

1. AUTO 1:

Lets you play single-finger or fingered chords with your left hand while playing the melody with your right. Your left hand chords trigger the Auto-Accompaniment. For a review of AUTO 1 operation, see the Basic Operation section.

2. AUTO 2:

Lets you play a bass line with your left hand while playing chords and melody with your right. Preset Auto-Accompaniment chords will play -- but are triggered by the chords you play in your *right hand*.

3. AUTO 3:

Like AUTO 2, AUTO 3 lets you play chords with your right hand and bass notes with your left. However, in AUTO 3, the actual notes you play are *not* heard. They simply "trigger" the auto accompaniment chords. The advantage to AUTO 3 is that it allows the SuperBoard to follow *any* chord you play, even chords that are not recognized by AUTO 2.

4. AUTO 4:

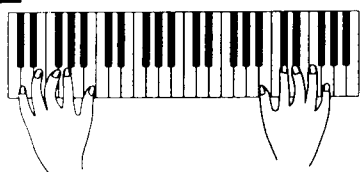
The mode to use when you're not sure what chords to play. AUTO 4 has a preset chord sequence for each rhythm (the same sequence used with ONE FINGER AD-LIB). You can play through the entire chord sequence by playing successive notes (in order starting with C1) in the Lower keyboard with your left hand.

Let's try using these three new Auto-Accompaniment modes, beginning with AUTO 2.

Note:

ONE FINGER AD-LIB is not operational when the FS800 is in AUTO 2 or AUTO 3.

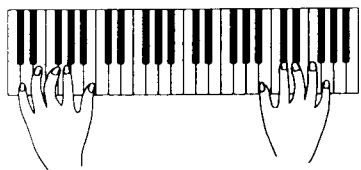
1



Chords with
left hand.

Melody with
right hand.

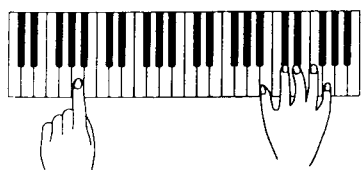
2



Bass with
left hand.

Chords and
Melody with
right hand.

4



Chords with
left hand.

Melody with
right hand.

Explanation of AUTO 2

1

Press twice.

2

3

4

to select
SOFT FUSION.

4

to select
E. PIANO 2.

5

AUTO 2 is an advanced form of Auto-Accompaniment which lets you play a bass line with your left hand while your right hand plays the chords and melody.

How is AUTO 2 different from AUTO 1? In AUTO 1, the Auto-Accompaniment Chords are triggered by the chords you play in your left hand only. In AUTO 2, your right hand notes trigger the Auto-Accompaniment Chords and your lowest left-hand note controls the bass.

■ Why is AUTO 2 valuable? There are two primary reasons:

1. Many people feel more comfortable playing chords with their right hand rather than their left. AUTO 2 suits that playing style better than AUTO 1.
2. If you play the FS800 as you would normally play a piano while using AUTO 2, the preset Auto-Accompaniment chords will follow the chords of your performance.

Let's see how AUTO 2 works:

1. With the rhythm stopped, press the **SYSTEM** button twice. The display will briefly flash "P02" and then begin to alternate between "Aut" and the number "001". This shows that the Auto-Accompaniment is currently set to AUTO 1.
2. Press #2 of the **numeric SELECTOR** buttons to change the number in the display to 002. This tells you that you have selected AUTO 2. Now press any key outside the **SELECTOR** section to escape from SYSTEM mode.
3. Press the **AUTO** button so that the LED lamp is lit. Also, press the **STEREO CHORUS** button to add some richness to the sound.
4. Select a rhythm using the **RHYTHM** button and the **numeric SELECTOR** buttons. This time, try Rhythm pattern number 03 (SOFT FUSION). Select sound number 04 (E. PIANO 2) using the **SOUND 1** button and the **numeric SELECTOR** buttons.
5. Press the **START/STOP** button. The rhythm will start. Try playing the music at left along with the rhythm.



Explanation of AUTO 2

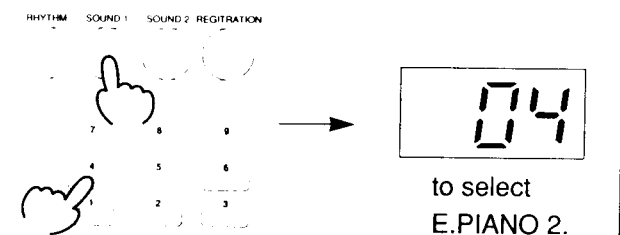
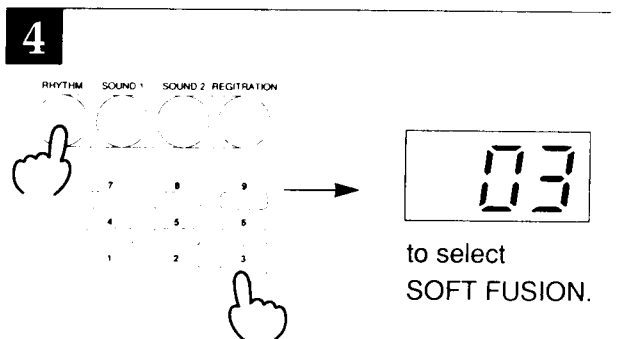
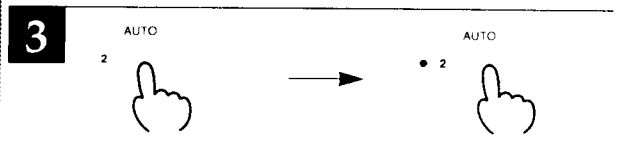
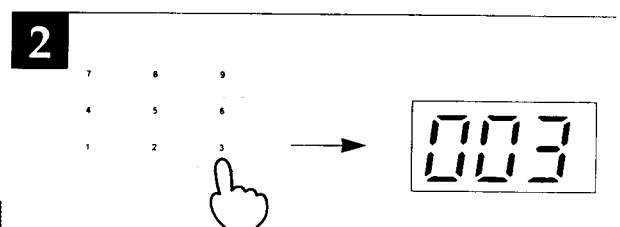
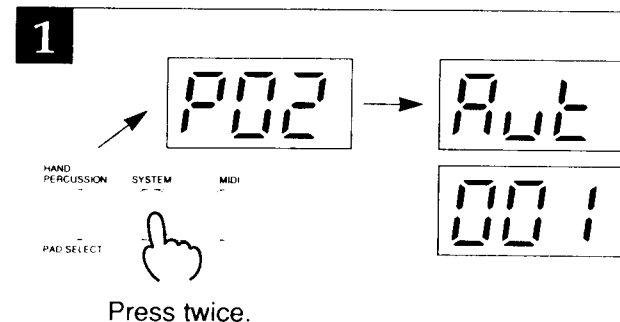
6. As you play the example, notice that you can hear both the notes you're playing and the chords of the preset accompaniment. Most of the time, these will not clash. As you begin to play more advanced chords, you may find that the preset accompaniment chords cannot follow you.

Your "played" chords will begin to clash with the preset chords. To remedy this situation, use the DIGITAL MIXER section to mute the preset accompaniment chords (press both the **UP** and **DOWN** buttons simultaneously for the CHORD part). This will leave only your chords, bass, and rhythm. The result will be much more pleasing.

Note: Here's some playing information about AUTO 2

1. The Auto-Accompaniment changes when you press three or more keys (total) on the Lower and Upper Keyboards. The Auto-Accompaniment chords will not change when you play a chord that FS800 cannot recognize as a chord. see page Ap-1 for a chart of the chords that FS800 can recognize.
2. When you press only one key on the Lower Keyboard, only the Auto-Accompaniment *bass* part will change.
3. If you press more than one key on the Lower Keyboard, the bass part will respond to the *lowest* key pressed.
4. When only keys on the Upper keyboard are pressed, pressing three or more keys will cause the Auto-Accompaniment to change.
5. When AUTO 2 is activated, neither ONE FINGER AD-LIB nor DUET will function.

Explanation of AUTO 3



Like AUTO 2, this third Auto-Accompaniment mode lets you trigger chords with your right hand while your lowest left-hand note triggers the bass.

AUTO 3 is different from AUTO 2 in two important ways. First, AUTO 3 allows you to play any chord you want on the keyboard. It will take your chords and insert them into the Auto Accompaniment. AUTO 2 also did this, but it was limited to specific set of chords. AUTO 3 gives you total freedom in chord selection.

The second difference is that the actual notes that you play on the keyboard will not be heard in AUTO 3. Your "played" notes or chords serve only to "trigger" the chords that are heard as part of the Auto Accompaniment. As you play, you will hear the accompaniment chords change to match the notes you are playing on the keyboard.

AUTO 3 will be used most often by composers or arrangers in a MIDI sequencing environment. AUTO 3 allows them to create complete accompaniments using complex chord structures and build upon this foundation using MIDI.

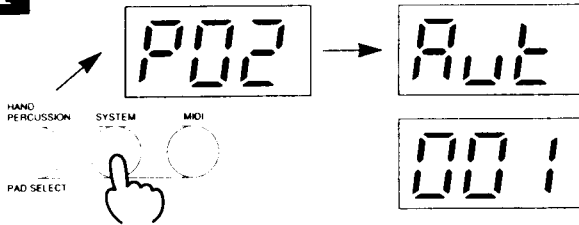
Let's try AUTO 3:

1. With the rhythm stopped, press the **SYSTEM** button twice. The display will briefly flash **P02** and then begin to alternate between "**Aut**" and the number "**001**" (or **002** if you were just in AUTO 2).
2. Press #3 of the **numeric SELECTOR** buttons to change the number in the display to **003**. This indicates that you have selected AUTO 3.
Now, press any key outside the **SELECTOR** section to escape from the **SYSTEM** mode.
3. Press the **AUTO** button so that the AUTO lamp is lit.
4. If you haven't already done so in our AUTO 2 example, use the **RHYTHM** button and the **numeric** keys to choose Rhythm #03 (SOFT FUSION). Also, select sound #04 (E. PIANO 2) using the **SOUND 1** button and the **numeric** keys.
5. Press the **START/STOP** button. The rhythm will start. Try playing the music at left along with the rhythm.
6. Try playing the music to one of your favorite songs and sing the melody. You'll like the result! Plus, AUTO 3 will allow the FS800 to follow every chord you play.

Note: When AUTO 3 is activated, neither ONE FINGER AD-LIB nor DUET will function.

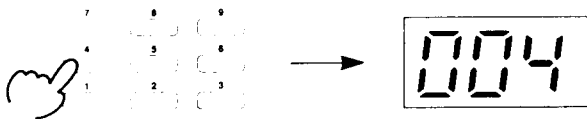
Explanation of AUTO 4

1

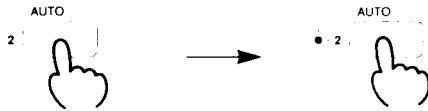


Press twice.

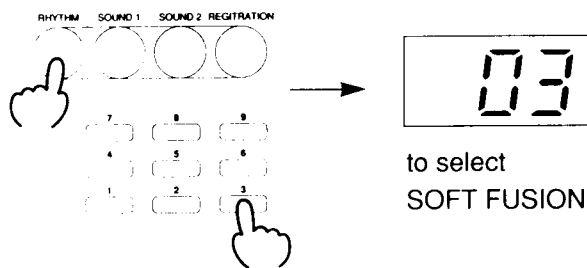
2



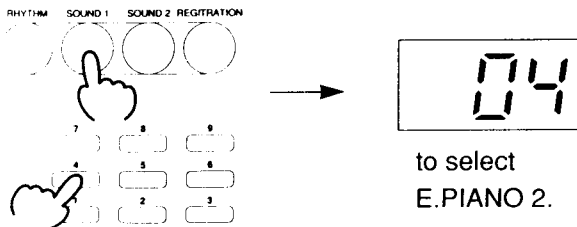
3



4



to select
SOFT FUSION.



to select
E.PIANO 2.

AUTO 4 is the best Auto-Accompaniment mode when you're not sure what chords to play. The FS800 has a preset chord sequence (the same one used with ONE FINGER AD-LIB) for each of the 100 *Rhythms*. You activate the preset sequence by pressing the notes of the Lower Keyboard (beginning with C1) in successive order. Here are the steps:

1. With the rhythm stopped, press the **SYSTEM** button twice. The display will briefly flash "P02" and then begin to alternate between "Aut" and the number "001". This shows that the Auto-Accompaniment is currently set to AUTO 1.
2. Press #4 of the numeric **SELECTOR** buttons to change the number in the display to 004. This tells you that you have selected AUTO 4. Now press any key outside the **SELECTOR** section to escape from **SYSTEM** mode.
3. Press the **AUTO** button so that the LED lamp is lit. Also, press the **STEREO CHORUS** button to add some richness to the sound.
4. Select Rhythm number 03 (SOFT FUSION) and sound number 04 (E.PIANO 2) as you did in the previous pages.
5. Press the **SYNC./FILL-IN** button. The rhythm will not start until you press a key in the Lower Keyboard.
6. Now, count "ONE... TWO... THREE... FOUR" at the same tempo as the blinking red "Tempo" dot in the display. These are the "Beats" of the Auto-Accompaniment. Starting with the lowest "C" (called C1), hold each note of the Lower keyboard in successive order (C... C#... D... D#) for four beats. You'll hear the chord sequence change as you move up the chromatic scale.

