


# *i2/i3*

**Interactive Music Workstation**

## **Player's Guide**

*by Andrew Lubman*

GENERAL  
**MIDI**  
INSTRUMENT

 AI<sup>2</sup> Synthesis System

# **KORG**

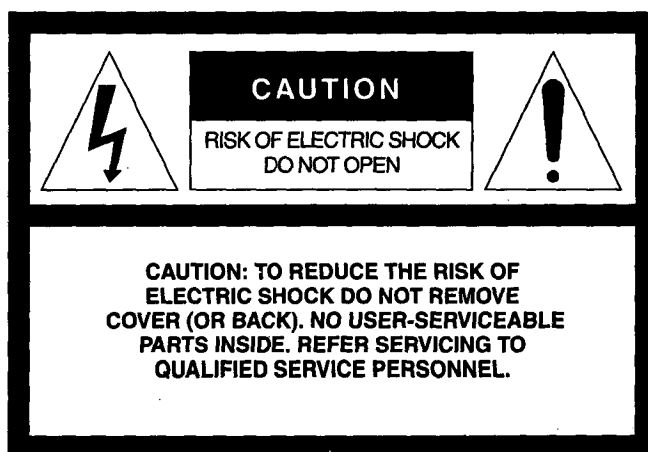
Ⓔ Ⓝ

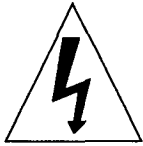
# IMPORTANT SAFETY INSTRUCTIONS

**WARNING** — When using electrical products, basic precautions should be followed, including the following:

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

## SAVE THESE INSTRUCTIONS





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



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

#### **GROUNDING INSTRUCTIONS**

This product must be grounded (earthed). If it should malfunction or breakdown, grounding a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with the local codes and ordinances.

**DANGER** – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product – if it will not fit the outlet, have a proper outlet fitted.

#### **THE FCC REGULATION WARNING**

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause interference to radio and 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:

- Reorientate the receiving antenna.
- Relocate the equipment with respect to the receiver.
- Move the equipment away from the receiver.
- Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

#### **CANADA**

THIS APPARATUS DOES NOT EXCEED THE "CLASS B" LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS SET OUT IN THE RADIO INTERFERENCE REGULATION OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS.

LE PRESENT APPAREIL NUMERIQUE N'EMET PAS DE BRUITS RADIOELECTRIQUES DEPASSANT LES LIMITES APPLICABLES AUX APPAREILS NUMERIQUES DE LA "CLASSE B" PRESCRITES DANS LE REGLEMENT SUR LE BROUILLAGE RADIOELECTRIQUE EDICTE PAR LE MINISTERE DES COMMUNICATIONS DU CANADA.

## **Trademarks**

MS-DOS is a registered trademark of Microsoft Corporation.

All trademarks or registered trademarks are the property of their respective holders.

# Table of Contents

<b>INTRODUCTION</b> .....	iv
About this manual .....	iv
Instrument capabilities .....	iv
Chapter overview .....	v
Precautions .....	vi
<b>1 GETTING STARTED</b> .....	1
Setting up the <i>i2/i3</i> .....	1
How to play the demo backing sequences .....	4
Selecting programs .....	5
Playing arrangements .....	5
Formatting a disk .....	13
<b>2 BASIC <i>i2/i3</i> CONCEPTS</b> .....	17
What is an Interactive Music Workstation? .....	17
What is a mode? .....	20
What is a program? .....	21
What is a song? .....	22
What is a style? .....	23
What is an arrangement? .....	23
What is a backing sequence? .....	24
Memory and disks .....	24
<b>3 GETTING AROUND</b> .....	27
Selecting modes .....	27
Selecting programs, arrangements, and styles .....	27
Selecting display pages .....	29
Moving the cursor .....	31
Entering values .....	33
Transposing the keyboard .....	35
<b>4 PROGRAM MODE</b> .....	37
Program organization .....	37
Selecting programs .....	38
Performance editing .....	39
<b>5 EDITING PROGRAMS</b> .....	45
Selecting the multisound .....	45
Adjusting the brightness .....	46
Adjusting the attack .....	46
Using the Compare function .....	47
Adding a second oscillator .....	48
Adjusting the settings for OSC2 .....	48
Adjusting the pitch bend range .....	51
Applying effects .....	51
Naming and writing the program .....	53

---

<b>6 WORKING WITH DRUMS</b> .....	57
What is a drum program? .....	57
Preparing to edit a drum kit .....	59
Editing the drum kit .....	60
Applying effects .....	65
Final notes .....	68
<b>7 SONG MODE</b> .....	69
Working in Song mode .....	69
Preparing to record .....	71
Realtime recording .....	72
Overdub recording .....	73
Pattern recording .....	75
Using auto punch recording to fix mistakes .....	78
Comparing and undoing .....	81
Using manual punch recording to fix mistakes .....	82
Editing events .....	83
Quantizing .....	90
Step recording .....	92
Naming and saving songs .....	94
Other functions in Song mode .....	96
Layering sounds .....	99
Adjusting volume levels .....	100
Positioning sounds in stereo .....	102
Applying effects .....	103
<b>8 EDITING ARRANGEMENTS</b> .....	107
Selecting styles .....	107
Changing the instrumentation .....	109
About wrap-around points .....	113
Selecting the default drum mapping .....	115
Changing variations with fills .....	116
Setting the keyboard assign mode .....	116
Setting the keyboard timbre parameters .....	118
Miscellaneous functions .....	119
Pulling it together .....	119
<b>9 EDITING STYLES</b> .....	121
Reassigning the chord variations .....	121
Recording new parts .....	123
Adjusting the style parameters .....	125
Introduction to recording styles .....	127
A few last words about recording styles .....	129
<b>10 BACKING SEQUENCES</b> .....	131
Basic instructions .....	131
Step recording .....	132
Using the extra tracks to control the backing tracks .....	135

---

<b>11 MIDI APPLICATIONS</b> .....	139
Using the <i>i2/i3</i> with an external sequencer .....	139
Using the <i>i2/i3</i> to control other MIDI instruments .....	142
What is General MIDI? .....	142
About Standard MIDI Files .....	143
About the Xpose Pos parameter .....	143
<b>Specifications and Options</b> .....	147

## INTRODUCTION

Congratulations and thank you for purchasing a Korg *i2/i3*! The *i2/i3* represents a new concept in keyboards: the Interactive Music Workstation. It has all of the integrated functions that can be found in Korg music workstations such as the M1 and 01/W. These functions include PCM sample playback, the ability to create and store you own sounds, a built-in dual digital effects processor and a 16-track sequencer that reads and writes Standard MIDI Files. It also has a number of unique new features that allow you to easily create and perform music with interactive, realtime control.

### About this manual

This Player's Guide shows you how to set up the instrument, and contains a number of tutorials that take you through all of the basic operations, step by step. You should read this entire manual and follow all the tutorials to get the most out of the *i2/i3*.

After familiarizing yourself with the *i2/i3* using this guide, or if you require more information about any parameter or function, please see the accompanying *i2/i3* Reference Guide.

### Instrument capabilities

The *i2/i3* is a very powerful musical instrument with features designed to meet the requirements of even the most demanding professional. It would fill too many pages to list all the applications you can use it for, but here are some of the most basic and useful:

- **As a stand-alone keyboard for playing various instrument sounds:** The *i2/i3* synthesis engine and collection of sounds have their roots in the award-winning 01/W family of Korg instruments, so even if you just use the *i2/i3* for playing piano, strings, drums or other sounds, you can be sure they will be of the highest quality.
- **As a "backup band" for practicing:** The *i2/i3* is the perfect tool for practicing and improvising—it never gets tired, and never complains about repeating the same section of music over and over. Unlike a tape recorder, you can change the tempo of the music without affecting its pitch. Likewise, you can change the key of the music without affecting its tempo.
- **As a songwriting tool:** Use the *i2/i3* "music database" of styles and arrangements to help spark ideas. Then build on those ideas with a backing sequence. For straight-forward sequencing, there is also a professional 16-track sequencer that can read and write standard MIDI files.
- **As an interactive live performance instrument:** The *i2/i3* is a versatile performance instrument which gives you everything you need to create professional, musical performances. The ability of the *i2/i3* to control sequenced music in real time gives you more power and flexibility than any musical instrument previously available.

## Chapter overview

### **Chapter 1: Getting Started**

This chapter helps you set up the *i2/i3*, and shows you some basic skills for selecting programs, playing arrangements, and formatting disks. In addition, you can find front and rear panel illustrations here.

### **Chapter 2: Basic *i2/i3* Concepts**

This chapter explains many of the basic concepts behind how the *i2/i3* works. This chapter covers some important terminology that will be used throughout this manual.

### **Chapter 3: Getting Around**

This chapter shows you how to use the front panel keys and LCD display to communicate with the *i2/i3*.

### **Chapter 4: Program Mode**

This chapter discusses how the *i2/i3* programs are organized. Basic program editing is also covered.

### **Chapter 5: Editing Programs**

In this chapter, you will learn some basic skills for editing and creating your own programs.

### **Chapter 6: Working With Drums**

This chapter discusses the details of the *i2/i3* drum programs and drum kits. You will learn how to create your own drum kits.

### **Chapter 7: Song Mode**

In this chapter, you will learn all the basics of using the *i2/i3*'s 16-track sequencer.

### **Chapter 8: Editing Arrangements**

This chapter takes you through some basic techniques for getting the most out of arrangements.

### **Chapter 9: Editing Styles**

In this chapter, you will learn some techniques to get you started with customizing and recording *i2/i3* styles.

### **Chapter 10: Backing Sequences**

This chapter gives you a brief overview of recording backing sequences, with some advanced techniques to give you the most control of your music.

### **Chapter 11: MIDI Applications**

This chapter outlines some basic applications of using MIDI with the *i2/i3*.



---

## Precautions

### ***Location***

Do not use the *i2/i3* in the following locations:

- In direct sunlight
- Locations of extreme temperature or humidity
- Excessively dusty or dirty locations
- Locations of excessive vibration

### ***Power supply***

Connect the AC power cable to an AC outlet of the correct voltage. Do not connect it to an AC outlet of voltage other than for which your unit is intended.

### ***Interference with other electrical devices***

This musical instrument contains a microcomputer. Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

### ***Handling***

To avoid damage, do not apply excessive force to the switches or controls.

### ***Care***

If the exterior becomes dirty, wipe it with a clean, dry cloth. Do not use liquid cleaners such as benzene or thinner, or cleaning compounds or flammable polishes.