With AUTO 4, you won't have to worry about chords. It lets you concentrate on making great melodies with your right hand.



Introducing Accompaniment Hold

Accompaniment Hold is an exciting new feature from KAWAI that allows you to control the rhythmic placement of Accompaniment Chords while you play. To operate Accompaniment Hold, you'll need to purchase a foot switch (model F-1, sold separately).

- Connect the F-1 foot switch to the Accompaniment Hold jack on the rear panel.
- Whenever you depress the foot switch pedal, the bass drum, open hi hat, bass, and chord will play in unison.
- If you hold the pedal down, the bass and chord sounds will be held until you release the pedal.

When will the Auto-Accompaniment Hold feature be most useful?

1. When you want to add rhythmic variety to your accompaniment by holding some chords and letting others play normally;
2. When you want to add syncopation to an accompaniment;
and
3. When you want to add accents to an accompaniment.

Try Accompaniment Hold with several different Auto-Accompaniments to see how effectively it can add interest and excitement to your performances.

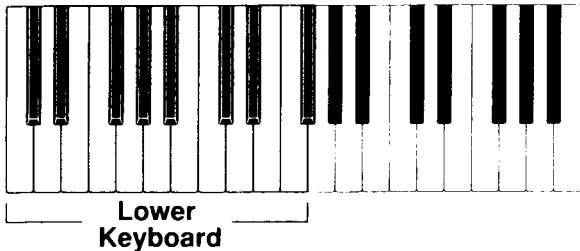
Important:

Before moving on to the next section, press the **SYSTEM** button twice and use the **numeric** keys to return to AUTO 1.

Note:

The F-1 footswitch can also operate as a "Fill-In" pedal. For details, see Page A-27.

Using Hand Percussion and Sound Selectable Pads



DRUM Assignment

Key	MIDI Key #	Instrument name
C1	36	Bass Drum
C#1	37	Rim Shot
D1	38	Low Snare
D#1	39	Hi Clap
E1	40	Hi Snare
F1	41	Scratch Low
F#1	42	Hi-hat Close
G1	43	Low Tom
G#1	44	Low Clap
A1	45	Low Conga
A#1	46	Hi-hat Open
B1	47	Mid Tom
C2	48	Hi Conga
C#2	49	Crash Cymbal
D2	50	Hi Tom
D#2	51	Ride Cymbal
E2	52	Low Cymbal
F2	53	Scratch High
F#2	54	Small Cymbal

In addition to its use with Auto-Accompaniment, the Keyboard can also be used to play percussion instruments.

Press the **HAND PERCUSSION/PAD SELECT** button . The letters “_ o n” will briefly appear in the display.

Now, when you press any of the keys on the Lower Keyboard, you will hear the sound of the instrument pictured above that key. This feature allows you to enjoy playing simple drum solos in time with the rhythm. Of course, these drum sounds can be played even when the rhythm is turned off. The drum sounds are assigned to the keys of the Lower Keyboard as shown in the chart at left.

The keys of the Upper Keyboard will also produce drum sounds -- even though there are no pictures above them. Drum phrases are assigned to the five keys from G#5 to C6 instead of drum sounds. These drum phrases can also be assigned the four Sound Selectable Pads.

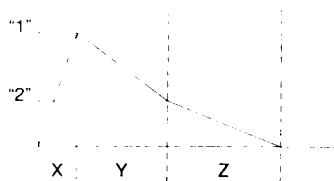
Pressing the **HAND PERCUSSION/PAD SELECT** button again turns off the Hand Percussion feature so that the Lower Keyboard will function as a Normal Keyboard once again.

Assigning Percussion Sounds to the Sound Selectable Pads

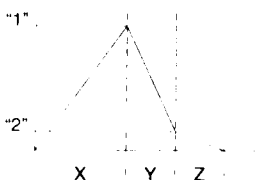
To assign percussion sounds to the Sound Selectable Pads, press the **HAND PERCUSSION/PAD SELECT** button to put the keyboard in the Hand Percussion mode. Then, hold down a pad while you press the key that contains the sound that you want assigned. For example, if you want to assign the “bass drum” sound to the first pad, hold down the pad while you press C1 on the keyboard (which has a picture of a bass drum over it). Be certain not to lift your finger off the pad until you've pressed C1. Now, the first pad should sound like a bass drum. You can assign percussion sounds to the other three pads in the same way.

Creating Your Own Sounds: The Synthesizer Function

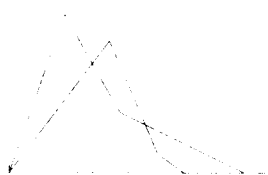
"WAVE A"



"WAVE B"



The sound you hear:



What is the synthesizer function?

The built-in 13-parameter synthesizer allows you to create your own sounds and store them in the FS800's User Memory. Before discussing the actual use of the synthesizer, let's take a look at the way the FS800's one hundred sounds are constructed. This information will be very helpful when you start to create your own sounds.

How sound is created on the SuperBoard.

The shape of each sound is determined by a variety of elements called "Parameters".

The figure shows the relationships between parameters and envelopes in the Superboard's SYNTHESIZER mode.

PHASE 1 LEVEL — "1"

PHASE 1 SPEED — "X"

PHASE 2 SPEED — "Y"

PHASE 2 LEVEL — "2"

PHASE 3 SPEED — "Z"

- "Z" must be approaching zero.

- RELEASE can be set separately,

Let's look at how each parameter affects the sound.

1. WAVE SELECT:

Use this parameter to select the WAVE Combination you wish to change. Every sound on the SuperBoard is composed of two waves, WAVE A and WAVE B. That's why we can refer to a "sound" as a WAVE Combination. When you select a sound, you're actually selecting two waves together. You cannot select each wave separately using the WAVE SELECT parameter. Each of the two waves has its own "shape" (or envelope) which determines the character of its sound.

2. PHASE 1 LEVEL:

This parameter controls the PHASE 1 volume levels of WAVES A and B. PHASE 1 LEVEL can be defined as "the maximum volume level for the first segment of a wave's shape."

3. PHASE 1 SPEED:

This parameter controls the amount of time it takes for WAVES A and B to reach PHASE 1 volume levels (maximum volume) after the key is struck. Phase 1 SPEED is fast for sounds such as #87 (VIBES) and slow for sounds such as #17 (SLOW VIOLIN).



Creating Your Own Sounds: The Synthesizer Function

4. PHASE 2 SPEED:

This parameter controls the amount of time it takes for WAVES A and B to change from PHASE 1 volume levels to their PHASE 2 volume levels. Phase 2 speed is fast for sounds such as 85 (XYLOPHONE) and slow for sounds such as 01 (PIANO 1).

5. PHASE 2 LEVEL:

This parameter controls the PHASE 2 volume levels. PHASE 2 LEVEL can be defined as "the maximum or minimum volume level for the second segment of a wave's shape." If the PHASE 2 segment is part of the "attack" of a sound, PHASE 2 LEVEL will be a maximum volume level. If the PHASE 2 segment is part of the "decay" of a sound, PHASE 2 LEVEL will be a minimum volume level. For sounds such as #85 (XYLOPHONE), where the sound fades even while the key is being depressed, the PHASE 2 volume level is generally zero. For sounds such as #31 (JAZZ ORGAN), where the sound continues for a long time, the level can be adjusted.

6. PHASE 3 SPEED:

This parameter controls the amount of time it takes for the PHASE 2 level for WAVES A and B to reach zero volume. For sounds such as #31 (JAZZ ORGAN), the amount of time is very long.

7. RELEASE SPEED:

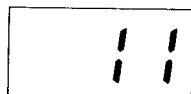
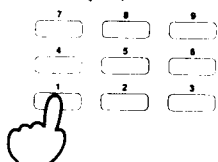
This parameter controls the amount of time it takes for the sound to disappear after the keys are released. Sounds such as #76 (COSMIC) have a long release.

The Synthesizer Function: Changing the Parameters

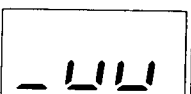
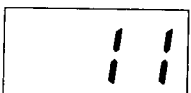


Select parameters using these keys.

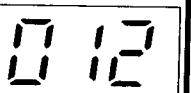
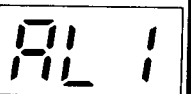
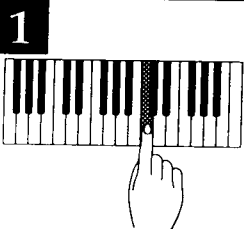
RHYTHM SOUND 1 SOUND 2 REGISTRATION



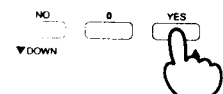
SYNTHESIZER



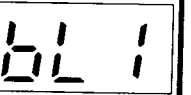
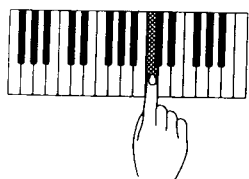
flash alternately.



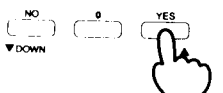
flash alternately.



Press again.



flash alternately.



Now that you understand the way sound is created on the SuperBoard, let's discuss the method with which you can change parameters to create your own sounds. Parameters are selected using keys B4 through F5 on the right side of the keyboard. Once a parameter has been selected, its value can be changed using the **numeric** keys.

First, use the **numeric** keys to select the sound which you would like to modify. Let's try changing the parameters for sound #11 (BOW. STRINGS).

Use the **numeric** **SELECTOR** buttons to select sound #11.

Begin by pressing the **SYNTHESIZER** button. The display will begin to flash alternately between "_UU" and "11". The "_UU" represents a W, the first letter in WAVE. The number 11 indicates that WAVE Combination #11 has been selected. (Remember that each of the sounds in the FS800's "100 SOUND LIBRARY" is actually a combination of two WAVES, WAVE A and WAVE B.) The WAVE SELECT key (B4) can be pressed at any time to remind you which WAVE Combination you are editing.

The WAVE number can be changed using the WAVE SELECT key and the **numeric** **SELECTOR** buttons. For example, if WAVE Combination #100 is selected, the display will flash alternately between "_UU" and "100".

1. Changing the PHASE 1 LEVEL

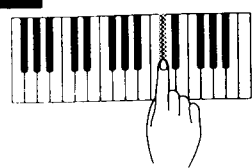
Press the C5 key. The display should begin to flash alternately between "AL 1" and the number "0 12". The "R" in the display means WAVE A, and the "L 1" stands for "PHASE 1 LEVEL." Thus, the PHASE 1 LEVEL is 12. If you press the **UP** ▲ button (in the **SELECTOR** Section) once, the number shown in the display should change to read "0 13".

Next, try pressing the C5 key once again. The display should begin to flash alternately between "bL 1" and the number "0 11". Again, the "b" is a lower case letter "B" indicating WAVE B, and the "L 1" stands for "PHASE 1 LEVEL". This indicates that the PHASE 1 LEVEL of WAVE B is 11. Use the **UP** ▲ button to change the number to "0 15".

You have now made WAVE B (at "0 15") louder than WAVE A (at "0 13").

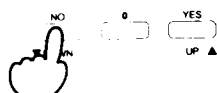
The Synthesizer Function: Changing the Parameters

2



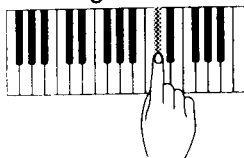
A5 1
0 1 1

flash alternately.



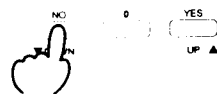
002

Press again.



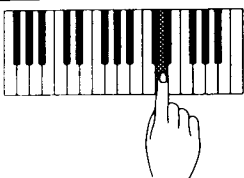
b5 1
0 10

flash alternately.



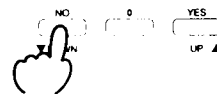
001

3



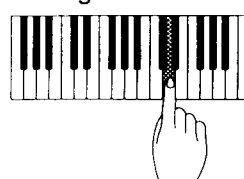
A5 2
005

flash alternately.



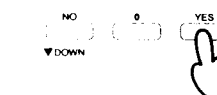
001

Press again.



b5 2
001

flash alternately.



0 10

2. Changing the PHASE 1 SPEED

Press the C#5 key. The display should begin to flash alternately between A5 1 and the number 0 1 1. The "A" in the display means WAVE A, and the "5 1" stands for "PHASE 1 SPEED". Thus, the PHASE 1 SPEED of WAVE A is 11.

Since the maximum PHASE 1 SPEED would be a value of 16, we can say that WAVE A reaches its maximum volume level fairly quickly. Use the ▼ DOWN button or the numeric SELECTOR buttons to change the number to 002. This will make WAVE A reach its maximum volume much more slowly.

Next, press the C#5 key once again. The display should begin to alternate between "b5 1" and the number "0 10". This indicates that the PHASE 1 SPEED of WAVE B is 10. Use the ▼ DOWN button or the numeric SELECTOR buttons to change the number to 001. Now, WAVE B will also reach its maximum volume level very slowly.

Play a lower key on the FS800 (away from the PROGRAM section). You'll hear that the BOW STRINGS sound now has a much slower "attack" than it did previously.

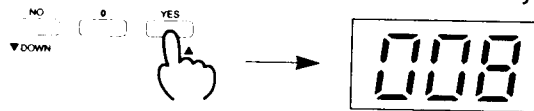
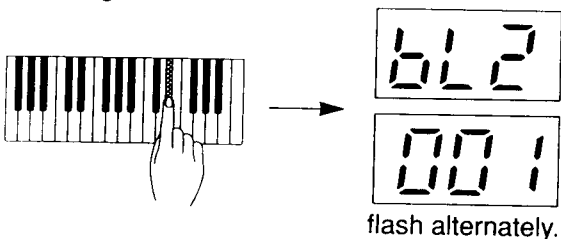
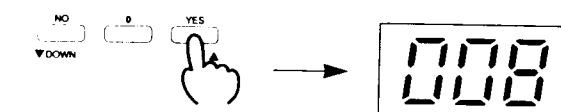
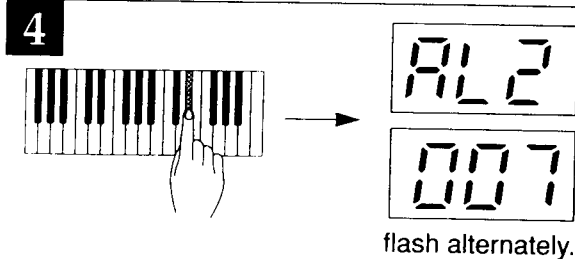
3. Changing the PHASE 2 SPEED

Press the D5 key. The display should begin to flash alternately between "A5 2" and the number "005". The "A" in the display means WAVE A, and the "5 2" stands for "PHASE 2 SPEED." Thus, the PHASE 2 SPEED of WAVE A is 5. Use the ▼ DOWN button or the numeric SELECTOR buttons to change the number to 001.

Next, try pressing the D5 key once again. The display should begin to alternate between "b5 2" and the number "001". This indicates that the PHASE 2 SPEED of WAVE B is 1. Use the UP ▲ button or the numeric SELECTOR buttons to change the number to 0 10.

Hold down one of the FS800's lower keys (away from the PROGRAM section). It will take 6-7 seconds for the sound to reach peak volume (because of the changes we made in Steps 1 and 2 above). After holding for about ten seconds, you'll hear WAVE B drop suddenly in volume. That's because you have assigned it a faster PHASE 2 speed than WAVE A.

The Synthesizer Function: Changing the Parameters



4. Changing the PHASE 2 LEVEL

Press the D#5 key. The display should begin to alternate between "AL2" and the number 007. The "A" in the display means WAVE A, and the "L2" stands for "PHASE 2 LEVEL". Thus, the PHASE 2 LEVEL of WAVE A is 7. Use the UP ▲ button or the **numeric SELECTOR** buttons to change the number to 008.

Next, press the D#5 key once again. The display should begin alternate between "bL2" and the number "001". This indicates that the PHASE 2 LEVEL of WAVE B is 1. Use the UP ▲ button or the **numeric SELECTOR** buttons to change the number to 008.

Hold a lower key once again. After about one second, you'll notice that the volume of WAVE B drops suddenly --- but not as low as WAVE A's volume level.

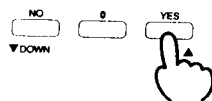
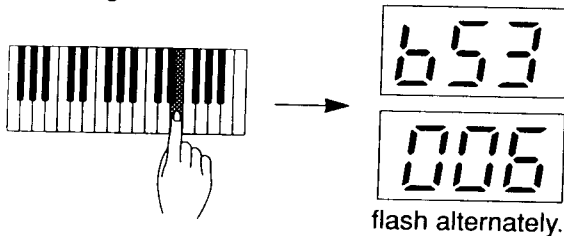
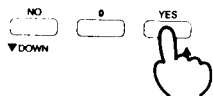
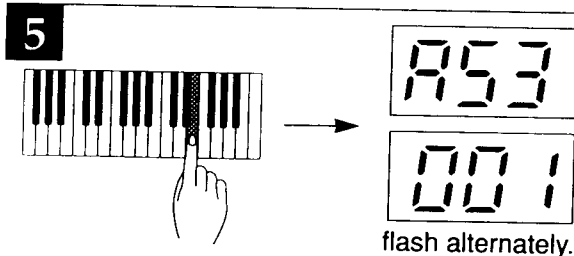
5. Changing the PHASE 3 SPEED

Press the E5 key. The display should begin to alternate between "A53" and the number 001. The "A" in the display means "wave A", and the "53" stands for "PHASE 3 SPEED". Thus, the PHASE 3 SPEED of WAVE A is 01. Use the UP ▲ button or the **numeric SELECTOR** buttons to change the number to 003.

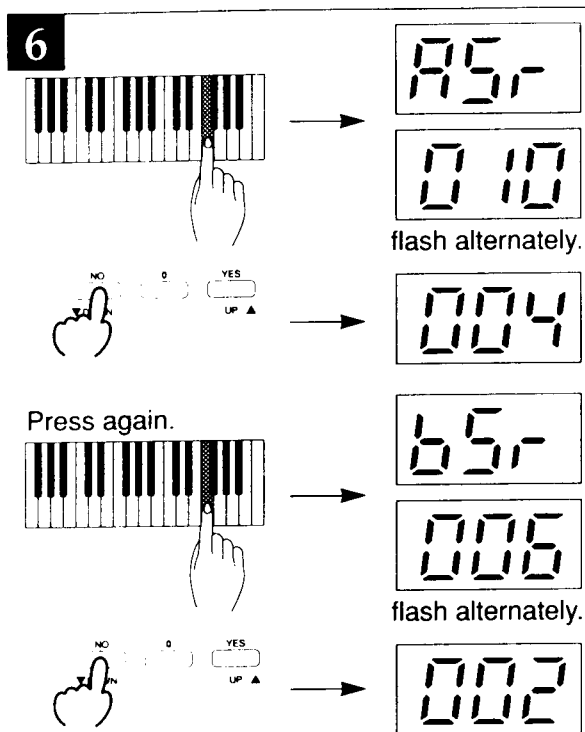
Next, try pressing the E5 key once again. The display should begin to flash alternately between "b53" and the number "005". This indicates that the PHASE 3 SPEED of WAVE B is 06. Use the UP ▲ button or the **numeric SELECTOR** buttons to change the number to 009.

Note:

Some sounds do not allow you to change the value of PHASE 3 SPEED.



The Synthesizer Function: Changing the Parameters



6. Changing the RELEASE SPEED

Before we change the RELEASE SPEED. Hold down one of the FS800's lower keys and then release the key after 3 seconds. You should hear the sound disappear quickly after you lift your finger from the key. Now, let's give this sound a longer RELEASE.

Press the F5 key. The display should alternate between "R5-" and "010". The "R" in the display means WAVE A, and the "5" stands for "RELEASE SPEED." Thus, the RELEASE SPEED of WAVE A is 10. Use the ▼ DOWN button or the numeric SELECTOR buttons to change the number to 004.

Next, press the F5 key once again. The display should begin to alternate between b5- and the number 006. This indicates that the RELEASE SPEED of WAVE B is 06. Use the ▼ DOWN button or the numeric SELECTOR buttons to change the number to 002.

Now, hold down the same lower key as before and release it after 3 seconds. The sound will linger for several seconds after your finger leaves the key. You have lengthened the RELEASE SPEED of WAVE A and WAVE B. Let's save this new sound using the procedure described on the next page.

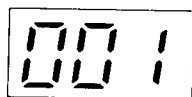
The Synthesizer Function: Storing Your New Sound

1



begin to flash.

2



Storing sounds

Now you're ready to store your newly created sound in the FS800's user memory.

1. Press the **STORE** button. The display should change to read **001**.

It is possible to store up to five sounds created using the synthesizer function. Those five sounds will be stored as sounds 96 through 00, which are listed as USER 1 through USER 5 in the "100 SOUND LIBRARY" on the FS800's front panel. Therefore, the number "001" in the display indicates that USER 1 has been selected. You can use the **numeric** keys to change this number to any value between 1 and 5. Let's leave it at 1 for now.

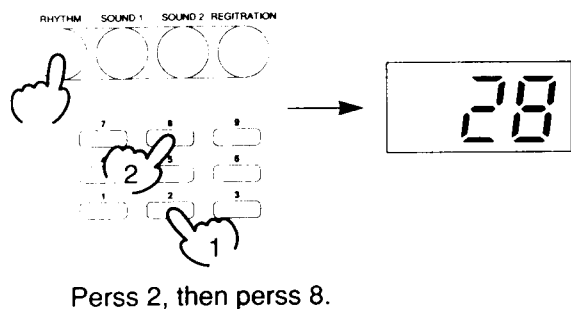
2. Press the **STORE** button one more time. The sound you just created will be stored as sound number 96 (USER 1). Try using the **numeric** keys to select this sound. When you press a key, you should hear the sound you just created.

Note:

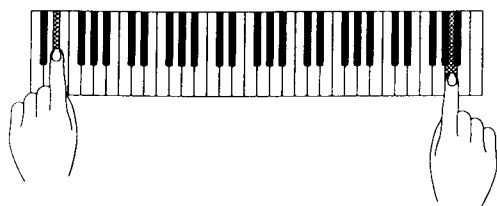
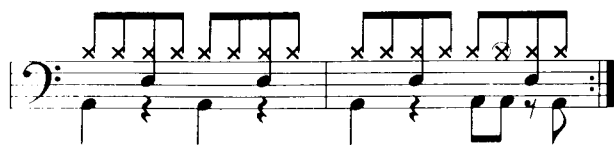
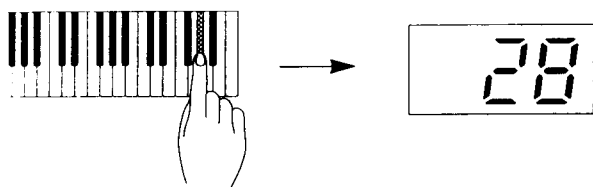
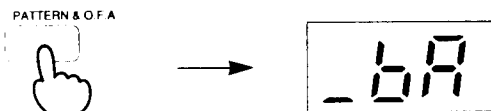
If, while you're creating a sound using the synthesizer function, you should happen to press a key which activates one of the FS800's other functions, the FS800 will leave the synthesizer mode and return to its normal performance mode. Did you forget to store the sound you were creating? There's no need to worry. You can simply press the **STORE** button to return to the synthesizer mode. (This is known as the "Recall" function.)

Pattern Maker: Creating Rhythm and Auto-Accompaniment Patterns

1



2



Have you ever wished you could take your own musical ideas and put together a dynamite Auto-Accompaniment pattern of your own? With the FS800, you can!

Using the programming functions of the FS800, it is possible for you to create Intro, Fill-in, Ending, and Basic patterns for each of the FS800's Auto-Accompaniment parts: rhythm, bass, and chords. You can build these patterns from scratch, or you can alter one or more elements (chord, bass, drums) of a preset pattern. This is an extremely powerful feature that offers you tremendous creative freedom!

As an example, let's try making a few changes to Rhythm number 28 (POP ROCK) to develop a new pattern.

1. Use the **RHYTHM** button and the **SELECTOR** buttons to select the POP ROCK pattern (number 28).
2. Let's begin by changing the Basic pattern.

With the rhythm turned OFF, press the **PROGRAM PATTERN & O.F. A.** button. The display will change to read **BA**, which is short for "Basic." This indicates that the Basic pattern has been selected.