### ***Keep the manuals***

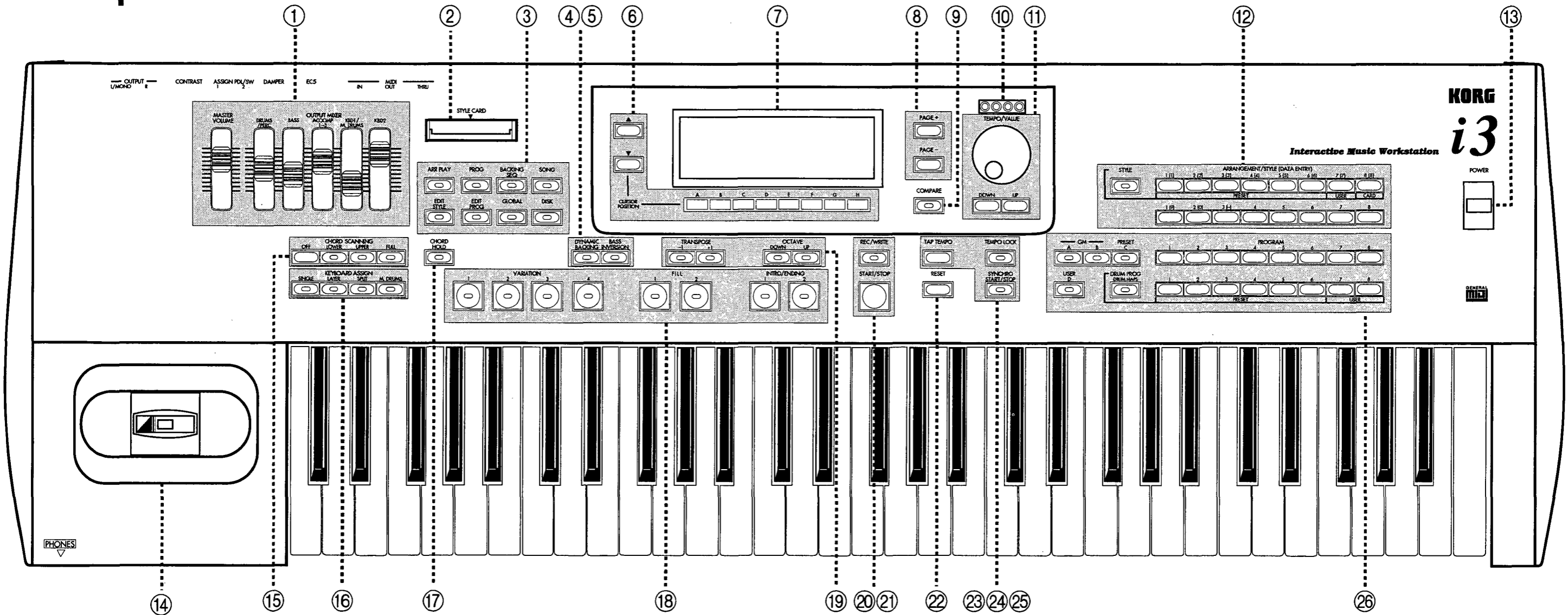
After reading the manuals, please keep them for later reference.

### ***Keeping foreign matter out of your equipment***

- Never set a cup, vase, or any other container with liquid in it on top of this equipment. If liquid gets into the equipment, it could cause a breakdown, fire, or electrical shock.
- Be careful not to let metal objects get into the equipment. If something does slip into the equipment, turn off the power switch and unplug the power cord from the wall outlet. Then contact your nearest Korg dealer or the store where the equipment was purchased.



# Front panel



- ① **MASTER VOLUME and OUTPUT MIXER sliders:** These sliders control the overall volume and the volume of the backing tracks.
- ② **STYLE CARD slot:** This slot lets you insert a ROM card to add new styles to your *i2/i3* repertoire.
- ③ **Mode keys:** These keys select the current mode of operation. The *i2/i3* has eight modes.
- ④ **DYNAMIC BACKING key:** When this key is lit, the backing tracks will follow your playing dynamics.
- ⑤ **BASS INVERSION key:** This key tells the *i2/i3* to play chords with an alternate bass note, such as C/G or D/F#.
- ⑥ **CURSOR POSITION keys:** These keys let you move the cursor to select parameters.
- ⑦ **LCD display:** This is your window for communication with the *i2/i3*. It shows the values for on-screen settings, as well as various messages about the status of the *i2/i3*.
- ⑧ **PAGE+/PAGE- keys:** These keys select the next and previous display pages.

- ⑨ **COMPARE key:** This allows you to switch back and forth between data you are currently editing and the original version stored in memory. It also lets you undo most recording and editing operations.
- ⑩ **Tempo LEDs:** The tempo LEDs indicate the current tempo by flashing, one after another, in time with the beat. The downbeat of each measure is indicated by all four LEDs flashing simultaneously.
- ⑪ **VALUE controls:** The TEMPO/VALUE dial and DOWN/UP keys adjust the tempo in Arrangement Play mode, and let you enter values for parameters in most display pages.
- ⑫ **ARRANGEMENT/STYLE keys (DATA ENTRY keys):** These keys choose arrangements and styles by number. You can also use them in combination with the cursor keys (A-H) to type in numeric values directly. In Song mode, use them to mute or solo individual tracks.
- ⑬ **POWER switch:** This switch turns the *i2/i3* on and off.
- ⑭ **Joystick:** This is used for pitch-bending, adding vibrato, and dynamically controlling the effects.

- ⑮ **CHORD SCANNING keys:** These keys determine which part of the keyboard the *i2/i3* will scan to determine chords for the backing tracks.
- ⑯ **KEYBOARD ASSIGN keys:** These set the "live keyboard" configuration in Arrangement Play and Backing Sequence modes.
- ⑰ **CHORD HOLD key:** This key tells the *i2/i3* whether it should hold the chords you play, even after you release them. When this key is unlit, the bass and accompaniment tracks will stop playing the moment you release a chord.
- ⑱ **Style element keys:** These keys select variations, fills, intros, and endings in Arrangement Play and Backing Sequence modes.
- ⑲ **TRANSPOSE and OCTAVE keys:** Use these keys to transpose the *i2/i3* by semitones or octaves.
- ⑳ **REC/WRITE key:** This key prepares the *i2/i3* to record in Backing Sequence, Song, and Edit Style modes. It is also used to save changes you make to an arrangement or a user program.
- ㉑ **START/STOP key:** Press this key to start or stop

- playback of an arrangement, style, backing sequence, or song.
- ㉒ **RESET key:** Press this key to return a song to the beginning, or to reset an arrangement or backing sequence to its initial settings. You can also use it to stop stuck notes.
- ㉓ **TAP TEMPO:** You can set the tempo in Arrangement Play mode, Edit Style mode, Backing Sequence mode, and Song mode by tapping this key in time with the tempo you want.
- ㉔ **TEMPO LOCK:** This key lets you keep the tempo constant when switching between styles or arrangements that are set to different tempos.
- ㉕ **SYNCR START/STOP:** This key tells the *i2/i3* to start (or stop) the moment you play (or release) a key in the chord scanning range of the keyboard.
- ㉖ **PROGRAM and program bank keys:** Use these keys to select programs in any mode.

# 1 GETTING STARTED

## 1.1 Setting up the *i2/i3*

### *What's in the box*

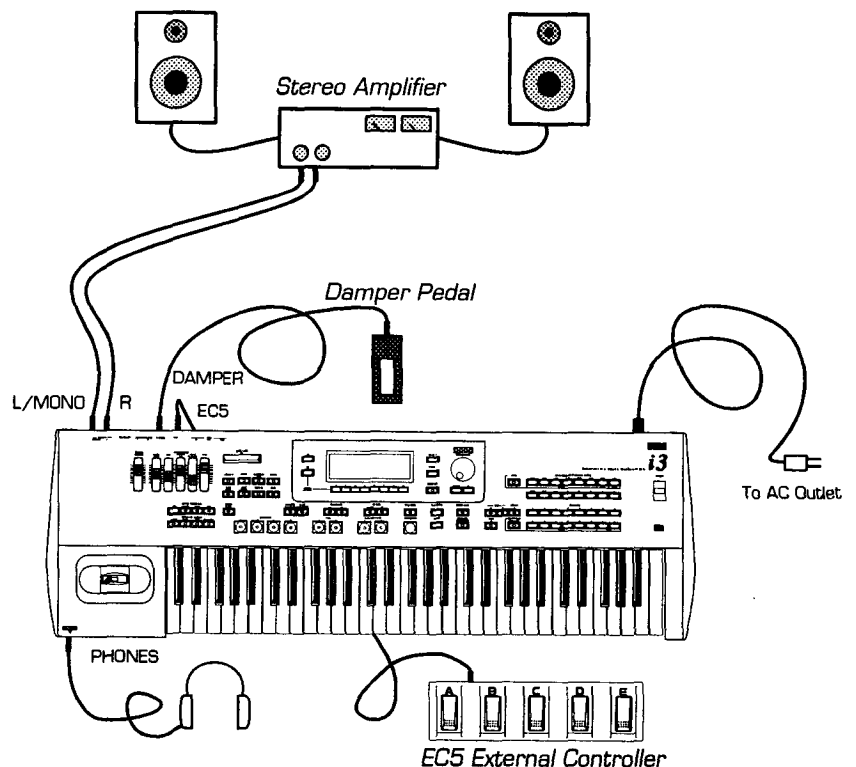
The following items should be enclosed with your *i2/i3*. Make sure that you have them all.

- Player's Guide (what you're reading now)
- Reference Guide
- *i2/i3* data disk, IFD-00P
- Power cable
- Music stand

It is a good idea to keep the packaging materials for when you want to transport the *i2/i3*.

### *Connections*

To hear the *i2/i3* in stereo, use both the L/MONO and R outputs. Stereo playback is highly recommended if your amplification system allows it. If you must connect only one output, use the one marked L/MONO.



If you want to use headphones, plug them into the PHONES jack at the front left edge of the instrument (next to the disk drive).

Your audio system is as crucial to your sound as the instrument body is to a violin. A weak or distorted sound system can rob the *i2/i3* of its inherent high fidelity.

**Connecting the EC5 External Controller**

Connect the EC5's REMOTE jack to the EC5 jack on the *i2/i3* rear panel.

The optional EC5 External Controller can be programmed to perform many functions. Use Page 3 of Global mode to set the functions of the EC5. (See page 220 in the Reference Guide for more details.)

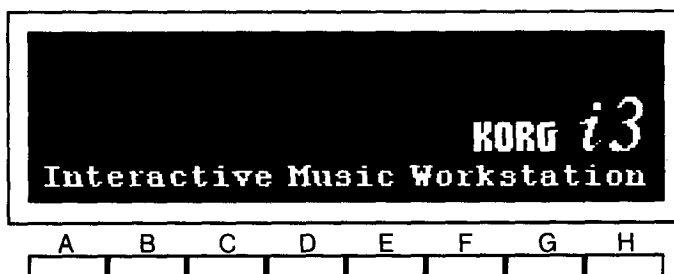
**MIDI connections**

Connections will vary depending on the current mode of the *i2/i3*, as well as how you want to use MIDI. See Chapter 11 for some basic applications of MIDI and how to connect the cables.

**Power-on procedure**

When you have made all the necessary connections, press the power switch to power on the *i2/i3*. (The power switch is located on the right side of the front panel.) Then switch on your amplifier, powered monitor, etc.

The following screen will be displayed for a few seconds, after which Arrangement Play mode will be selected. (If you are using the *i2*, its name will be displayed in place of *i3*.)



**Power-off procedure**

Press the power switch to power off the *i2/i3*.

All programs, arrangements, and styles will be retained in memory while the *i2/i3* is powered off. Be aware, however, that all songs and backing sequences will be lost as soon as you switch off the *i2/i3* power. Save this data to disk before powering off.

*Do not power off while the disk drive light is on, or when a "Loading" or "Saving" message is shown on the display.*

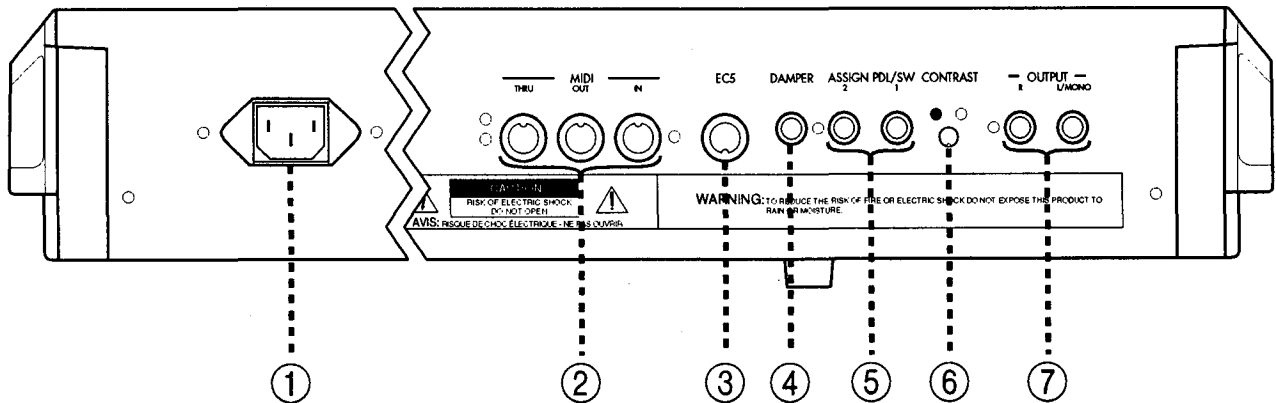
**Adjusting the volume**

Use the MASTER VOLUME slider to set an appropriate output level. This slider also controls the headphone volume.