● First, let's change the Rhythm pattern

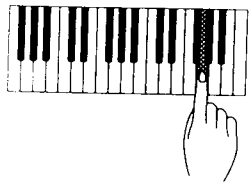
Find the **USER PROGRAM** keys at the right end of the keyboard which are identified by **PATTERN MAKER** above the keys (F#5 to A5). These are the **USER PROGRAM** keys for changing accompaniments. Press the G#5 key (labelled "Rhythm Clear"). The display should change to show the number of the POP ROCK pattern (that is, number 28).

The basic Rhythm pattern for the POP ROCK pattern is at left:

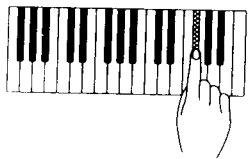
Let's try adding the high clap sound on top of the snare drum. Just press the D#1 key, which controls the high clap sound, in time with the snare drum (on beats 2 and 4).

Feel free to add other rhythm sounds as you like. If you make a mistake with one sound for example, (high clap), use the **RHYTHM ERASE** key (A5) to remove the mistake. Hold down the **RHYTHM ERASE** key (A5) while you press the "high clap" key (D#1). All high clap sounds will be instantly erased.

Pattern Maker: Creating Basic Patterns



58



01



Notes
to
add.

● Next, let's change the Bass part

If you're finished with the Rhythm pattern, let's move on to the bass pattern. Press the G5 key (labelled "BASS CLEAR") on the keyboard *twice* (see note at bottom of page). The bass pattern should disappear, and the display will change to show the number 58. This indicates that sound number 58 (E. BASS) is the sound being used for the bass part in this pattern.

Let's create a bass part like the one given at left. Use the keys from C1 to B4 to input the bass part. If you want to use a sound other than E. BASS for the bass part, select the sound you prefer using the **numeric** keys to change the sound number shown in the display. You should also use the **BASS volume** buttons to set the volume of the bass part at this time.

● Last, let's change the Chord part

Press the F#5 key (labelled "Chord Clear"). The number 01 should appear in the display. This indicates that sound number 01 (PIANO 1) is being used for the Chord part.

The basic Chord part for the POP ROCK pattern is as shown at left. Let's try adding the eighth notes shown at left to the last beat of the second measure. Use the keys from C1 to B4 to input the Chord part. If you want to use a sound other than PIANO 1 for the Chord part, select the sound you want using the **numeric** keys to change the sound number shown in the display. You should also use the **CHORD volume** buttons to set the volume of the Chord part at this time.

- Thus far, we have changed each of the elements (rhythm, bass, chord) of the POP ROCK Basic pattern --- but we have not yet stored the revised pattern in the FS800's user memory. Before we cover the procedure for storing, let's change the Fill-in and Intro/Ending patterns as well.

Important:

As you've probably observed by now, pressing the USER PROGRAM PATTERN MAKER keys (F#5, G5, G#5) *once* lets you *add* to that portion of the existing pattern. Pressing the same key a *second* time *erases* that portion of the pattern allowing you to rebuild it from scratch.

Pattern Maker: Creating Fill-in and Intro/Ending Patterns

1

SYNC/FILL IN



The Fill-in pattern plays.

2

Press once. . .

INTRO/ENDING



. . .and the Intro pattern plays.

Press again. . .

INTRO/ENDING



. . .and the Ending pattern plays.

Fill-in and Intro/Ending patterns can also be changed using the same procedure that you used to change the Basic pattern in the previous page.

1. Let's try changing the Fill-in pattern.

With Rhythm #28 (POP ROCKS) still selected, press the **SYNC./FILL-IN** button. You should hear the POP ROCK Fill-in pattern. Try to change this Fill-in pattern to suit your taste using the same procedure that you used to change the Basic pattern.

2. Last, let's change the Intro and Ending patterns.

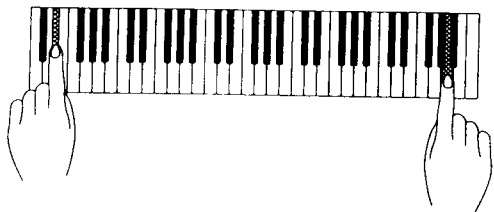
If you press the **INTRO/ENDING** button, you will hear the POP ROCK Intro pattern. Press it once more and you will hear the Ending patterns. Go ahead and edit these patterns as you like using the same procedure as before.

Notes:

1. When creating difficult patterns, feel free to slow down the tempo for input, then speed it up again when performing.
2. The same bass and chord sounds will be used for all four pattern types (Basic, Intro, Fill-in, and Ending) of a single Auto-Accompaniment pattern. The last sounds you choose for the Bass and Chord parts are the ones that will be memorized when you store the pattern. For example, if you had chosen E. BASS for the bass part sound when creating the Basic pattern, but later changed it to A. BASS when creating the Ending pattern, then A. BASS will be memorized as the bass part sound for all four of the patterns. Note also that the SPLIT sounds, those numbered 41 through 50, cannot be chosen as the Bass or Chord part sounds.

Pattern Maker: Creating Fill-in and Intro/Ending Patterns

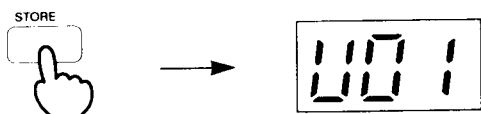
3



3. If you incorrectly enter one or more notes while creating any part of the Auto-Accompaniment pattern, just press the CLEAR key for that part and all of the notes that you input will be erased. (For example, if you press the F#5 key while creating the bass part for a pattern, the entire bass line will disappear.) You can use the RHYTHM ERASE key to remove individual rhythm sounds from a Rhythm pattern. (For example, to remove *only* the closed hi-hat sound from a Rhythm part, hold down the A5 key and press the F#1 key, which controls the closed hi-hat sound. That sound will be removed from the Rhythm pattern.)
4. As mentioned in an earlier note, the CLEAR key for each part operates in two ways. When pressed *once*, the original pattern for that part remains unchanged and you can actually *add* notes to the part. When you press the CLEAR key a second time, all the notes for that part will be erased --- allowing you to build an entirely new part from scratch. If you want to change the original pattern to something entirely different, however, press the CLEAR key two times to erase the entire part.

Pattern Maker: Storing Your New Patterns

1



Now that we've create an entirely new pattern, let's store it in the FS800's user memory using the following procedure:

Storing patterns

1. With your new pattern set just the way you want it, press the **STORE** button. The display should change to read **001**.

It is possible to store up to five patterns which you create. Those five patterns will be stored as patterns 96 through 100, which are listed as **USER 1** through **USER 5** in the "100 RHYTHM LIBRARY" on the FS800's front panel. Therefore, the number "001" in the display indicates that **USER 1** has been selected. You can use the **SELECTOR** buttons to change this number to any value between 1 and 5. Let's store our pattern as number 1 this time.

2. Press the **STORE** button one more time. The pattern you just created will be stored as pattern number 96 (**USER 1**). Try using the **RHYTHM** button and the **numeric** keys to select this pattern. Now, when you press a note in the Lower Keyboard with Auto-Accompaniment on, you should hear the pattern you just created.

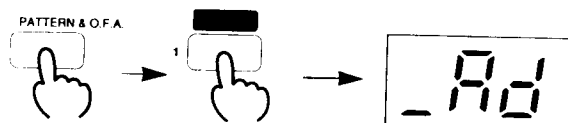
2



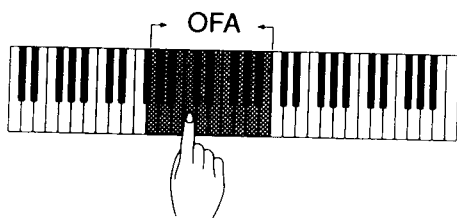
Press again.

Programmable ONE FINGER AD-LIB: Creating Phrases

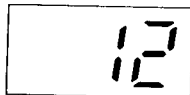
1



2

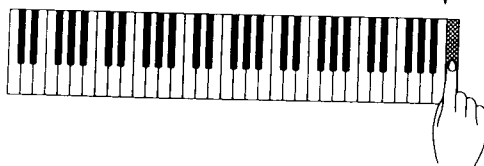


Press any key. . .



. . .and the sound
number will be
displayed.

Press this key and the
phrase will disappear.



With the FS800's new programmable ONE FINGER AD-LIB capability, you have the power to create up to 85 different ONE FINGER AD-LIB phrases of your own. Here's how:

1. Begin by choosing a rhythm using the **RHYTHM** button and the **SELECTOR** buttons.

Then, press the **PATTERN & O.F.A** button. The lamp above that button will light up. Next, press the **ONE FINGER AD-LIB** button. The letters **_ Ad**, which are short for "Ad-lib," will appear in the display.

The Ad-lib phrase for the G2 key should also begin to play.

2. Select the phrase which you want to modify by pressing the key for that phrase in the ONE FINGER AD-LIB section of the keyboard.

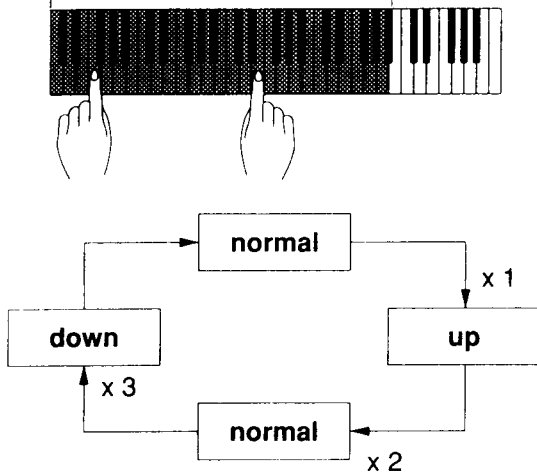
The Ad-lib phrase you've selected will begin to play.

The sound number for that phrase will be shown in the display. When you're ready to erase the phrase you've selected, press the C6 key (PHRASE CLEAR) and that phrase will disappear.

Programmable ONE FINGER AD-LIB: Creating Phrases

3

Input new phrase using
this range.



3. Inputting the new phrase.

Use the keys from C1 to A#4 to input the new phrase.

If you find that this range isn't high or low enough to play the Ad-lib phrase you have in mind, press the B5 (OCTAVE SHIFT) key. This key can be used to shift the range played by the keys from C1 to A#4 up or down an octave, as shown in the diagram left.

Pressing the OCTAVE SHIFT key one time causes the keyboard to shift *up* one octave. Pressing a second time restores the keyboard to the normal pitch.

Pressing the OCTAVE SHIFT key a third time causes the keyboard to shift *down* one octave. Pressing a fourth time restores the keyboard to the normal pitch.

You can also use the **SOUND 1 volume** buttons to set the volume of the Ad-lib phrase which will be memorized when you store the phrase.

4. Inputting additional Ad-Lib phrases.

Suppose you want to input a second Ad-Lib phrase. To do this, make sure that your first customized Ad-Lib phrase (from Step 3 above) is finished. Now, press the POINT SELECT key (A# 5). This tells the FS800 that you are done with the current phrase.

Now, repeat Steps 2 and 3 above to input a new Ad-Lib phrase. When you are done with this second phrase, press the POINT SELECT key again. You can continue this process until all 17 Ad-Lib keys have been programmed with your own customized phrases.

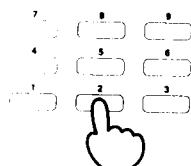
The next section will show you how to store your newly created AD-LIB phrases.

Programmable ONE FINGER AD-LIB: Storing Phrases

1



begin to flash.



2



Press again.

Now use the **numeric** keys to select a voice for the phrase. The length of a ONE FINGER AD-LIB phrase is limited to one measure. You can change any number of ONE FINGER AD-LIB phrases for a given rhythm --- up to seventeen for each Rhythm pattern. When you're finished changing the phrases, you can store them for future use using the procedure below.

Storing ONE FINGER AD-LIB phrases

1. Press the **STORE** button. The display should change to read **001**.

The ONE FINGER AD-LIB phrases you create must be stored *with* the Rhythm patterns that accompany them. (Therefore, if you also want to change the rhythm pattern, you should refer to the Pattern Maker section and change the Rhythm now before showing the new phrases).

It is possible to store up to five patterns (and their accompanying ONE FINGER AD-LIB phrases) which you create. Those five patterns will be stored as patterns 96 through 00, which are listed as USER 1 through USER 5 in the "100 RHYTHM LIBRARY" on the FS800's front panel. Therefore, the number "**001**" in the display indicates that USER 1 has been selected. You can use the **numeric** keys to change this number to any value between 1 and 5. Let's store our new pattern as number 2.