**Adjusting the LCD contrast**

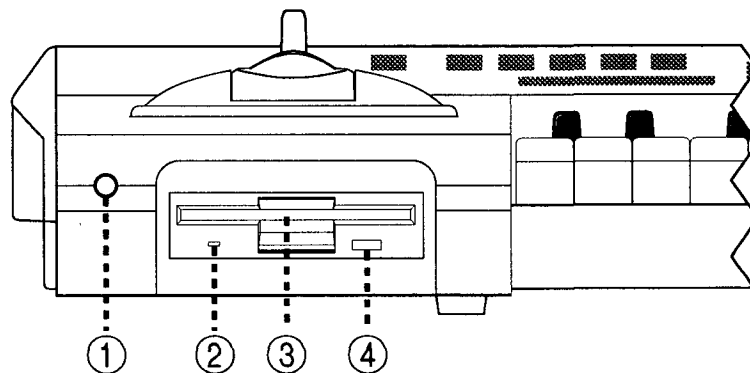
Depending on the temperature and lighting conditions, you may need to adjust the LCD contrast to maintain good readability. You can do so by turning the CONTRAST knob on the rear panel (located next to the right output jack).

# Rear panel



- ① **Power input:** Plug the power cord into this socket.
- ② **MIDI jacks:** Used for communicating with other MIDI-equipped devices such as keyboards and computers. The *i2/i3* receives MIDI signals *from* other devices via the MIDI IN jack, and *sends* MIDI signals *to* other devices via the MIDI OUT jack. The MIDI THRU jack passes on signals received at the MIDI IN jack.
- ③ **EC5:** For connecting the optional EC5 External Controller footswitch. You can assign a different function to each switch in Global mode.
- ④ **DAMPER:** Connect a sustain pedal here.
- ⑤ **ASSIGN PDL/SW 1 and 2:** For connecting an optional foot pedal or footswitch. You can assign a different function to each pedal in Global mode.
- ⑥ **CONTRAST:** Turn this knob to adjust the contrast of the LCD display.
- ⑦ **Output jacks:** For connecting to other devices such as amps, etc. For stereo hook-up, the left and right signals are output via the L/MONO and R jacks, respectively. For monaural use, use the L/MONO jack only.

# Headphone jack and disk drive

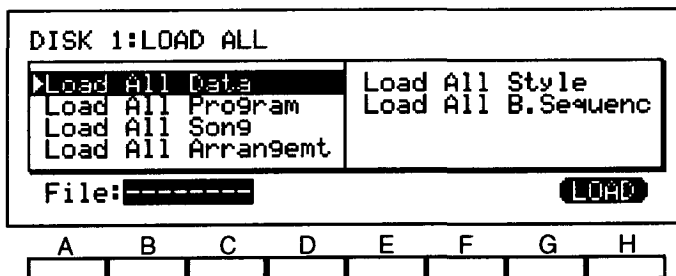


- ① **PHONES jack:** Plug a pair of stereo headphones into this jack for playing and listening without disturbing others.
- ② **Disk access indicator:** This indicator will light up to show disk activity. *Never try to remove a disk from the disk drive while this light is on!*
- ③ **Disk drive slot:** Insert 3.5 inch double-sided, double-density (2DD) disks here. For more information on the care and handling of disks, see page 15.
- ④ **Disk eject button:** Push this button to eject a disk from the disk drive. If the disk does not eject after pushing this button all the way, consult an authorized Korg service center—*Do not try to force the disk out!*

## 1.2 How to play the demo backing sequences

Before we go any further, let's take a listen to what this instrument can do.

- First, turn the power off and back on.
- After the start-up display goes away, press the key labelled DISK.



The above display will appear, with the Load All Data function already highlighted.

- Insert the IFD-00P factory disk (see the illustration on page 14).
- Press cursor key B or C.

The *i2/i3* will display "Wait a moment..." while scanning the disk for files.

After a moment, the filename "AMERICA" will appear in the bottom line of the display.

- Press cursor key H to load the data from that file.

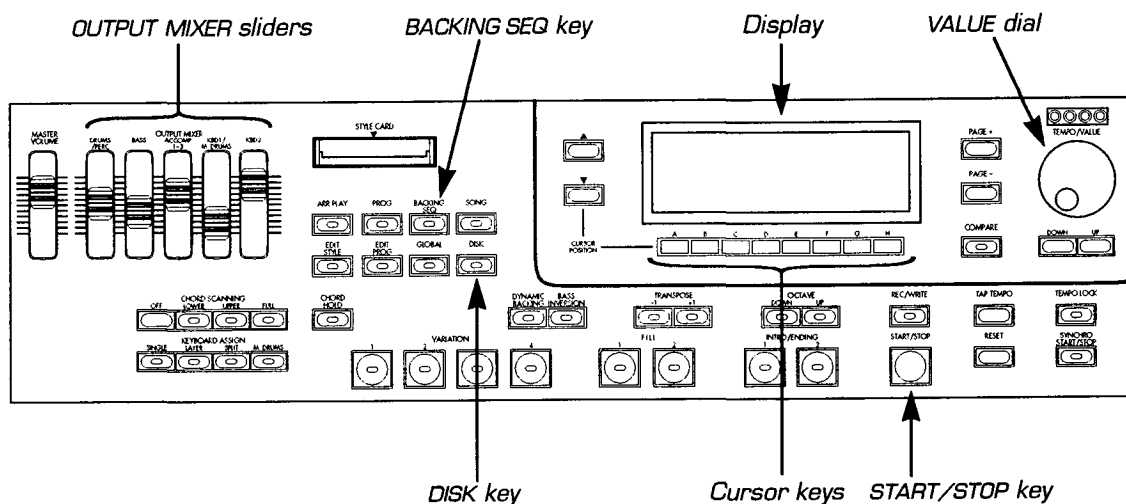
The *i2/i3* will display an "Are you sure?" message.

- Press cursor key E or F to confirm the load operation.

The *i2/i3* will display various messages as to its loading status. When it is finished loading, a "Completed" message will be displayed.

- Press the key labelled BACKING SEQ.
- Raise all OUTPUT MIXER sliders to their maximum position.
- Press the key labelled START/STOP.
- Enjoy the demo.

If you need to stop the backing sequence, press the START/STOP key a second time. Otherwise, the *i2/i3* will stop on its own after it has played all the backing sequences.



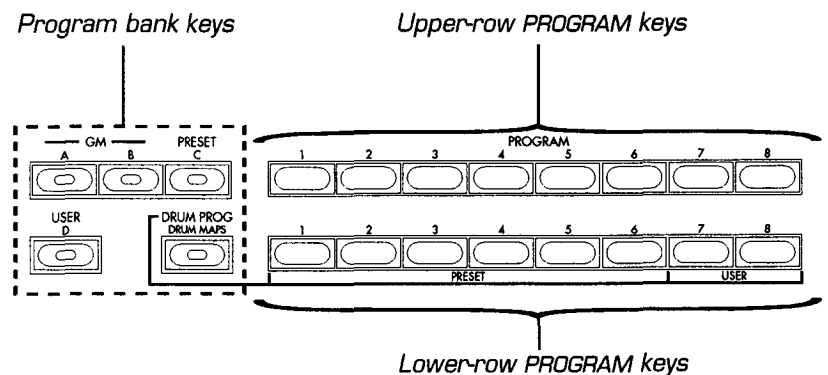
### Selecting other backing sequences

The *i2/i3* will automatically select the next backing sequence, after the current one has stopped playing. You can also use the UP and DOWN keys (located under the VALUE dial) while the *i2/i3* is stopped, to select the next and previous backing sequences, respectively.

## 1.3 Selecting programs

Now that you have had a taste of what the *i2/i3* can do, you will probably want to play some of the sounds you heard in the demo. These sounds are known as *programs*.

Selecting programs is very easy. First, choose a program *bank* using the bank keys. Then press one of the upper-row PROGRAM keys to select a program *group*. Finally, select the program *number* you want using the lower-row PROGRAM keys.



To illustrate this, let's select program **B32 Saw Wave**.

- ☛ First, press the key labelled PROG.

You have now entered Program mode. (See Chapter 2 of this manual for a description of each of the modes.)

- ☛ Press the B bank key.
- ☛ Press the 3 key in the upper-row of PROGRAM keys.
- ☛ Press the 2 key in the lower-row of PROGRAM keys.

You can use this method to select any *i2/i3* program in any mode.

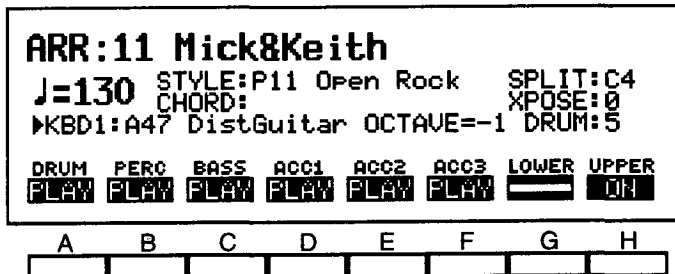
Take some time now to play through the various programs that are available to you. For more information about programs, see Chapter 4 in this manual. For a complete list of program names, see the Performance Notes that came with the *i2/i3*.

## 1.4 Playing arrangements

Arrangements give you realtime control over sequenced data. When you play an arrangement, you can control the chord progression, song section (intro, verse, chorus, fill, ending, etc.), and basic feel of the music.



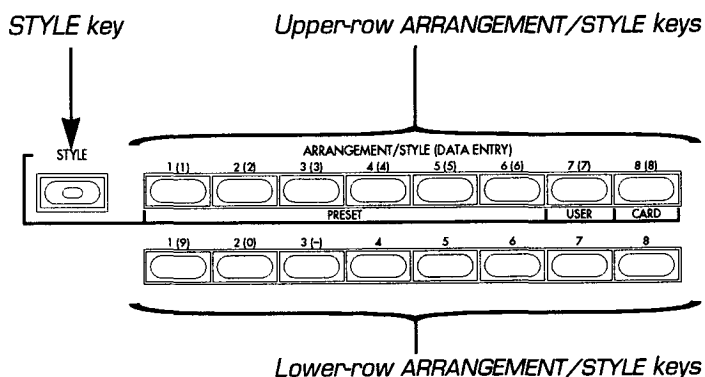
- Press the key labelled ARR PLAY to enter the Arrangement Play mode. (See Chapter 2 of this manual for a description of each of the modes.)



**Selecting arrangements**

The procedure for selecting arrangements is very similar to that for selecting programs.

First, make sure the STYLE key is not lit. Then, press one of the upper-row ARRANGEMENT/STYLE keys to select an arrangement group, followed by the arrangement number you want using the lower-row ARRANGEMENT/STYLE keys.



For this tutorial, select arrangement 14 Top40 Rock.

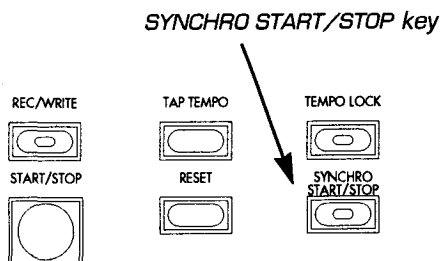
- Press the 1 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 4 key in the lower row.