2. Press the **STORE** button one more time. The pattern (with the new ONE FINGER AD-LIB phrases you just created) will be stored as pattern number 97 (USER 2). Try using the **RHYTHM** button and the **numeric** keys to select this pattern. Make sure that the **ONE FINGER AD-LIB** button and the **AUTO** button are in the ON position. Press **START/STOP** button. When you press the ONE FINGER AD-LIB key on which you created the new phrase, you should hear your newly created phrase.

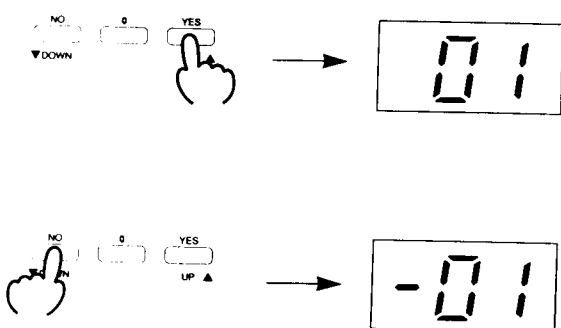
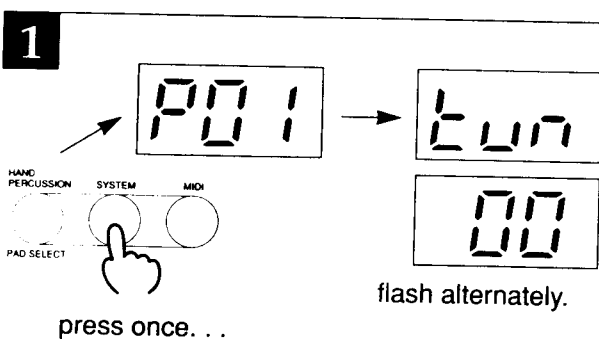
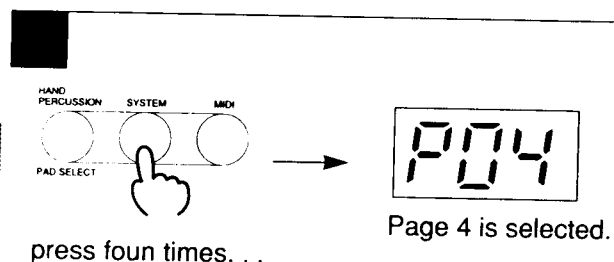


Programmable ONE FINGER AD-LIB: Storing Phrases

Notes:

1. The patterns listed as USER 1 through USER 5 in the "100 RHYTHM LIBRARY" section are used for storing *both* the Auto-Accompaniment patterns and the ONE FINGER AD-LIB phrases that you create. Therefore, if you had saved the Ad-lib phrases created above as USER 1, the modified version of the POP ROCK rhythm pattern (which you created and stored as USER 1 previously) would be erased, and the Auto-Accompaniment rhythm pattern you selected in order to create the Ad-lib phrases would take its place. If you would like to create ONE FINGER AD-LIB phrases to go with a rhythm of your own invention, then you should edit and store the rhythm in advance on one of the user memories. Then, select this user rhythm when you are ready to create the Ad-lib phrases.
2. It is possible to input up to about 300 notes for a single Auto-Accompaniment pattern (combined total for Basic, Intro, Fill-in, Intro and Ending patterns), and up to about 270 notes for all the ONE FINGER AD-LIB phrases for a single pattern (combined total for seventeen phrases).
3. If, while you're creating Auto-Accompaniment patterns or Ad-lib phrases using the functions described above, you should happen to press a key which activates one of the FS800's other functions, the FS800 will return to its normal performance mode. If you haven't stored the patterns or phrases you're working on yet, there's no need to worry. You can press the **STORE** button to resume the creation of Auto-Accompaniment patterns and Ad-lib phrases. (This is known as the "Recall" function.)

Using the SYSTEM Functions: Tuning Control



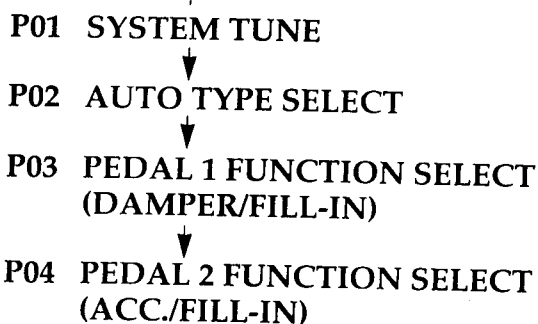
In this section, we will outline the SuperBoard's SYSTEM functions (which deal with overall control of the FS800).

SYSTEM Functions

The SYSTEM Functions are divided into four sections which we will refer to as "pages". "P01" means "Page 1". The pages include:

- P01. SYSTEM TUNE: For tuning control (pitch adjustment)
- P02. AUTO TYPE SELECT: Allows you to select among the four styles of Auto-Accompaniment. (Please see the section on "Advanced Use of Auto-Accompaniment" on page A-3.)
- P03. PEDAL 1 (DAMPER/FILL-IN): When an optional F-1 Footswitch is connected to this jack, the footswitch can operate as either a DAMPER Pedal or a Fill-in Pedal.
- P04. PEDAL 2 (ACC./FILL-IN): Allows you to assign a function to the Accompaniment Hold jack. When an optional F-1 Footswitch is connected to this jack, the footswitch can operate as either an Accompaniment Hold pedal or a Fill-in pedal.

In the SYSTEM mode, the page (in the display) changes every time you press the **SYSTEM** button. The display will show a different page with each press. If you want to select a page directly (without pressing from page to page), just press the page number you desire immediately after pressing the **SYSTEM** button.



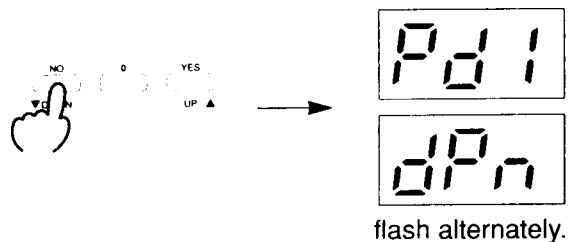
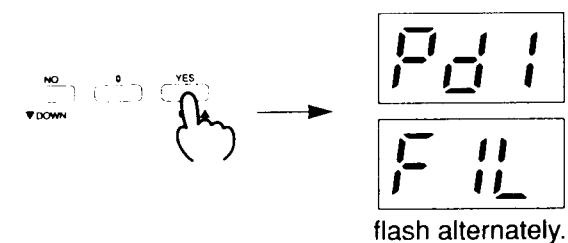
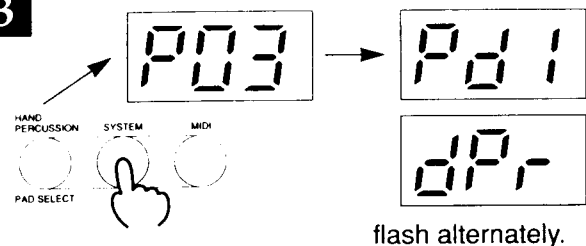
Let's explore the various functions available in SYSTEM mode:

P01. TUNING CONTROL

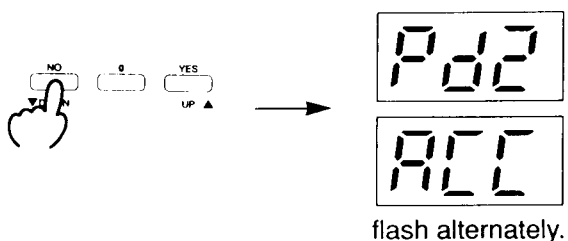
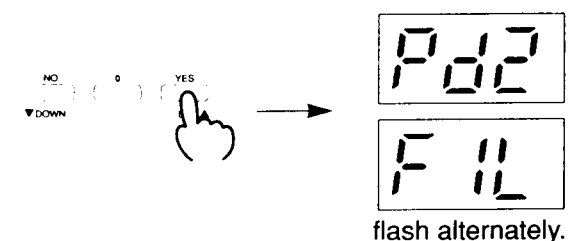
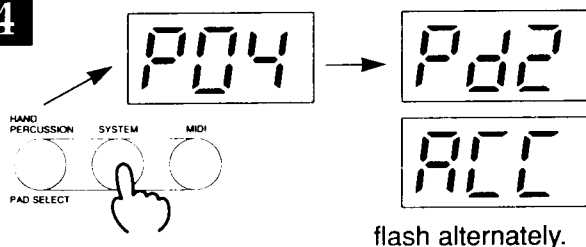
Press the **SYSTEM** button once. The display will briefly flash **P01** and then begin to alternate between the letters **"TUN"** (short for TUNE) and the number **"00"**.

Pedal 1 (Accompaniment Hold Pedal) and Pedal 2 (Damper Pedal)

3



4



If you press the **UP** button in the **SELECTOR** section one time, the number in the display will change to read "01" and the pitch will raise slightly. If you press the **DOWN** button instead, the number will change to "-01" and the pitch will drop slightly. You can use the **TUNE** function to adjust the SuperBoard's pitch within a range of -08 to 07.

P03. PEDAL 1 (Damper Pedal) Function Select

Press the **System** button three times (or until the display reads **P03**). The display will briefly flash **P03** and then begin to alternate between "**Pd1**" and "**dPr**". The "**dPr**" stands for Damper Pedal (used for sustaining the sound). "**Pd1**" lets you know that the optional F-1 footswitch will control the Damper function when it is connected to the **DAMPER** jack. If you press the **UP** button in the **SELECTOR** section, the display will begin to alternate between "**Pd1**" and "**F IL**". The "**F IL**" stands for Fill-in. Now, when the optional F-1 Footswitch is depressed it will operate in the same manner as the **SYNC./FILL-IN** button on the front panel. This function lets you insert Fill-in Patterns without having to remove your hands from the keyboard. Fill-in Patterns are activated when you depress the footswitch. To return the Damper jack to its normal function, press the **DOWN** button in the **SELECTOR** section so that the display once again alternates between "**dPr**" and "**Pd1**".

P04. PEDAL 2 (Accompaniment Hold Pedal) Function Select

Press the **SYSTEM** button four times (or until the display reads "**P04**"). The display will briefly flash **P04** and then begin to alternate between "**Pd2**" and "**ACC**". The "**ACC**" stands for Accompaniment. "**Pd2**" lets you know that the optional F-1 footswitch will control the Accompaniment Hold function when it is connected to the **ACC HOLD** jack.

You can assign either the Accompaniment Hold or Fill-in function to PEDAL 2, just as you did for PEDAL 1 above.

Using the MIDI Functions: Setting the Local Control ON/OFF

MIDI functions

In this section we will outline the FS800's MIDI functions (which allow you to connect the FS800 to other MIDI instruments).

Upon seeing the word "MIDI," many people may think: "This section has nothing to do with me!" or "MIDI is too difficult to bother with!" However, if you try using the FS800's MIDI functions, you're sure to find that MIDI is a fun and useful tool for making music.

The FS800 is loaded with MIDI functions – if you don't use them, you're missing out on a lot of the fun the FS800 has to offer!

However packed the FS800 may be with exciting MIDI functions, they are not much use if the FS800 is the only instrument you're using. These MIDI functions are used to connect the FS800 to other MIDI equipment. In this section we will give you some examples of how this is done.

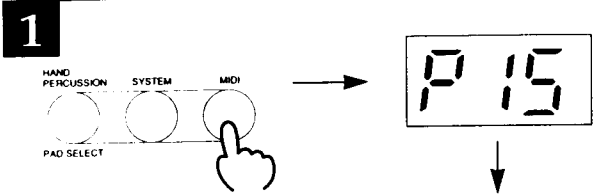
■ Connecting the FS800 to another MIDI keyboard or tone generator module

First, connect the FS800 MIDI Out jack to the MIDI In jack of another keyboard or tone generator. Make sure that the FS800's MIDI transmit channel matches the MIDI receive channel of the tone generator or other keyboard. Then, pressing a key on the FS800's keyboard will cause both the FS800 and the other instrument to play a sound simultaneously. Or, if you connect the FS800 to a keyboard which has a multi-timbral function (which would allow it to receive signals over a number of different MIDI channels at once), you can play the FS800's Auto-Accompaniment and Rhythm patterns through the other instrument as well. (See page A – 9 for Rhythm key numbers.)

Setting the Local Control ON/OFF

Using Local Control, you can determine whether or not the FS800 produces sound when the keys are played. Why would you want to turn off the FS800's sound? When using MIDI, the FS800 can operate as a "controller"; used to control the sound of another MIDI-equipped keyboard. In this situation, you may want to play the FS800's keys but hear only the sound of the "slave" keyboard that is being controlled through MIDI.

Using the MIDI Functions: Setting the Local Control ON/OFF

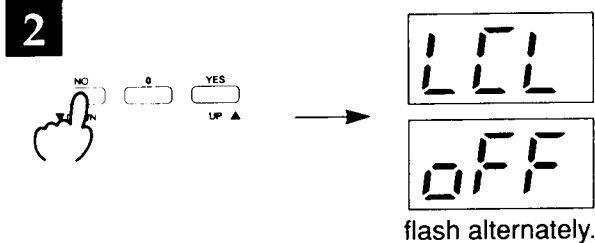


P 15

L L L

_ o n

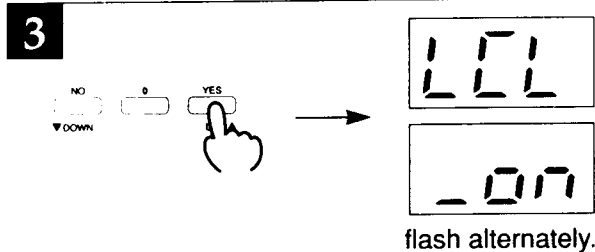
flash alternately.



L L L

o f f

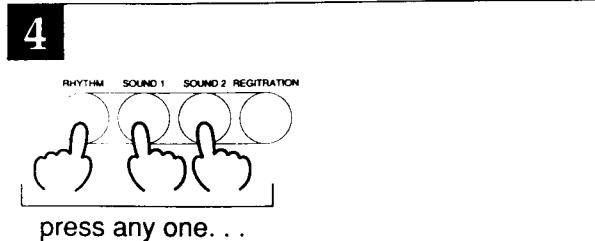
flash alternately.



L L L

_ o n

flash alternately.



press any one. . .

When Local Control is "ON", you will hear the FS800's sound when the keys are played. When Local Control is "OFF", MIDI note Information is still sent as you play, but no sound is heard through the FS800's speakers.

To select Local ON/OFF, use the following procedure:

1. LOCAL CONTROL ON

Press the **MIDI** button until "P 15" flashes in the display. After stopping at P15, the display will begin to flash alternately between "L L L" and "_ o n". The "L L L" stands for Local Control; and the "_ o n" indicates that Local Control is set to "on". In this setting, you will hear sound when the FS800's keys are played.

2. LOCAL CONTROL OFF

Next, try pressing the "NO" button. The display will change to flash alternately between L L L and o f f. This indicates that the Local Control is off and no sound will be heard when the FS800's keys are played.

Remember, MIDI data is still sent when you play the FS800's keys. So, if the FS800 is connected to another keyboard through MIDI (the FS800's MIDI Out jack to the other keyboard's MIDI In jack with a MIDI cable), you should hear notes sounding on the other keyboard as you play keys on the FS800.

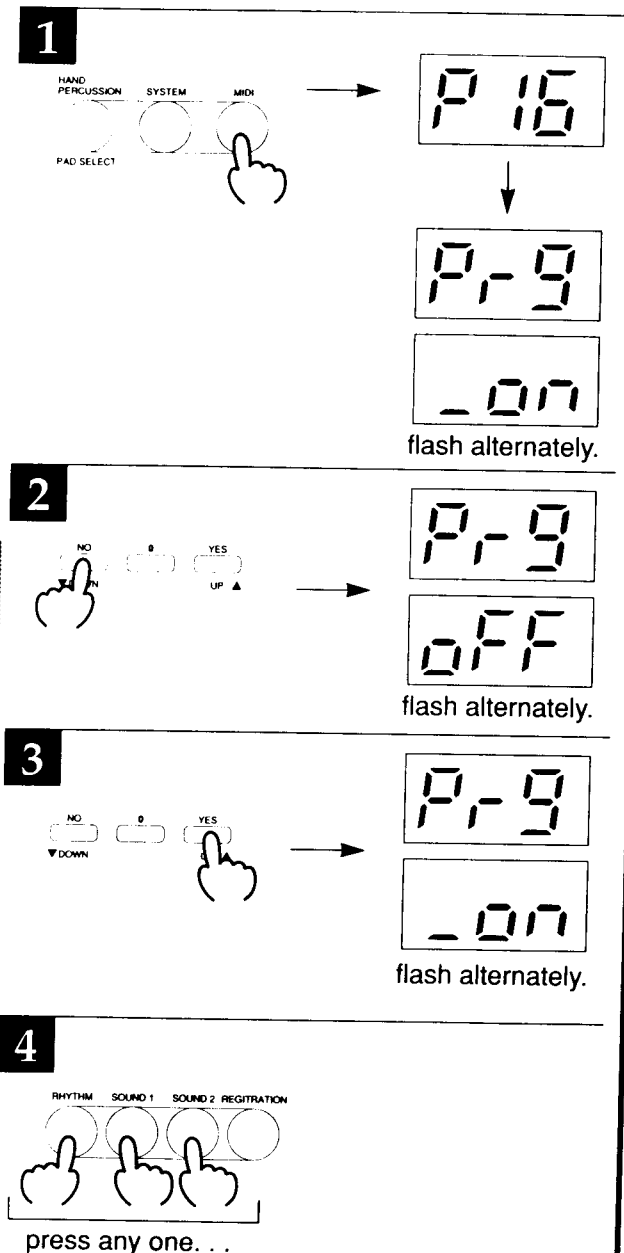
3. RETURNING TO LOCAL CONTROL ON

To turn Local Control "ON" once again, simply press the "YES" button. If your other keyboard is still connected via MIDI, you should hear both keyboards produce sound as you play keys on the FS800.

4. LEAVING THE LOCAL CONTROL ON/OFF MODE

To leave the Local Control mode, press the **Sound 1**, **Sound 2** or **Rhythm** button. Pressing any one of these buttons will cause you to leave the Local Control mode.

Using the MIDI Functions: Setting the Program Change ON/OFF



Setting the Program Change Control ON/OFF

The FS800 continually transmits Program Change data through MIDI as you play. Additionally, you can set the FS800 to receive Program Change information from other instruments via MIDI. To accomplish this, use this procedure.

1. PROGRAM CHANGE ON

Press the **MIDI** button until "P 16" flashes in the display. After stopping at P16, the display will begin to flash alternately between "P-9" and "_on". The "P-9" stands for Program Change; and the "_on" indicates that Program Change is set at the "ON" position. In this setting, the sound of the FS800 will change when you send program change data from another keyboard via MIDI. The MIDI Out jack of the other keyboard must be connected to the MIDI In jack of the FS800 with a standard MIDI cable.

2. PROGRAM CHANGE OFF

Next, try pressing the "NO" button. The display will begin to flash alternately between P-9 and off. This indicates that the Program Change function is set to the "OFF" position and the FS800 will not receive program change data.

3. RETURNING TO PROGRAM CHANGE "ON"

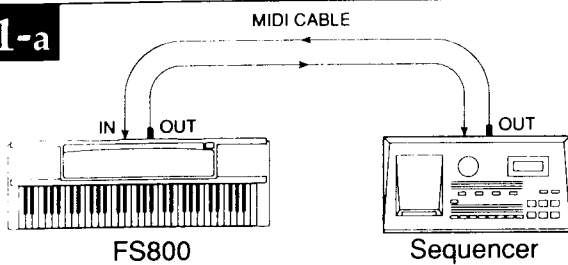
To allow the FS800 to receive Program Change information once again, simply press the "YES" button. If you have left the Program Change mode, repeat Step One above before pressing the "YES" button.

4. LEAVING THE PROGRAM CHANGE MODE

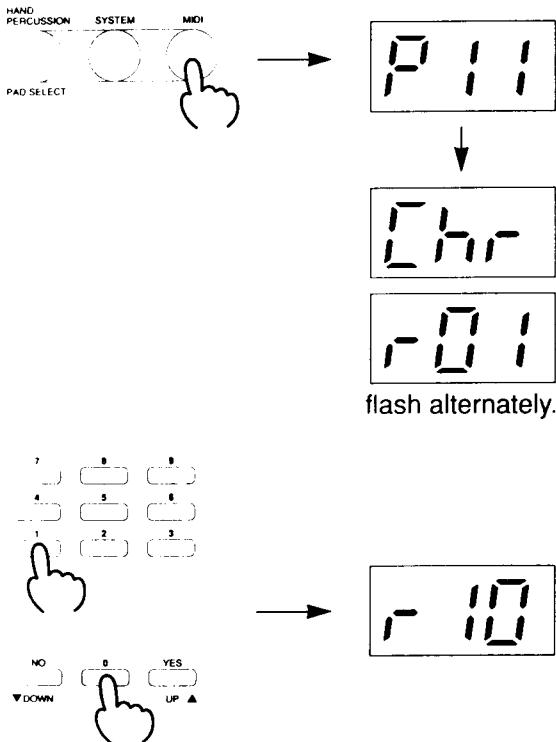
To exit the Program Change mode, press the **Sound 1**, **Sound 2** or **Rhythm** button. Pressing any one of these buttons will cause you to leave the Program Change mode.

Using the MIDI Functions: Creating Songs

1-a



1-b



Before taking your through an example using MIDI, let's discuss the ways your SuperBoard transmits and receives MIDI data. The SuperBoard can transmit any one of 16 MIDI channels. The process for selecting the MIDI Transmit Channel is described shortly.

The SuperBoard receives MIDI data on 5 fixed channels. Channels 1-4 are used for receiving sounds, and channel 10 is used for receiving drum/rhythm information.

Keeping this in mind, let's create a song using MIDI and an external sequencer:

a) First connect the SuperBoard to a sequencer

Connect as shown in the diagram at left.

b) Create a drum part

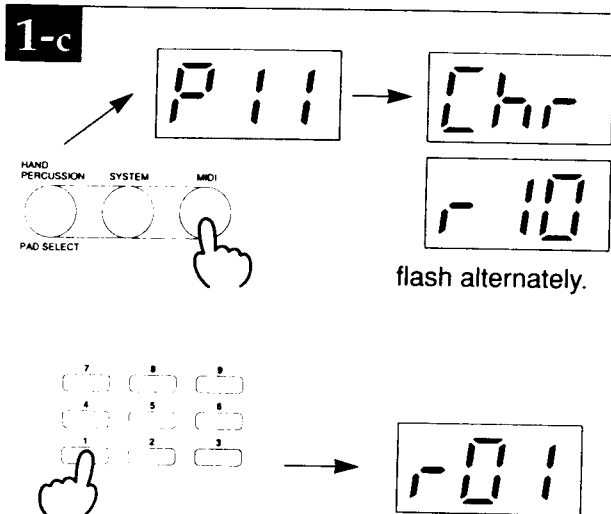
Activate the Hand Percussion function by pressing the **HAND PERCUSSION** button.

Press the **MIDI** button once (or until the display reads "P 1 1"). The display will briefly show P11 and then begin to alternate between "P 1 1" and "r 0 1". "P 1 1" stands for "MIDI Transmit Channel". The "r 0 1" means that the current MIDI Transmit Channel is set to Channel 1.

Use the **numeric** keys to change the "r 0 1" to "r 10". This changes the FS800's MIDI Transmit Channel to channel 10. Now the drum data that you are about to record will be assigned to channel 10. On playback, the SuperBoard will receive that set of data on channel 10 and assign it to the drums.

If you start the sequencer recording now, you can record a drum part using the percussion sounds on the FS800's keys. If you raise or lower the volume while recording using the **RHYTHM volume** buttons of the **DIGITAL MIXER**, these changes will also be recorded by the sequencer.

Using the MIDI Functions: Creating Songs



c) Creating other parts

If you have left the MIDI mode, press the **MIDI** button once (or until the display reads "P 1 1" again). The display will briefly flash P11 and then alternate between "Chr" and "r 10".

Use the numeric **SELECTOR** button "1" to change the "r 10" to "r 0 1".

The FS800's MIDI Transmit Channel is now set to channel 1. (We could have chosen any channel from 1 to 4, since the FS800 receives sound data on any of these four channels.)

If you press one of the keys on the keyboard, you will hear whatever sound is currently selected. Use the **SOUND** button and the **numeric** keys to select the sound of your choice.

Now you can use the sequencer to record the track for that sound. Volume changes made using the **VOLUME** buttons of the **DIGITAL MIXER** for each part will be recorded by the sequencer as before.

To record other parts, use the **MIDI** button and the **numeric** keys to change the MIDI Transmit Channel to any channel from 2 through 4. Then, select the sound you will use for each new track and record it as before.

If you change the sound you are using in the middle of the recording, the sound change will also be recorded. Therefore, it is not necessary to assign three solos (for example: a sax solo, a guitar solo, and an organ solo) to three separate channels. You can record them all on one channel by simply changing the sound as you record.

To summarize, drums should be sent to your external sequencer on MIDI Transmit Channel 10. Sounds should be recorded on MIDI Transmit channels 1 through 4. Then your tracks will be sent to the appropriate "Receive" channels on playback. This gives you five multi-timbral channels for recording separate tracks.