**Chord recognition**

The i2/i3 can recognize just about any chord you can play, and change sequenced music to fit that chord.

You can play chords in their full or abbreviated forms. (See Appendix C in the Reference Guide for details on the recognized chords and how to play them.) Let's try entering an abbreviated chord now.

- Press the SYNCHRO START/STOP key.



This way, the arrangement will start together with the chord you play.

- Play the C (single note) at the bottom of the keyboard.

You have just entered a C major chord. You could have obtained the same results by playing C and E; or C, E, and G; in combination.

The *i2/i3* should now be playing Intro 1. After eight bars, the intro will finish and the *i2/i3* will automatically switch to Variation 1.

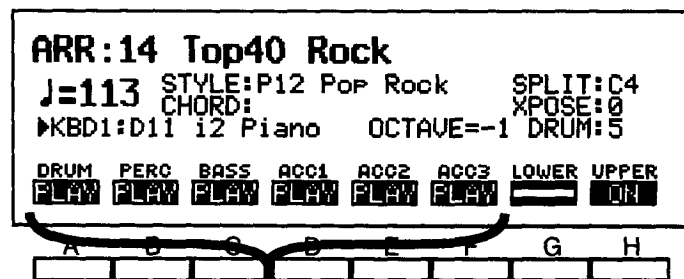
When Variation 1 starts, try playing different chords on the lower end of the keyboard.

- Alternately play single notes C, F, and G in the area of the keyboard below C4 (middle C). Try playing these notes in a different order to create your own basic rock song.
- Now play A and C together to enter an A minor chord.

You could have alternately played A, C, and E in combination to enter the A minor chord.

### Muting tracks

There may be times when you want to mute some of the backing tracks. The quickest way to do this is to use the mute buttons in the Arrangement Play display.



Mute buttons for the backing tracks

Let's try this now.

- Press cursor keys D and F to mute the ACC1 and ACC3 tracks.

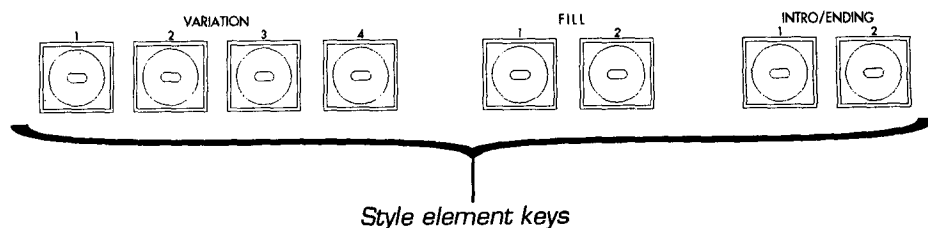
When you do this, the PLAY indications will change to empty bars, showing that the tracks are muted.

- Press cursor keys D and F a second time to un-mute the ACC1 and ACC3 tracks.

You can also use the individual OUTPUT MIXER sliders on the front panel to control the levels of the DRUM and PERC tracks, the BASS track, and the three ACC tracks.

### Selecting style elements

The style element keys on the front panel let you select from 10 *style elements*. These are Variation 1 through 4, Fill 1 and 2, Intro 1 and 2, and Ending 1 and 2.



To select a style element, simply press the corresponding button.

- Press the VARIATION 2 key.

Notice the difference between the music that is played in this variation as opposed to that of Variation 1.

- Press the FILL 1 key.

The *i2/i3* will play a fill.

- Press the INTRO/ENDING 2 key.

The *i2/i3* will play an ending, after which the arrangement will end.

You have probably noticed that intros and endings share the same front panel keys. The *i2/i3* will play the intro if the arrangement is stopped, and the ending if the arrangement is already playing, when you press either of these keys.

### **About intros and endings**

There is an important difference between Intro/Ending 1 and Intro/Ending 2.

Intro 1 and Ending 1 have built-in chord changes and so are designed for hands-off performance. If you enter a chord with a different root than that which is currently playing, the entire chord progression will be transposed to a new key determined by the root of the new chord.

Intro 2 and Ending 2 do not have built-in chord changes. It is therefore up to you to provide the chords, if you like.

Let's listen to Intro 1 and Ending 1 in arrangement 13 **Shufflin'**.

- Press the 3 key in the lower row of ARRANGEMENT/STYLE keys.

It is not necessary to press an upper-row key if the arrangement you want to select is from the same group as the one currently selected.

- Press the INTRO/ENDING 1 key.
- Press the SYNCHRO START/STOP key.
- Play the C at the bottom of the keyboard.

After the intro has finished, the arrangement will switch to Variation 3.

- Press the INTRO/ENDING 1 key to hear the ending.
- After the arrangement stops, repeat the last four steps using Intro 2 and Ending 2. Be sure to try different chords.

It is also possible to have either intro repeat indefinitely. You can do this simply by pressing the key for the intro while it is playing. To continue with the song, press any other style element key. The selected style element will start at the beginning of the next measure.

Let's try this with arrangement 51 **Boston Boy**.

- Press the 5 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 1 key in the lower row, to select the arrangement.
- Press the SYNCHRO START/STOP key.
- Enter a C minor 7th chord by playing C, E-flat, and B-flat in combination at the bottom of the keyboard.

You could have also played C, E-flat, G, and B-flat to enter the same chord.

Once you play the chord, the four-bar intro will start.

- Press the INTRO/ENDING 1 key during these four bars.

After it reaches the end, Intro 1 will repeat indefinitely until you press another style element key.

- When you want the intro to stop repeating, press the FILL 2 key.

After the *i2/i3* reaches the end of the current measure, it will play Fill 2 and then switch to Variation 1.

- Press the START/STOP key to stop the *i2/i3*.

You can also use this technique to cut short an otherwise long intro. After pressing the intro key a second time, press the desired style element key when you want the intro to end—it is not necessary to wait for the intro to repeat.

### Using fills

Depending on when you press a fill key, you will hear different parts of the fill. This is because the fill does not simply start from its beginning each time you press a fill key. Instead, it runs alongside the current style element. To illustrate this, let's use arrangement **47 Da Blues**.

- Press the 4 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 7 key in the lower row, to select the arrangement.
- Press the VARIATION 1 key.
- Play the C at the bottom of the keyboard.
- Press the START/STOP key.
- Press the FILL 1 key on the fourth beat of the fourth measure.

You should hear a piano glissando. This is actually the last part of the fill.

Let's listen to a little more:

- Press the START/STOP key once to stop the *i2/i3*.
- Press the START/STOP key again to start the *i2/i3*.
- This time, press the FILL 1 key on the *first* beat of the fourth measure.

You should hear a little more of the fill.

Now, let's listen to the whole fill.

- Press the START/STOP key once to stop the *i2/i3*.
- Press the START/STOP key again to start the *i2/i3*.
- Press the FILL 1 key on the first beat of the fifth measure.

You should hear the fill in its entirety. Try the above steps with Fill 2.

You can use a fill as an intro—just be sure to select it before you press the START/STOP key.

### **Using endings as fills**

Some of the endings work well as fills and turn-arounds. We will use arrangement 72 **The Duke** to show how this works.

- ☛ If the previous arrangement is still playing, press the START/STOP key to stop it.
- ☛ Press the 7 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 2 key in the lower row, to select the arrangement.
- ☛ Press the VARIATION 4 key.
- ☛ Play the C at the bottom of the keyboard.
- ☛ Press the START/STOP key.
- ☛ Press the INTRO/ENDING 1 key on the first beat of the fourth measure.
- ☛ After the ending plays for two bars, press the VARIATION 4 key to return to the variation.
- ☛ Press the START/STOP key to stop the *i2/i3*.

### **Selecting chord variations**

Each of the style elements is actually made up of smaller units called *chord variations*. Different chord variations are selected depending on what chords you play. Let's use arrangement 32 **The King** to illustrate this.

- ☛ Press the 3 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 2 key in the lower row, to select the arrangement.
- ☛ Press the VARIATION 4 key.
- ☛ Play the C at the bottom of the keyboard.
- ☛ Press the START/STOP key.

Notice the rockabilly bass part.

- ☛ Play a C7 chord (C, E, G, B-flat, or just C and B-flat) at the bottom of the keyboard.

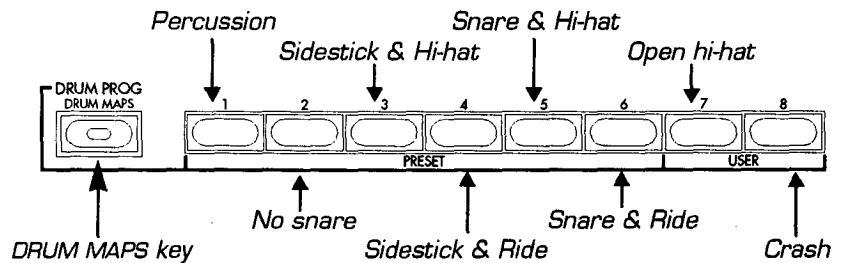
The bass part has now switched to a walking bass. The chord variations are used for obvious changes like this one, as well as more subtle changes that make the arrangement sound better with a wider variety of chords.

- ☛ Press the START/STOP key to stop the *i2/i3*.

### **Changing the drum mapping**

The *i2/i3* has the ability to change, in real time, the drum sounds it uses to play arrangements. For example, you can switch from snare drum and hi-hat to sidestick and ride cymbal, at the touch of a button. We will use arrangement 27 **Unplugged** to show how this works.

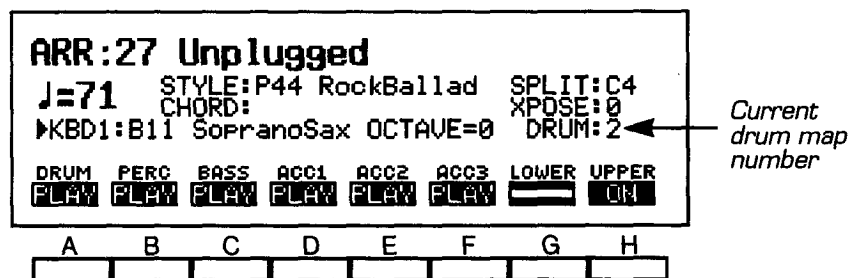
- ☛ Press the 2 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 7 key in the lower row, to select the arrangement.
- ☛ Press the VARIATION 3 key.
- ☛ Play the C at the bottom of the keyboard.
- ☛ Press the START/STOP key.
- ☛ Press the DRUM MAPS key.



The DRUM MAPS key will start to blink.

- Press the 2 key (to the right of the DRUM MAPS key) to select drum map number 2.

The current drum map number will be displayed in the right portion of the display.



Notice now that the snare is no longer played.

- Select drum map number 3.

A sidestick is added.

- Select drum map number 4.

The hi-hat changes to a ride cymbal.

- Select drum map number 5.

The sidestick changes to a snare and the ride cymbal to a hi-hat.

- Select drum map number 6.

The hi-hat changes to a ride cymbal.

- Try drum map numbers 7 and 8.

If you want to return to the original drum map, hold the DRUM MAPS key and press any one of the eight number keys to the right.

### Chord scanning

Up until now, we have been using the lower chord scanning option. The *i2/i3* also has *upper* and *full* chord scanning options. With full chord scanning, the *i2/i3* scans the entire keyboard to determine the current chord. This allows you to play the whole keyboard as you normally would, when playing a piano sound for example, without having to think about the range of keys you can play.

There is basically one rule to follow when using the full chord scanning option. You must play at least three notes in either hand for the *i2/i3* to change the chord. This means that you can play single- or double-note melodies and solos without changing the chord.

Let's try this now with arrangement 56 **Groovin'**.

- If the previous arrangement is still playing, press the START/STOP key to stop it.
- Press the 5 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 6 key in the lower row, to select arrangement 56.
- Press the SYNCHRO START/STOP key.
- Play any chord with both hands (three notes or more).

The arrangement will start.

- Try playing many different chords.
- After awhile, try playing a single- or double-note melody.

Notice that the chord does not change.

If you want to prevent the *i2/i3* from changing chords when you play more than two notes—such as when playing a glissando—press and hold the sustain pedal. This will activate the *Chord Latch* function, which was designed for this purpose. This function is enabled for all of the factory-supplied arrangements that use the full and upper chord scanning options.

Upper chord scanning is similar to both lower and full chord scanning modes in that only half of the keyboard is scanned, *and* you must play at least three keys to change the chord.

### **Changing styles**

It is possible to change the current style used in the arrangement for creating medleys or for accessing other style elements without having to change the arrangement itself. This way you can keep the same instrumentation and effect settings.

Let's try this now with arrangement 11 **Mick&Keith**.

- If the previous arrangement is still playing, press the START/STOP key to stop it.
- Press the 1 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 1 key in the lower row, to select arrangement 11.
- If the TEMPO LOCK key is not lit, press it now.
- Press the VARIATION 2 key.
- Press the SYNCHRO START/STOP key.
- Play some chords in the lower half of the keyboard.

The arrangement will start.

- Press the STYLE key (make sure it is lit).
- Now press the 3 key in the *lower* row of ARRANGEMENT/STYLE keys.

At the start of the next measure, the style will change smoothly from 11 Open Rock to 13 Hard Rock. You can switch freely between any style this way—just remember that the change won't occur until the next measure.

The Tempo Lock function keeps the tempo constant when you switch styles; otherwise the *i2/i3* changes to the default tempo that is saved with each style.

### ***Creating a break in the music***

You can create a break in the music by pressing the SYNCHRO START/STOP key while an arrangement is playing. When you release the keys in the chord scanning area of the keyboard, the music will stop. It will start again when you play another chord.

Be aware that you must hold the chord at this point—otherwise the *i2/i3* will stop again when you release the keys. Press the SYNCHRO START/STOP key a second time to turn this function off.

### ***Playing riffs with the backing tracks***

The chord hold function is similar to the synchro start/stop function above, except that the drum and percussion tracks will continue to play when you release the keys.

To get an idea of how this function works, try arrangement 15 Riffin'.

### ***Putting it all together***

So far, we have been isolating individual features and performance techniques of Arrangement Play mode. Now it's time to put all of this to work. Each arrangement has one or two *keyboard timbres* (KBD1 and KBD2) which you can play live over the backing tracks.

You can change the program of either keyboard timbre by using the program keys as you learned earlier. Select the keyboard timbre to change by using the up and down arrow keys (▲ and ▼) located to the left of the LCD display. (If the Keyboard Assign mode is set to SINGLE, you will only be able to change the program for KBD1.)

Enjoy exploring all the musical possibilities the *i2/i3* has to offer!

## **1.5 Formatting a disk**

Let's prepare a disk that you can use for storing your own data. It is important to save the data you create with the *i2/i3* (arrangements, songs, programs, etc.) to a disk. This *backup* copy, will be very helpful to you if you lose any of your data or if somebody else changes it by accident. In the case of Song mode and Backing Sequence mode, you *must* save your data to disk because it is "flushed out" of the *i2/i3* memory when you turn the power off.

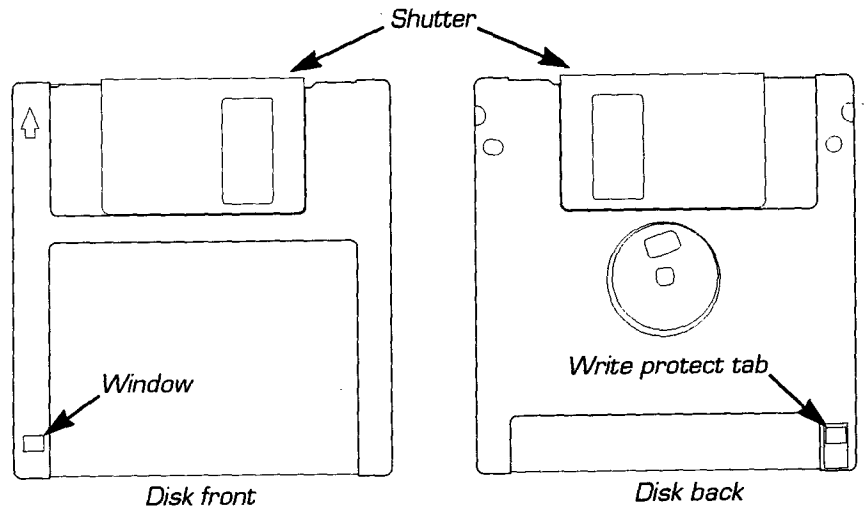
Before you can use a disk, you must prepare it for use with the *i2/i3*. This procedure, known as *formatting*, writes information to the disk that identifies it as an *i2/i3* disk. (For those of you who are interested, it is the same format used on 720k MS-DOS™ disks.)

You must have a 3.5 inch double-sided, double-density (2DD) disk to perform the following procedure. Because this procedure erases all information on the disk, *do not use the disk that came with the i2/i3!* You can buy this type of disk at your local computer store, an office supply store, or perhaps the music store where you purchased the *i2/i3*.

Once you have a disk to format, make sure that the disk is *write enabled*. This allows data to be written to the disk.

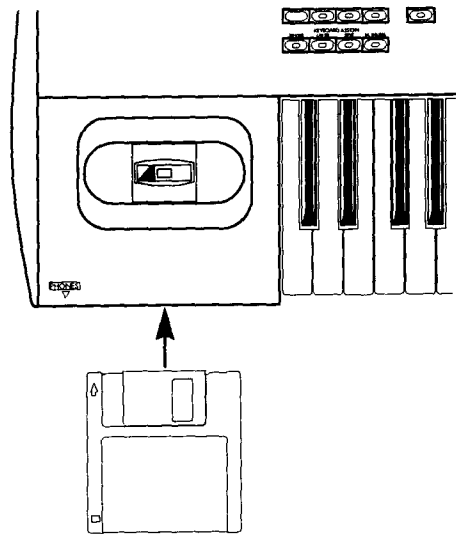


- Locate the small window on the corner of the disk.



If the window is closed, then the disk is write enabled. If the window is open you must slide the *write protect tab* on the back of the disk so that it closes the window.

- Insert the disk into the disk drive with the front side facing up, shutter-first.



Now you can format the disk.

- Press the key labelled DISK.
- Press the PAGE+ key four times.
- Press the down arrow key (▼) two times so that the Format Disk function is highlighted.
- Press cursor key H (located underneath the word FORMAT on the display).

In a moment, the *i2/i3* will ask "Are you sure?"

- Press cursor key E to answer "Yes" to this prompt.

"Now formatting..." will appear on the display. After about two minutes, this message should change to "Completed." If it doesn't, refer to Appendices A and B in the Reference Guide.

***Handling floppy disks***

Observe the following precautions when handling floppy disks.

- Do not open the shutter or touch the surface of a disk.
- Do not transport the *i2/i3* with a floppy disk in the disk drive. Vibration may cause the disk drive head to scratch the disk, making it unusable.
- Do not store or place floppy disks near a television, computer monitor, loudspeaker, power transformer, or any other device that generates a magnetic field. Doing so may render the disk unusable.
- Do not store or place floppy disks in locations subject to extremes of temperature and humidity, direct sunlight, or excessive dust and dirt.
- Do not place objects on top of a floppy disk.
- Always return disks to their protective cases after use.



## 2 BASIC *i2/i3* CONCEPTS

Now that you have seen and heard what the *i2/i3* can do, let's take a closer look at some of the ideas behind how it works.

### 2.1 What is an Interactive Music Workstation?

There are three basic elements that an instrument must have in order to be considered an Interactive Music Workstation: high quality sounds, the ability to record music, and the ability to control recorded music while you perform. The *i2/i3* has three key components which enable it to perform these tasks.

#### **The tone generator**

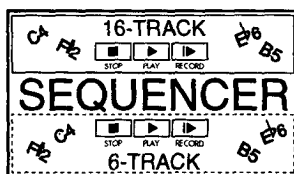
The *tone generator* is what produces the sounds you hear when you play the *i2/i3*. It is 32-note *polyphonic*, which means it can play up to 32 notes at the same time. It is also 16-part *multi-timbral*, which means it can play up to 16 different instrument sounds simultaneously. This gives you the power to create the sound of a full ensemble.



Sounds from every major musical instrument group are included such as piano, strings, brass, and drums. These sounds can be modified slightly to suit your personal tastes, or transformed into something completely otherworldly. Because it is a digital device, you never have to worry about the instrument going out of tune.

#### **The sequencer**

The *i2/i3 sequencer* lets you record musical ideas in much the same way as a multi-track tape recorder. In fact, it can record and play songs of up to 16 tracks. However, unlike a tape recorder, the sound itself is not what gets recorded. Instead, the *i2/i3* records more abstract information: which key you pressed, when you pressed it, how hard, and for how long.



Because this information is not sound-specific, you can easily change the sound of tracks you have already recorded. For example, you can record a delicate piano sonata, and have it played by a tuba—just by changing a single piece of data. Sequencing is thus a powerful, flexible tool for recording and editing music.

#### **The music processor**

The *i2/i3* takes the music workstation concept a step further by giving you realtime control over the music you have recorded. Its special *music processor* lets you change many important musical variables as you perform.

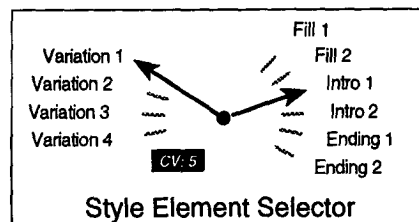


Let's say, for example, that you're performing a song that involves some pre-recorded sequences. Suddenly you have the urge to make a change. You'd like to change the chord progression...or play the last chorus once more before ending...or add in a few extra cymbal crashes. You could make these changes with a normal sequencer—but only after some laborious editing. The *i2/i3* lets you make all these changes, and more, at a moment's notice.

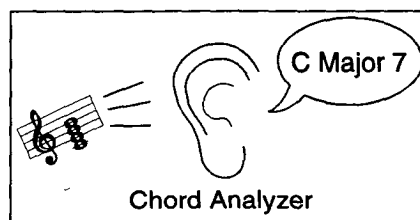
**Inside the music processor**

As you can imagine, the music processor really has its work cut out for it. After all, it has to understand a lot about music, from basic concepts such as chord theory and song structure, to the techniques drummers use to build musical tension in a song. The music processor's musical expertise is divided among four tools, each of which is designed to handle a specific task.

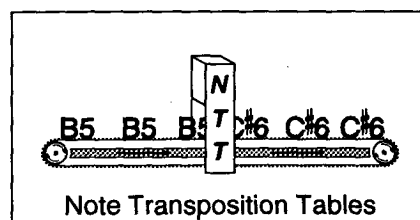
To begin with, the music processor organizes its knowledge of each musical style as a number of different elements, each of which is suited to a specific musical purpose. It thus thinks of a style in terms of the parts of a song: variations, fills, intros, and endings. The *Style Element Selector* switches between these elements smoothly and instantaneously.



Each element actually consists of a number of different sequences that are triggered by chord changes. The Style Element Selector chooses among these sequences based on information it receives from a second music processor tool—the *Chord Analyzer*. This tool constantly scans the keyboard to check what keys are being pressed, and from this information determines what chords you are playing. If the music processor were an improvisational musician, the Chord Analyzer would be its ears.



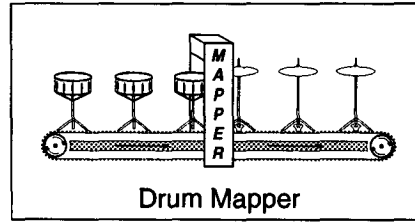
The Chord Analyzer also allows the *i2/i3* to modify the sequences chosen by the Style Element Selector so that they perfectly match the chords you play. After it learns from the Chord Analyzer what chord you are playing, the music processor runs the sequences through *Note Transposition Tables*, which mold the sequence to fit the chord by altering certain notes.