Note:

If you raise or lower the volume while recording using the **MASTER VOLUME** slider, these changes will *not* be recorded by the sequencer.



Using the MIDI Functions: Connecting the FS800 to a Sequencer

Notes:

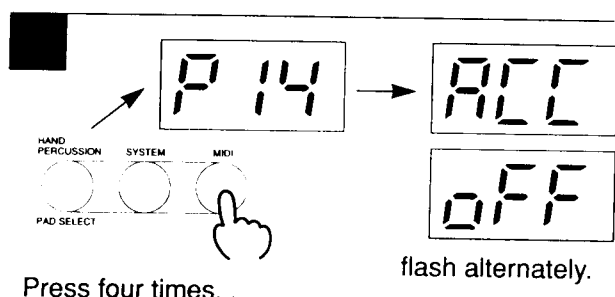
“MIDI” is an acronym for Musical Instrument Digital Interface.

MIDI provides a method for the FS800 to communicate with other MIDI-equipped instruments or personal computers.

It is not the purpose of this manual to discuss in depth the many uses and techniques of MIDI operation.

For complete books on this subject, KAWAI recommends that you consult your local music dealer or contact the MIX BOOKSHELF (6400 Hollis St., Suite 12, Emeryville, CA 94608 U.S.A. Phone 415-653-3307) to request their catalog of MIDI materials.

Using an External Sequencer: Sending Automatic Functions



During normal operation, the FS800 does not send (transmit) automatic information (automatic notes that are not actually played by hand) via MIDI. You can, however, instruct the FS800 to send this information by using the MIDI button.

■ Using a sequencer to record FS800's Automatic functions. (Auto-Accompaniment, ONE FINGER AD-LIB).

Begin by pressing the MIDI button four times (or until the display reads *P 14*). The display will briefly flash "*P 14*" and then begin to alternate between the letters "*ACC*" and "*OFF*". The "*ACC*" stands for Accompaniment.

The "*OFF*" signifies that the FS800 is not currently sending "Automatic" information via MIDI.

If you press the YES button in the SELECTOR section, the "*OFF*" should change to read "*_ON*". This indicates that the Auto-Accompaniment will be transmitted via the MIDI connection.

You may now start the sequencer recording and begin your performance. Each part will be sent to the sequencer by way of a different MIDI channel, as shown below:

Channel	Part
1	SOUND1 (Your melody, ONE FINGER AD-LIB)
2	SOUND2 (Your melody, ONE FINGER AD-LIB)
3	Chord part
4	Bass part
10	Rhythm part

On playback, your performance should sound exactly the same as it did when you recorded it.

Using an External Sequencer: Sending Automatic Functions

● Changing MIDI Channels

At some point during recording, you may find it necessary to change the MIDI channel for a specific part. Here's how it can be done:

When the $\overline{H} \overline{C} \overline{C}$ is set to " $\overline{d} \overline{F} \overline{F}$ ", the FS800 receives MIDI data on several channels but transmits on only one MIDI channel (referred to as " r "). The MIDI channel assignments are found below:

Transmit Channel	= r (see page A-32 to adjust the " r ")
Receive Channel of Sound 1	= n (see the following explanation to adjust the " n ")
Sound 2	= $n+1$
Chord	= $n+2$
Bass	= $n+3$
Rhythm	= d (see the following explanation to adjust the " d ")

When the $\overline{H} \overline{C} \overline{C}$ is set to " $\overline{d} \overline{d} \overline{n}$ ", the FS800 will both transmit and receive MIDI data on the same MIDI channels. The channel assignments are:

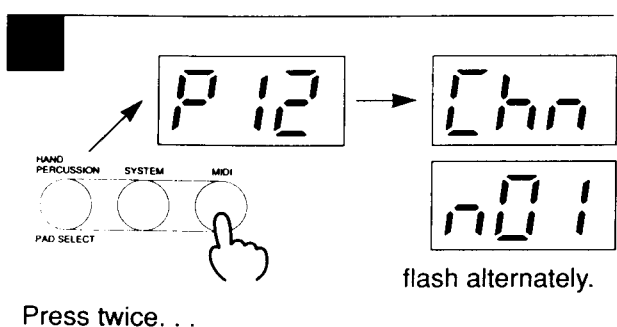
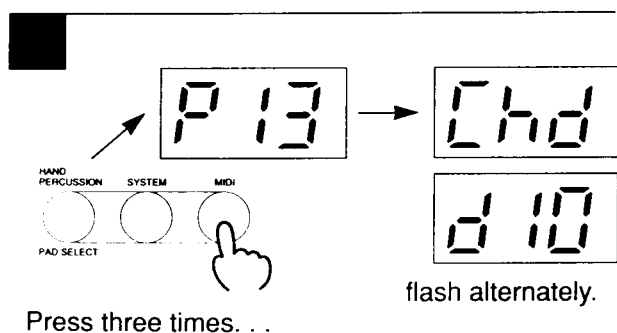
Sound 1 = n , Sound 2 = $n+1$, Chord = $n+2$, Bass = $n+3$, Rhythm = d .

● To change the Rhythm part channel

Press the **MIDI** button three times (or until the display reads $P 13$). The display will briefly show $P 13$ and then begin to alternate between " $\overline{C} \overline{h} \overline{d}$ " (which is an abbreviation for "Channel, Drum") and $d 10$. This indicates that the Rhythm part is being output through channel 10. If you use the **numeric** keys to change the number in the display to read $d 11$, the Rhythm part will be output through channel 11.

● To change the channels of the other parts

Press the **MIDI** button twice (or until the display reads $P 12$). The display will briefly show $P 12$ and then begin to alternate between " $\overline{C} \overline{h} \overline{n}$ " and $n 01$. This indicates that the melody and ONE FINGER AD-LIB phrases you play using SOUND 1 will be output through channel 1.





Using an External Sequencer: Creating Patterns

If you use the **numeric SELECTOR** button "2" to change the display to read $\alpha \bar{0} \bar{0} \bar{2}$, then the melody and ONE FINGER AD-LIB phrases you play using SOUND 1 will be output through channel 2; the melody and ONE FINGER AD-LIB phrases you play using SOUND 2 will be output through channel 3; the Auto-Accompaniment Chord part will be output through channel 4; and the bass part will be output through channel 5.

You can see that the channel number for melody using SOUND 1 determines the channels for the other three sounds – which are assigned to the next three successive channels.

In other words, if the channel which outputs the melody and ONE FINGER AD-LIB phrases is channel "N", then SOUND 2 outputs through channel N+1; the Chord part outputs through channel N+2; and the bass part outputs through channel N+3.

The number shown in the display is the channel number α .

Suppose you want to create a complete Accompaniment pattern on an external sequencer (such as KAWAI's professional MIDI sequencer, the Q-80) and store it in the FS800's user memory for use with the Auto-Accompaniment feature. Here's how it can be done:

■ Recording Auto-Accompaniment patterns created with an external sequencer for use with the FS800

Note: Quantize is set to $\text{J} = 24$.

1. First program the Accompaniment pattern into your external sequencer. Remember that the Intro and Fill-in patterns you create should be one measure long. The Basic and Ending patterns should be two measures long.



Using an External Sequencer: Creating Patterns

2. Next make sure that the external sequencer's Playback (Transmit) channels and Rhythm, Chord and Bass channels of the FS800 are the same. You can check or change the Rhythm channel by pressing the **MIDI** button three times as described in page A-35.
3. Use the **TEMPO DOWN** button to change the display until it reads **5 5 5** (short for SYNC.).
4. Prepare the FS800 to record the pattern into user memory. Record the Rhythm part first. Begin by pressing the **PROGRAM PATTERN & O.F. AD-LIB** button, just as you did when you created an Auto-Accompaniment pattern. Then select which of the four pattern types (Basic, Intro, Fill-in, or Ending) you are going to record from the sequencer. Then select the Rhythm part by pressing the **G#5** key. Now the FS800 is set to record your pattern from the external sequencer. When you playback the Rhythm pattern from the external sequencer, the FS800 will begin recording in SYNC with the sequencer.
5. Record the other parts (chord, bass) once again, making sure that your Playback (Transmit) channels for chords and bass are matched with the appropriate channels on the FS800. The chords should be set to transmit from the external sequencer on channel N+2. The bass should transmit on channel N+3. (Refer to page A – 35 of this manual to review the channel assignment procedure for the FS800.)
 - Repeat Steps 3 and 4 above to prepare the FS800 for recording. Select the appropriate pattern type. Remember that Intro and Fill-in patterns should be one measure long while Basic and Ending patterns should be two measures long.
 - Now play back the pattern from your external sequencer. The complete pattern should now be ready to be assigned to a user memory location.
6. Storing your pattern. The final step is to store your new pattern on one of the five user memory locations using the **STORE** button and the **numeric** keys. If necessary see Page A – 21 of this manual to review this procedure.

Using an External Sequencer: Creating O.F. AD-LIB Phrases

You can also use the same procedure described in the preceding pages to create ONE FINGER AD-LIB phrases on an external sequencer and store them in the FS800's user memory.

■ Recording ONE FINGER AD-LIB phrases created with a sequencer for use with the FS800

1. First, program your ONE FINGER AD-LIB phrase into the external sequencer. Remember that ONE FINGER AD-LIB phrases can only be one measure in length.
2. Prepare the FS800 to record.
 - Use the **RHYTHM** and **numeric** keys to select the Accompaniment pattern you want as back-ground for your ONE FINGER AD-LIB phrases.
 - Make sure that the Playback (Transmit) channel of your external sequencer matches the FS800's Receive channel for Sound1 (the default is channel 1).
 - Now press the **PROGRAM PATTERN & O.F. A.** button, just as you did when you were creating ONE FINGER AD-LIB phrases.
3. Record the phrase
Use the **TEMPO DOWN** button to change the display so that it reads **5 5 5** (which, you will recall, is short for SYNC.). Now, when you playback the phrase from the sequencer, it will be recorded as the ONE FINGER AD-LIB phrase for the ONE FINGER AD-LIB key that is currently selected.
4. By selecting different ONE FINGER AD-LIB keys, you can record different phrases from the external sequencer. When you are through recording new phrases, use the "storing" procedure (see page A - 24) to store the new Ad-Lib phrases in user memory along with the corresponding Accompaniment pattern.

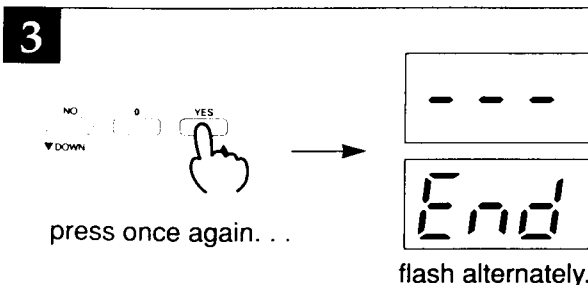
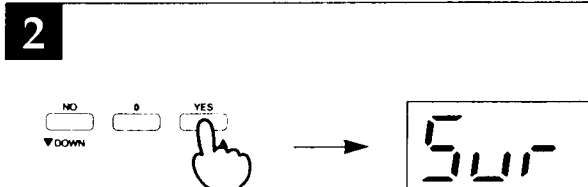
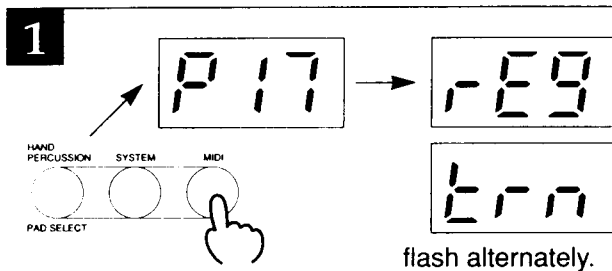
Using the External Sequencer: Using Other Functions

As you know, it is possible to store the sounds and patterns you create in the FS800's user memory. However, the number of sounds and patterns you can store in this way is limited to five each. To increase your stock of sounds and patterns, the FS800 allows you to store them in an external sequencer (such the Q-80, a data filer, or some other external MIDI device). You can store the following data using this function:

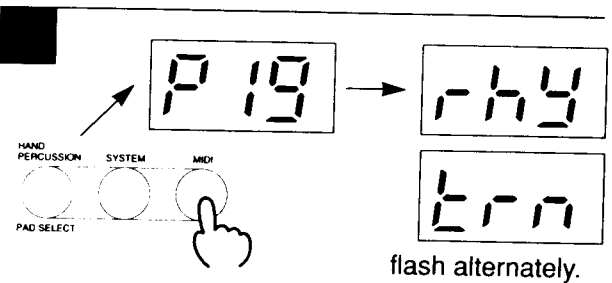
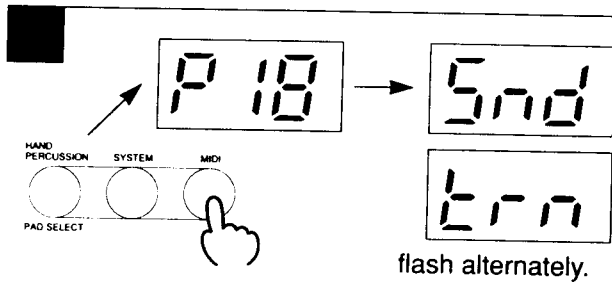
- Five sounds created using the synthesizer function
- Five Auto-Accompaniment patterns plus corresponding ONE FINGER AD-LIB phrases
- Twenty sets of REGISTRATION data

■ Storing REGISTRATION data you create for the FS800 in an external sequencer:

1. If you press the **MIDI** button until "P 17" flashes in the display. After stopping at P 17, the display will change so that it reads *r E S* (short for "REGISTRATION") and *Trn* (short for "Transmit") alternately. By this, the FS800 is asking whether you want to transmit your REGISTRATIONS to another MIDI device.
2. Since this is exactly what you want to do, press the **YES** button once again. The display will change to read *Sure*, which means "Sure?"
3. Press the **YES** button one more time, and the display will read *_ _ _* for a few moments, then change to read *End*. Your data transmission is now complete.