As you can see, the music processor uses these three tools to fit musical sequences both to the various sections of a song, and to the chord progressions that make up these sections. To put it technically, it adapts pre-recorded sequences to the structure of the music you perform.

This is impressive enough in itself...but we're not done yet. The music processor has one more trick up its sleeve.

There may be times when you want to change the feel of your music by varying the drum sounds. For example, you may want to exchange the sidestick and ride cymbal you are using during the verse for a snare drum and hi-hat when you hit the chorus. Our last music processor tool, the *Drum Mapper*, allows you to do this on the spur of the moment.

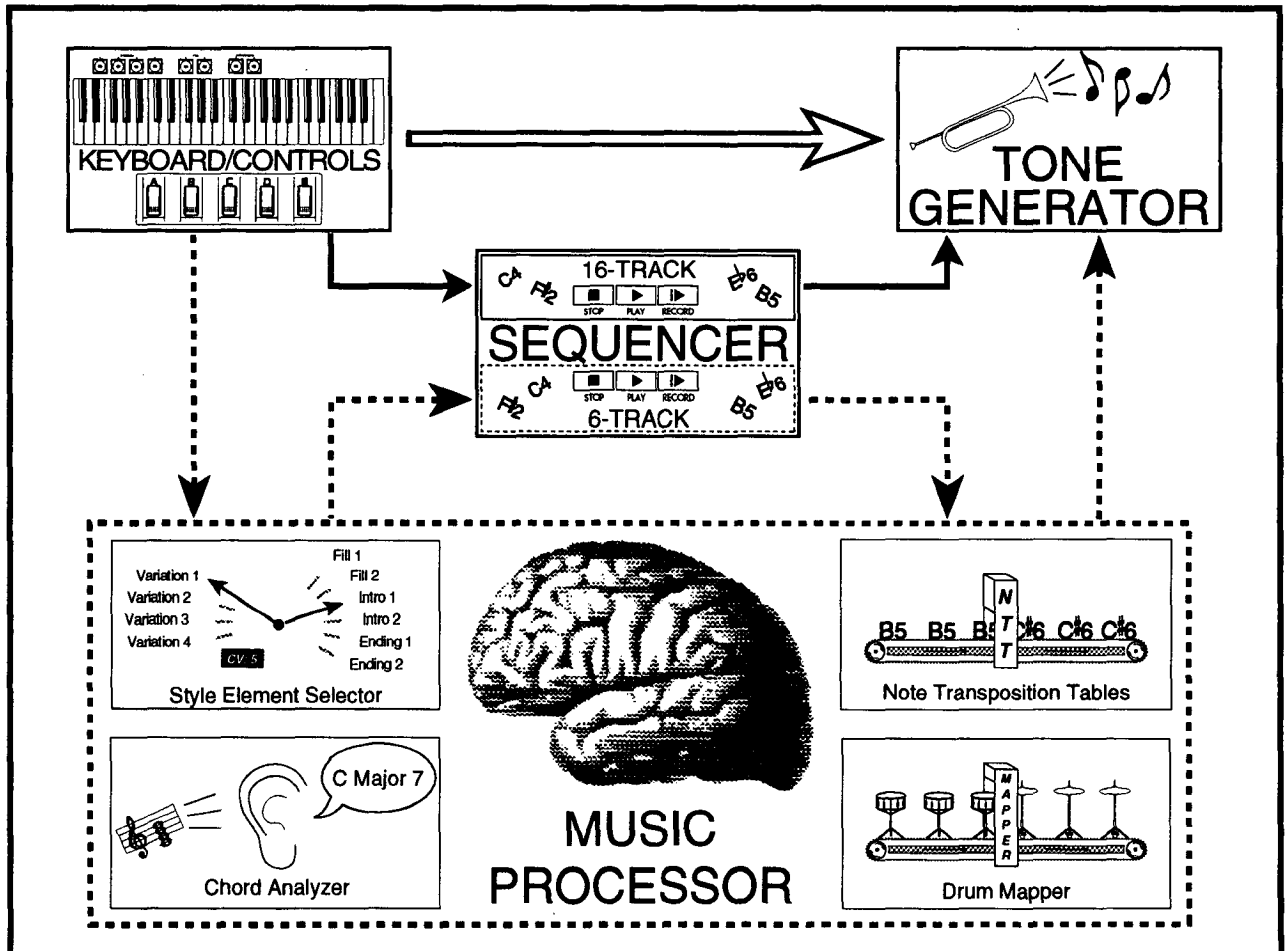


It is even possible to remap each drum to play a different percussion instrument, so that the bass drum, snare, and hi-hat will become a pair of claves, a cowbell, and a shaker, for example. All of this flexibility opens new possibilities for musical expression.

**Putting it all together**

We have seen how the *i2/i3* is composed of a tone generator, a sequencer, and a music processor. To these three components we can add a fourth: the *keyboard and controls*. These form the link between you and the *i2/i3*, giving you control over all of its capabilities.

If we combine the four components and try to represent their relationships graphically, the result would look something like this:



In the preceding illustration, you can see that there are three basic configurations for connecting the components. The first of these, represented by the hollow arrow, joins the keyboard directly to the tone generator so you can play and edit programs. This is perhaps the simplest configuration, and is considered to be fundamental for any electronic keyboard instrument.

The second configuration, represented by the thin, solid arrows, connects the keyboard to the 16-track sequencer, and the sequencer to the tone generator for recording and playing up to sixteen tracks of musical data. This setup provides the backbone for a music workstation's song production capabilities.

With the third configuration, represented by the dotted arrows, the keyboard and controls send commands to the music processor which in turn modifies sequence data from the six-track sequencer as it passes on to the tone generator. In particular, the music processor's ability to control sequenced music in real time gives you more power and flexibility than any musical instrument previously available.

Considering how much power the *i2/i3* has to offer, there needs to be a way in which to organize its functions in a logical manner. After all, you probably won't need to use all of them at the same time. The *i2/i3* groups each of the above mentioned configurations and their associated functions into what are known as *modes*.

## 2.2 What is a mode?

A mode is a collection of functions that let you use the instrument's resources to perform a specific task, such as editing sounds, recording music, or accessing a disk drive.

The *i2/i3* has eight modes, the most powerful of which are the sequencing modes: Arrangement Play, Edit Style, Backing Sequence, and Song. These modes combine the keyboard, the tone generator, the sequencer, and in some cases the music processor. Program mode and Edit Program mode use only the keyboard and tone generator. There are also two utility modes, Global and Disk.

Let's take a moment to briefly explain each of the modes.

### ***Program mode and Edit Program mode***

Program mode allows you to play individual sounds, called *programs*. You can also use this mode to select programs to be edited in Edit Program mode. Edit Program mode lets you change all aspects of a program, including brightness, attack, release, and basic waveform settings.

See section 2.3 on page 21 and Chapters 5 and 6 in the Reference Guide for information on programs and how to edit them.

### ***Song mode***

This mode provides a standard 16-track sequencer which can be used for straight-forward sequencing (no interactive capabilities). A full range of song editing functions give you the power to refine your music with note-by-note precision.

See Chapter 4 in the Reference Guide for more information.

**Arrangement Play mode**

Use this mode for interactive live performance. When you play an arrangement, you can control the tempo, chords, style element selection, and drum mapping in real time. You can also specify program selection, volume, panning, and effect send levels for each of the backing tracks.

Arrangement Play mode also provides two additional programs, known as *keyboard timbres* that you can play over the backing tracks.

See Chapter 1 in the Reference Guide for information on arrangements.

**Edit Style mode**

This mode provides a special six-track sequencer that allows you to create your own styles and edit them to your liking. You can also use this mode to edit any of the on-board ROM styles.

See section 2.5 on page 23 and Chapter 2 in the Reference Guide for a description of styles and how to edit them.

**Backing Sequence mode**

This mode allows you to *record* all aspects of an arrangement performance including chord changes, keyboard timbre parts, style element selections, and drum mapping changes. There are also eight *extra tracks*, each of which can be used to record additional musical parts, or can act as a control source for the backing tracks.

See Chapter 3 in the Reference Guide for more information on backing sequences.

**Global mode**

This mode is used to set parameters that apply to the *i2/i3* as a whole, such as basic MIDI channels, tuning, assignable foot pedals, and memory protect settings.

There are also functions that let you edit the two user drum kits, load style data from a ROM card, and transfer *i2/i3* data as MIDI system exclusive messages.

See Chapter 8 of the Reference Guide for more information on the various functions in Global mode.

**Disk mode**

This mode allows you to save and load all *i2/i3* information, including programs, songs, arrangements, styles and backing sequences to a floppy disk.

There are also functions which enable you to use the *i2/i3* as a MIDI data filer for saving system exclusive data from other MIDI instruments.

See Chapter 9 in the Reference Guide for more information on the various functions in Disk mode.

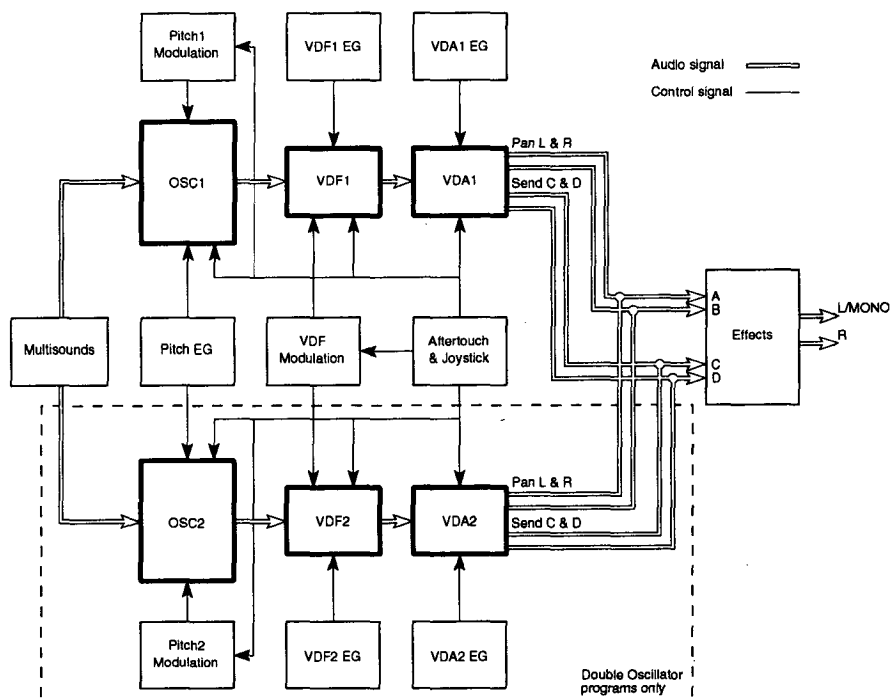
## 2.3 What is a program?

Basically, a program is a single instrument sound which you can play unaccompanied in Program mode, or assign to tracks in the sequencing modes.



### Program structure

The AI<sup>2</sup> Synthesis System used in the *i2/i3* provides a powerful method for creating and editing sounds. In this system, there are three main ingredients that make up a sound: pitch, tone, and volume. These are controlled by the oscillator (OSC), the Variable Digital Filter (VDF), and the Variable Digital Amplifier (VDA), respectively.



The oscillator is the sound source. Here you can assign the basic waveform, known as a *multisound*, and specify its octave. This signal is then passed through the VDF, whose function is to set the basic tone or brightness by removing overtones, known as harmonics.