Using the External Sequencer: Using Other Functions



■ Storing other data you create for the FS800 in an external sequencer:

Press the **MIDI** button until "P 18" flashes in the display. After stopping at P18, the display will begin to flash alternately between 5nd and 6th. By pressing the **YES** button twice, in the same way as for registration, you can send the musical data created with the synthesizer function to an external MIDI device.

When you select "P 19", rhy (rhythm) and 6th will begin to flash. Again, pressing the **YES** button twice lets you send rhythm or ONE FINGER AD-LIB data made with the pattern maker to an external MIDI device.

■ Sending stored data back to the FS800 from an external sequencer:

No special command is necessary to perform a data dump into the FS800. Simply command your external sequencer to transmit data to the FS800. The FS800 will receive this data automatically.

These are a few examples of the ways in which the FS800's MIDI functions can be used. There are sure to be many more interesting and enjoyable things you can find to do with MIDI.

Its possibilities are limitless!

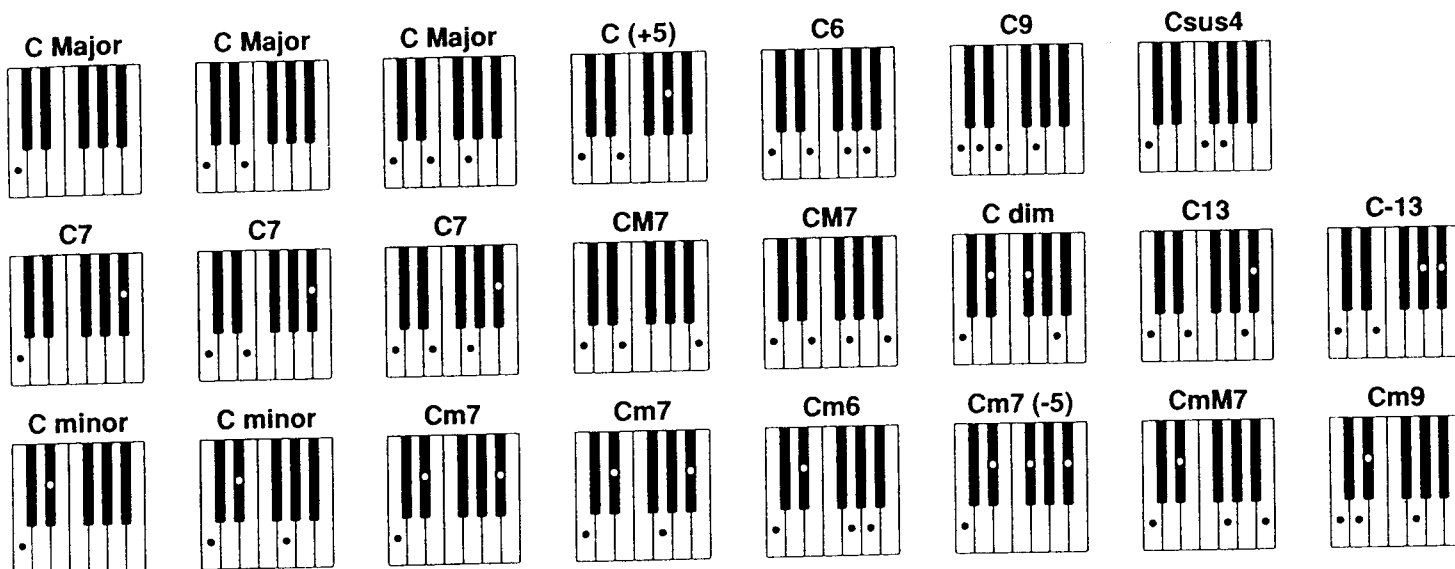
TROUBLE-SHOOTING ON YOUR FS800 SUPERBOARD

Problem	Check the following
No sound from your FS800.	<p>(1) Check your power adaptor. We recommend that you use a Kawai 9- or 12-volt adaptor.</p> <p>(2) If using another brand of adaptor:</p> <ul style="list-style-type: none"> - Does the voltage range from 9-12 volts? - Is it set to negative (-) polarity? - Is it rated above 500 mA or 6 Watts? <p>(3) Have you tried six fresh batteries?</p> <p>(4) Are all the batteries aligned in the proper direction?</p>
All the FS800's sounds have a "wavering" quality to them.	Make sure that the modulation wheel is set to "off". The white line should be rotated downward to the lowest position (closest to you).
You notice that the front panel has a "cloudy" finish or has begun to "bubble" or "peel". <u>This is not a defect.</u>	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.	<p>You may be taking too long to enter the second digit. Once you enter one digit, the SuperBoard waits for one second to see if a second digit follows. If the second digit is not entered within that time, the SuperBoard assumes that you meant to enter a single-digit number.</p> <p>Be sure to enter all two-digit numbers in rapid succession.</p>
The rhythm will not start when you press the yellow START/STOP button.	Press the TEMPO MONITOR button to see if someone has inadvertently activated the TEMPO "Sync" mode. The display will read "5 5 5" if this is the case. The START/STOP button will not operate in TEMPO "Sync" mode. To escape this mode, press the TEMPO UP button until "UP" appears in the display.
The DUAL feature does not combine certain sounds.	Are you trying to combine any of the SPLIT sounds? These cannot be used with the DUAL feature, since they already contain two sounds.
The RECORDER will not record.	The recorder will not record when there is already a song in memory. Use the ERASE procedure (press both the REC/END and PLAY/STOP buttons simultaneously) for that song to clear a particular song. Then try recording again.

TROUBLE-SHOOTING ON YOUR FS800 SUPERBOARD

Problem	Check the following
The keyboard only plays drum sounds.	The HAND PERCUSSION button has been activated. Press the button again to deactivate the Hand Percussion feature.
The AUTO function is not working properly.	Check to see if someone has set your SuperBoard to operate in AUTO 2, AUTO 3, or AUTO 4 modes. All of these alternative modes are different from the normal AUTO 1 style of accompaniment. (Please refer to the "Advanced Use of Auto-Accompaniment" section of this manual.)
The FS800 is not sending "automatic" note information via MIDI.	See the MIDI section of this manual. The ACCOMPANIMENT MIDI OUT function must be set to "on". Otherwise, the FS800 will only send "note" information (notes that are actually played) via MIDI.

3. Appendices



Function...		Transmitted				
		SOUND 1/2	CHORD/BASS	RHYTHM	SYSTEM	Remarks
Basic Channel	Default Changed	1/2 1 - 16 (N/N+1)	3/4 1 - 16 (N+2/N+1)	10 1 - 16 (D ch)	1 1 - 16 (R ch)	
Mode	Default Messages Altered	3 X *****	3 X *****	3 X *****	3 X *****	
Note Number	True Voice	24 - 108 *****	0 - 127 12 - 108	36 - 54 12 - 108	24 - 108 *****	
Velocity	Note ON Note OFF	○ X 9n v = 0	○ X 9n v = 0	○ X 9n v = 0	○ X 9n v = 0	
After Touch	Key's Ch's	X X	X X	X X	X X	
Pitch Bend		○	○	X	○	5bit rese ±2semi
Control Changes	1	○	X	X	X	Modulation
	7	○	○	○	*○	Volume
	64	○ (N)	X	X	*○	Hold
	93	○ (N)	X	X	*○	Chorus
						Moduration →Vib Depth
Prog Change	True #	○ 0 - 99	○ 0 - 99	○ 0 - 99	○ 0 - 99	
System Exclusive		*****	*****	*****	○	
Common	: Song Pos	*****	*****	*****	X	
	: Song Sel	*****	*****	*****	X	
	: Tune	*****	*****	*****	X	
System Real Time	: Clock	*****	*****	*****	○	
	: Commands	*****	*****	*****	○	
Aux Messages	: Local ON/OFF	*****	*****	*****	X	
	: All Notes OFF	*****	*****	*****	X	
	: Active Sense	*****	*****	*****	○	
	: Reset	*****	*****	*****	X	
Notes	* When "Auto Send" is off.					

Mode 1 : OMNI ON, POLY

Mode 2 : OMNI ON, MONO

○ : Yes

Mode 3 : OMNI OFF, POLY

Mode 4 : OMNI OFF, MONO

X : No

Function. . .		Recognized				Remarks
		SOUND 1/2	CHORD/BASS	RHYTHM	SYSTEM	
Basic Channel	Default Changed	1/2 1 - 16 (N/N+1)	3/4 1 - 16 (N+2/N+1)	10 1 - 16 (D ch)	1 1 - 16 (R ch)	
Mode	Default Messages Altered	3 X *****	3 X *****	3 X *****	3 X *****	
Note Number	True Voice	0 - 127 12 - 108	0 - 127 12 - 108	36 - 54 12 - 108	***** *****	
Velocity	Note ON Note OFF	○ X	○ X	○ X	***** *****	
After Touch	Key's Ch's	X X	X X	X X	***** *****	
Pitch Bend		○	○	X	*****	5bit rese ±2semi
Control Changes	1	○	○	X	X	Modulation
	7	○	○	○	○	Volume
	64	○ (N)	X	X	○	Hold
	93	○ (N)	X	X	○	(Chorus) Moduration → Vib Depth
Prog Change	True #	○ 0 - 99	○ 0 - 99	○ 0 - 99	○ 0 - 119	100 - 119 → Registration
System Exclusive		○	○	○	○	
Common	: Song Pos : Song Sel : Tune	***** ***** *****	***** ***** *****	***** ***** *****	X X X	
System Real Time	: Clock : Commands	***** *****	***** *****	***** *****	○ ○	Only when TEMPO=SYNC
Aux Messages	: Local ON/OFF : All Notes OFF : Active Sense : Reset	***** ○ ***** *****	***** ○ ***** *****	***** ○ ***** *****	X ***** ○ X	
Notes						

Mode 1 : OMNI ON, POLY

Mode 2 : OMNI ON, MONO

○ : Yes

Mode 3 : OMNI OFF, POLY

Mode 4 : OMNI OFF, MONO

X : No

Specifications

FS800

Keyboard:	61 keys, standard
Sounds:	100
Rhythms:	100
Effects:	PITCH BEND wheel, MODULATION wheel STEREO CHORUS button, SUSTAIN button, DUET button
Rhythm controls:	START/STOP button INTRO/ENDING button SYNC./FILL-IN button TEMPO button
RECORDER:	REC/END button PLAY/STOP button SONG SELECT button
Auto-Accompaniment:	AUTO button
PROGRAM:	SYNTHESIZER button PATTERN & O. F. A. button STORE button REGISTRATION button
Volume controls:	MASTER VOLUME slider
DIGITAL MIXER:	SOUND 1 volume button SOUND 2 volume button CHORD volume button BASS volume button RHYTHM volume button
Miscellaneous controls:	TRANSPOSE slider ONE FINGER AD-LIB button DEMO button SYSTEM button MIDI button
Speakers:	12 cm x 2
Rated voltage:	9-12 V DC: six size D dry cell batteries or power adaptor (PS-102 or PS-101)
Accessory jacks:	MIDI IN/OUT/THRU DAMPER PEDAL ACC. HOLD PEDAL RCA STEREO OUT DC (9-12 V) IN HEADPHONE
Accessories:	music rack

KAWAI

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