After that, the signal goes through the VDA, whose function is to set the basic volume by adjusting the oscillator output level. Finally, the signal passes through the effects section and is sent to the outputs on the back panel. Programs can use one or two OSC-VDF-VDA systems.

Each of the three components has associated modulation sources which allow you to change the sound ingredients in various ways. The Pitch MG and VDF MG (*Modulation Generator*) can be used to vary the pitch and tone in a cyclic way. This is useful for producing vibrato effects. The Pitch EG, VDF EG, and VDA EG (*Envelope Generator*) control how the pitch, tone, and volume change over time.

For example, a sound can fade in when you first play a note (VDA EG), get brighter as you hold the note (VDF EG), and fade out gradually while getting darker and sliding down one octave when you release the note (VDA EG, VDF EG, and Pitch EG).

## 2.4 What is a song?

A *song* is a sequence consisting of up to 16 independent tracks, each of which can play a different *i2/i3* program in response to note information it receives from its own MIDI channel.

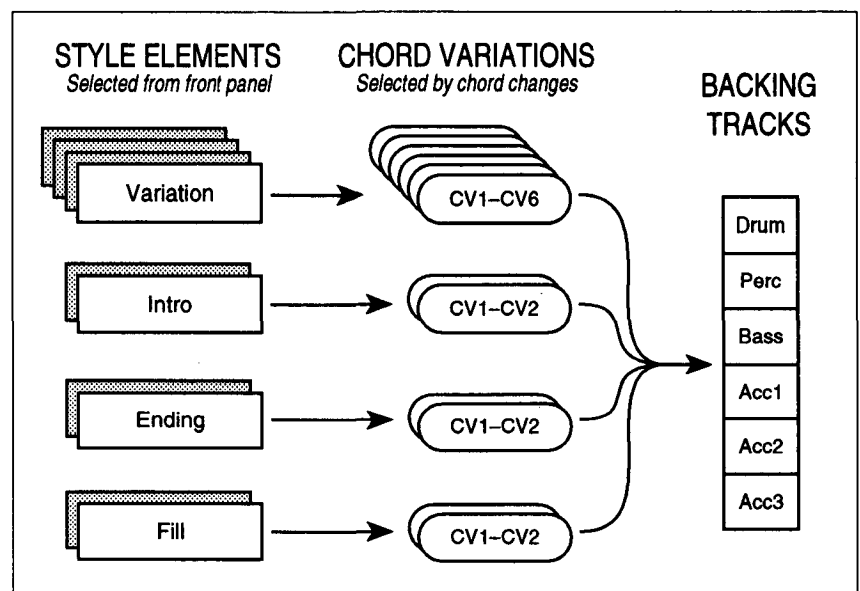
## 2.5 What is a style?

A *style* is a collection of musically related sequences grouped together in a special way that enables the *i2/i3*'s music processor to perform all of its special functions. Each sequence contains data for six *backing tracks*: drums, percussion, bass, and accompaniment 1, 2, and 3.

As we discussed in Chapter 1, styles consist of four variations, two intros, two endings, and two fills. You can select each of these *style elements* by pressing the corresponding key on the front panel. Each style element is made up of a smaller unit called a *chord variation*.

The chord variation is what contains the actual sequence data for the backing tracks. Each variation has six chord variations, labelled CV1 through CV6. Each intro, ending and fill has two chord variations labelled CV1 and CV2.

You can set each chord type to trigger any one of the chord variations within each style element. For example, the *i2/i3* can trigger CV1 when you play a major 7th chord and CV5 when you play a diminished chord.



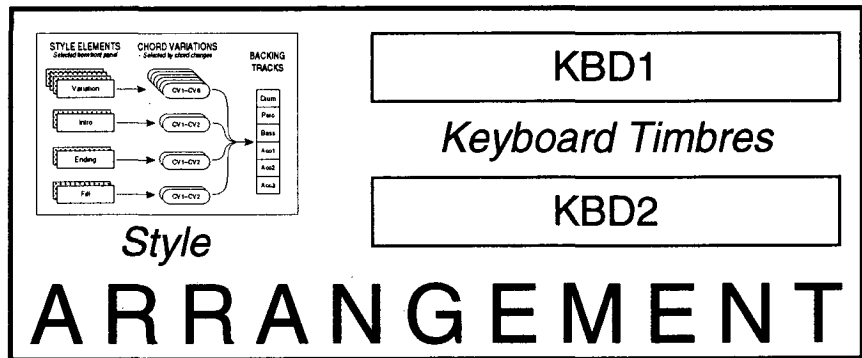
There are 48 styles stored in the *i2/i3* ROM. You can create up to four of your own styles and store them in battery-backed RAM. (For an explanation of ROM and RAM, see section 2.8 on page 24.)

## 2.6 What is an arrangement?

An *arrangement* allows you to interact with styles in real time. Once a style has been assigned to an arrangement, you can control the tempo, chords, style element selection, and drum mapping in real time.

You can assign different program, volume, panning, effect, tempo, and mute settings for each arrangement, thereby stretching the sonic possibilities for each style. This enables you to perform many different songs using the same style.

In addition to the six backing tracks, there are two "live" *keyboard timbres* that can be layered together or assigned to separate halves of the keyboard to play live over the backing tracks.



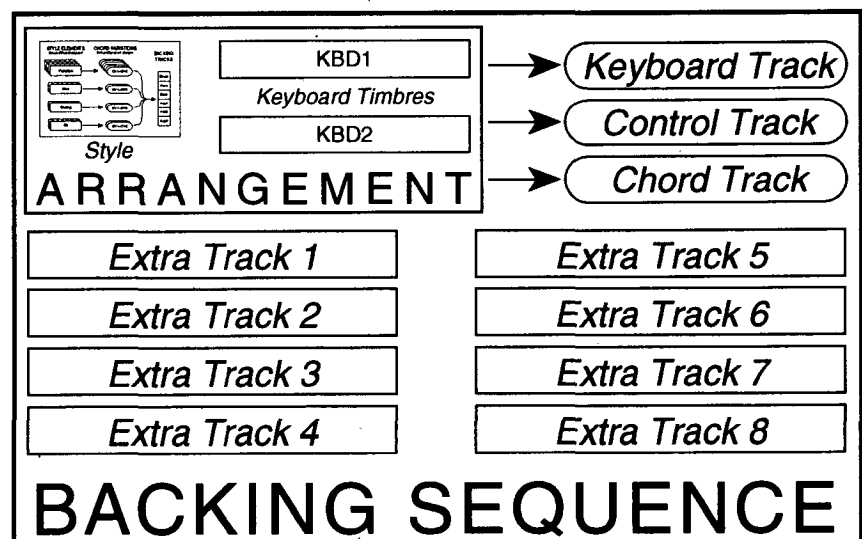
The *i2/i3* has 64 arrangements stored in battery-backed RAM. (For an explanation of ROM and RAM, see Section 2.8 below.)

### 2.7 What is a backing sequence?

A *backing sequence* lets you record all aspects of an arrangement performance including what arrangement is being used, what style is being used, and the tempo.

In addition, there are three *arrangement tracks* which record the keyboard timbres, the front panel keys, and the chords you play in the chord scanning range of the keyboard.

For even further flexibility, there are eight *extra tracks* which can be used to record other musical parts, or to send information such as volume and program changes to the six backing tracks.



The *i2/i3* can hold 10 backing sequences in un-backed RAM.

### 2.8 Memory and disks

The *i2/i3* is basically a computer, specially designed for use as a musical instrument. There are many different types of information that the *i2/i3* has to remember. The programs, songs, styles, arrangements, backing se-

quences, drum kits, global settings and many of the settings which you specify on the display must have some way of being stored. Thus the *i2/i3*, like any computer, has *memory* that it uses to store data. There are two types of memory: ROM and RAM.

ROM stands for Read Only Memory. This type of memory stores data permanently and can only be read from (think of it as a library text book).

Some examples of data stored in ROM include most of the styles, programs, drum kits, all the multisounds, and the *i2/i3* operating system (the instructions which make the *i2/i3* behave the way it does).

RAM stands for Random Access Memory. This type of memory allows you to read from it *and* write to it (think of it as a notebook).

There are two types of RAM: one which is battery-backed and one which is not. Battery-backed means that the information is remembered even after you turn the power off. This is possible because a small battery inside the *i2/i3* sends a constant trickle of electricity to the RAM. RAM which is not battery-backed will "forget" its data when the power is turned off.

Some of the programs, styles, drum kits and all of the arrangements are stored in battery-backed RAM. The songs and backing sequences are stored in un-backed RAM.

This means that the *i2/i3* will forget all songs and backing sequences when you shut the power off. Of course you don't want to leave the *i2/i3* powered on all the time, as this would be impractical and expensive. Also, the cost of battery-backed RAM is higher than that of un-backed RAM.

Enter disks: Disks provide a convenient and inexpensive way to store data, and are already widely accepted as a storage medium for many devices including computers and other musical instruments.

Because disks are so small, it is easy to carry all your *i2/i3* data with you. You can bring this data to another *i2/i3*, and instantly have access to all your personal arrangements, styles, etc.

In addition to storing all of its internal data, the *i2/i3* can store bulk dumps of MIDI System Exclusive data from other MIDI devices using its data filer function.

You can save songs that you create in Song mode as Standard MIDI Files, which can be read by computers and other MIDI instruments that support this format. Likewise, you can load Standard MIDI Files from other sources into the *i2/i3*, and edit them in Song mode.



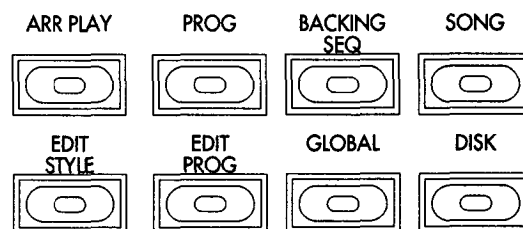
## 3 GETTING AROUND

In this chapter we will take a look at some techniques you can use to get around the *i2/i3*, including how to navigate through the instrument's various displays, as well as basic operations for using the *i2/i3* functions and editing its parameters. But first, let's review the basic procedures for selecting programs, arrangements, and styles which we brushed past in Chapter 1.

### 3.1 Selecting modes

As we discussed in Chapter 2, the *i2/i3* has several functions organized into what are called modes. Each mode allows you to perform different functions, depending on what you would like to do.

Selecting modes couldn't be easier; simply press the key whose name corresponds to the mode you wish to select. For example, if you want to enter Song mode, press the SONG key. If you want to go to Arrangement Play mode, press the ARR PLAY key.

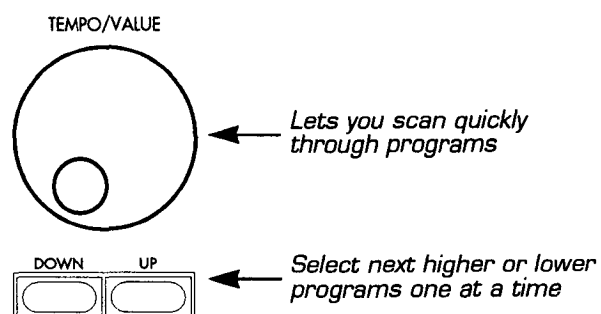


### 3.2 Selecting programs, arrangements, and styles

#### *Using the VALUE controls to select programs*

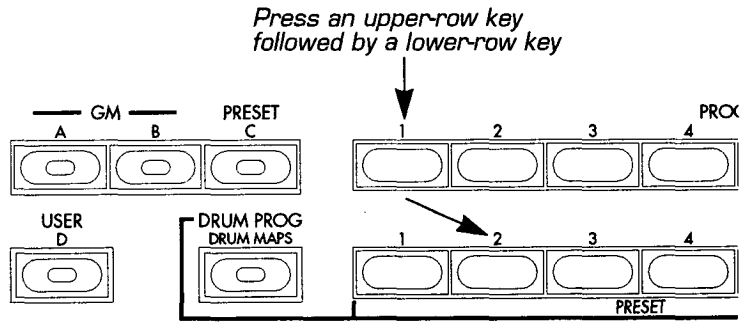
The VALUE controls provide the simplest way to select programs. You can use the UP and DOWN keys to select programs one at a time in ascending or descending order respectively, or turn the VALUE dial as far as you want to scroll through many programs. (When you are selecting programs in a mode other than Program mode, you must first use the CURSOR POSITION keys to highlight the program you want to change. See Section 3.4 on page 31 for a description of the CURSOR POSITION keys.)

On Page 1 of Arrangement Play mode, the VALUE controls are dedicated to controlling the tempo. Use the PROGRAM keys instead, as described below.

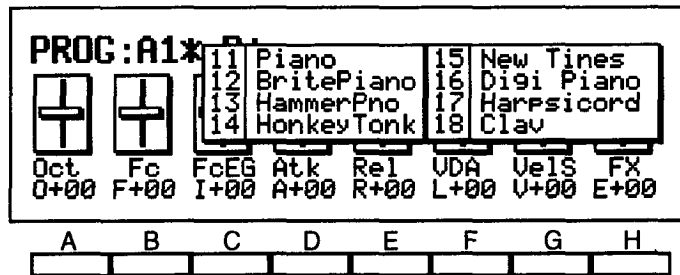


**Using the PROGRAM keys to select programs**

Another way to select a program is to enter its number using the PROGRAM keys. If you know the number of the program you want to select, you can enter it directly.



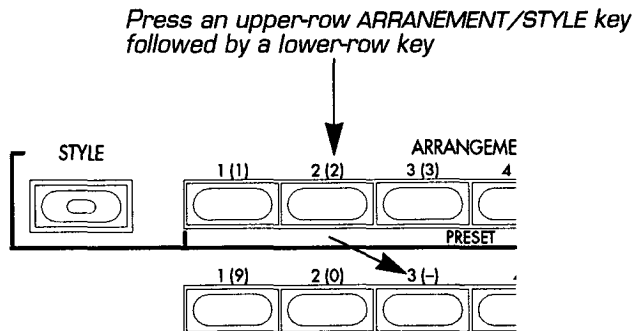
When you press one of the bank or upper-row PROGRAM keys in Program mode, a list like the one below will appear, showing you the programs in the group you have chosen (group 1, in this example). This lets you find a program—or just browse through the programs—even if you don't know its number. When you find the program you want to select, enter the second digit by pressing the appropriate lower-row PROGRAM key.



When selecting programs in the same group, it is not necessary to press the upper-row key for each program; just press the desired lower-row key. For example, to switch from program A32 to A38, just press the 8 key in the lower row.

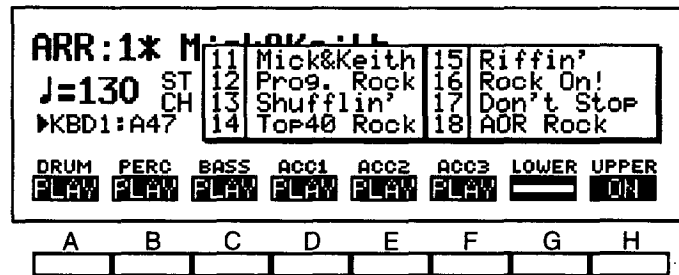
**Using the ARRANGEMENT/STYLE keys to select arrangements**

The ARRANGEMENT/STYLE keys function in much the same way as the PROGRAM keys.



When you press an upper-row ARRANGEMENT/STYLE key in Arrangement Play mode, a list will appear showing you the arrangements in the corresponding group. Press the appropriate lower-row ARRANGEMENT/

STYLE key to select the desired arrangement. (When selecting arrangements in Backing Sequence mode, the list will not appear.)



When selecting arrangements in the same group, it is not necessary to press the upper-row key for each arrangement; just press the desired lower-row key. For example, to switch from arrangement 11 to arrangement 12, just press the 2 key in the lower row.

### Using the ARRANGEMENT/STYLE keys to select styles

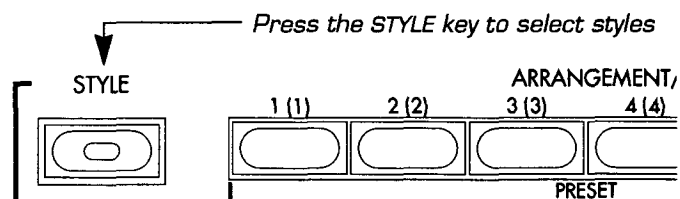
To select styles when in Arrangement Play or Backing Sequence mode, you must first press the STYLE key, located to the left of the ARRANGEMENT/STYLE keys. The STYLE key will light to indicate that you are about to select a style. Then use the ARRANGEMENT/STYLE keys to select the style you want.

Press upper-row keys 1 through 6 followed by lower-row keys 1 through 8 to select the preset styles. Press the upper-row 7 key followed by lower-row keys 1 through 4 to select user styles 1 through 4, and the upper-row 8 key followed by lower-row keys 1 through 4 to select ROM card styles 1 through 4.

If you are using Arrangement Play mode, and the arrangement is *not* playing when you select a style, the *i2/i3* will copy the Program, Volume, Panpot, and Tempo settings from the style you select into the arrangement. It will also reset the Octave and Wrap-Around settings for the bass and accompaniment tracks to 0 and STY respectively.

If the arrangement is playing, the *i2/i3* will use the new style without changing the arrangement's backing track settings. This allows you to switch styles as you play without causing abrupt sound changes. The tempo will change to that set as the default for the style, unless the TEMPO LOCK key is lit.

Unlike programs and arrangements, a list will not appear when selecting styles. To return to selecting arrangements, press the STYLE key a second time.



### 3.3 Selecting display pages

Related parameters and functions are grouped together on the display into what are called *pages*. All the parameters that relate to the effects, for

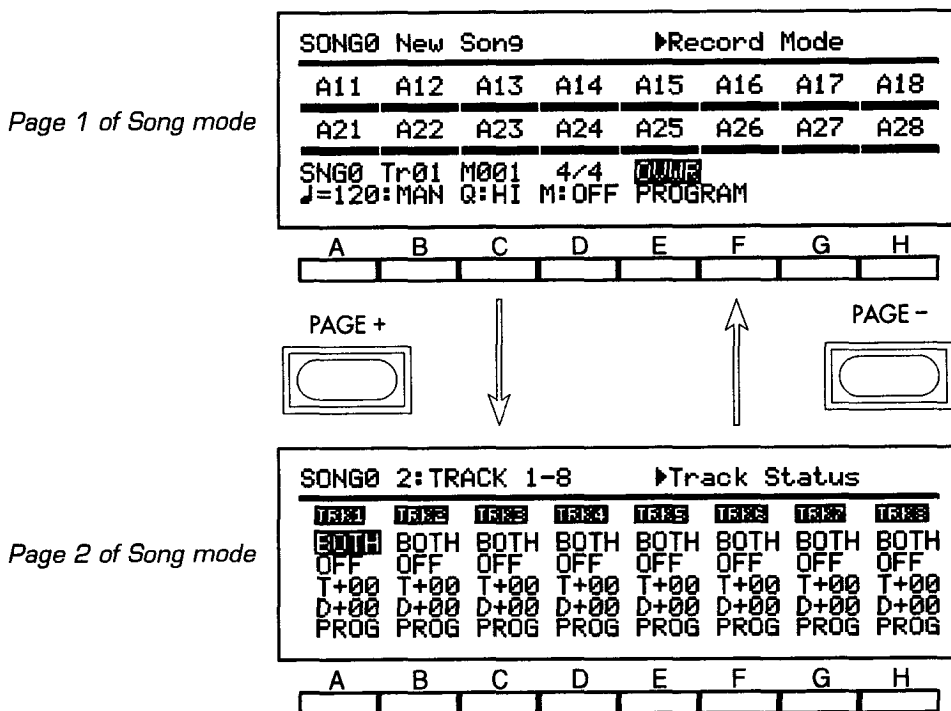


example, appear on one page, while all functions that relate to saving files to a disk appear on another.

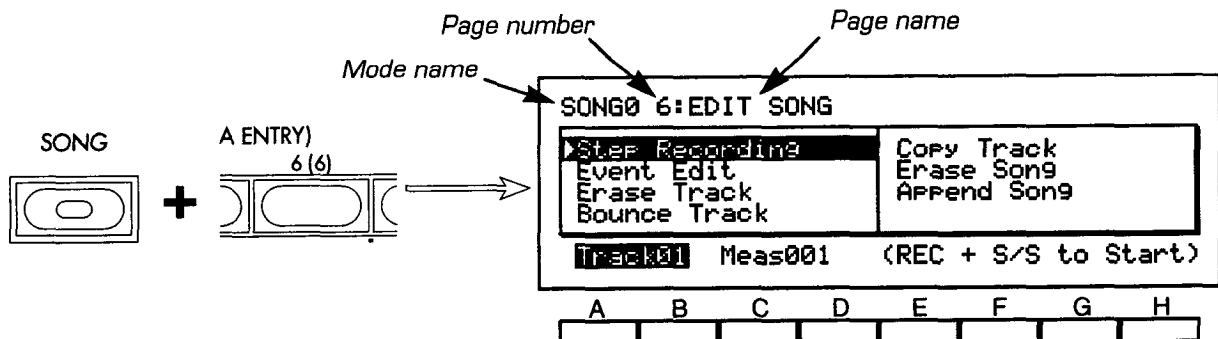
A *parameter* is simply any one of the settings that you can change on the LCD display. For example, MIDI Channel is a parameter that has a possible range of values from 1 to 16. Tempo is a parameter which is variable from 40 to 240 beats per minute.

A *function* allows you to perform a specific operation, such as formatting a disk, writing a program, or deleting measures from a song. Usually, a function contains a number of parameters that you must enter values for in order to proceed.

You can use the *PAGE+* and *PAGE-* keys to move to the next and previous display pages respectively. For example, to move from Page 1 to Page 2, press the *PAGE+* key once. To move from Page 2 to Page 1, press the *PAGE-* key once.



If you know which page number you would like to go to, you can jump to it directly by pressing the *DATA ENTRY* key of the same number while holding down the current mode key. For example, to go to Page 6 of Song mode, hold down the *SONG* mode key and press *DATA ENTRY* key 6.



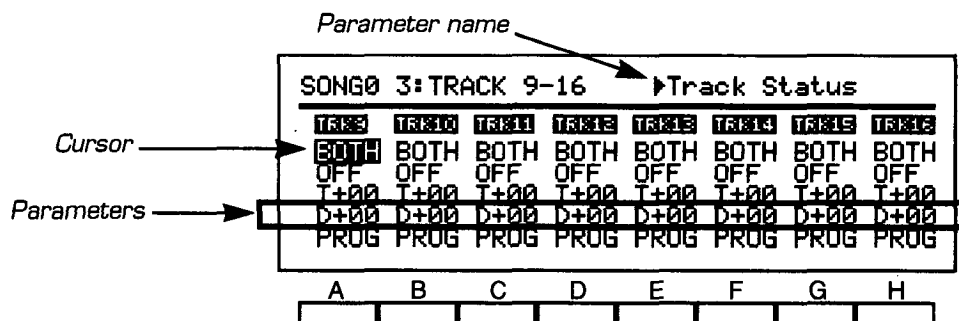
Only Song mode has more than nine pages. To go to Page 10 or 11 in Song mode, hold down the SONG mode key and press DATA ENTRY key 0 or -, respectively.

### 3.4 Moving the cursor

The *cursor* is used to show the currently selected item or position on the display. It is the highlighted area represented by inverse video (white text on a black background).

The basic idea of working with the *i2/i3* navigation system is to move the cursor around the various display pages to select parameters that you want to adjust, and then enter values for them.

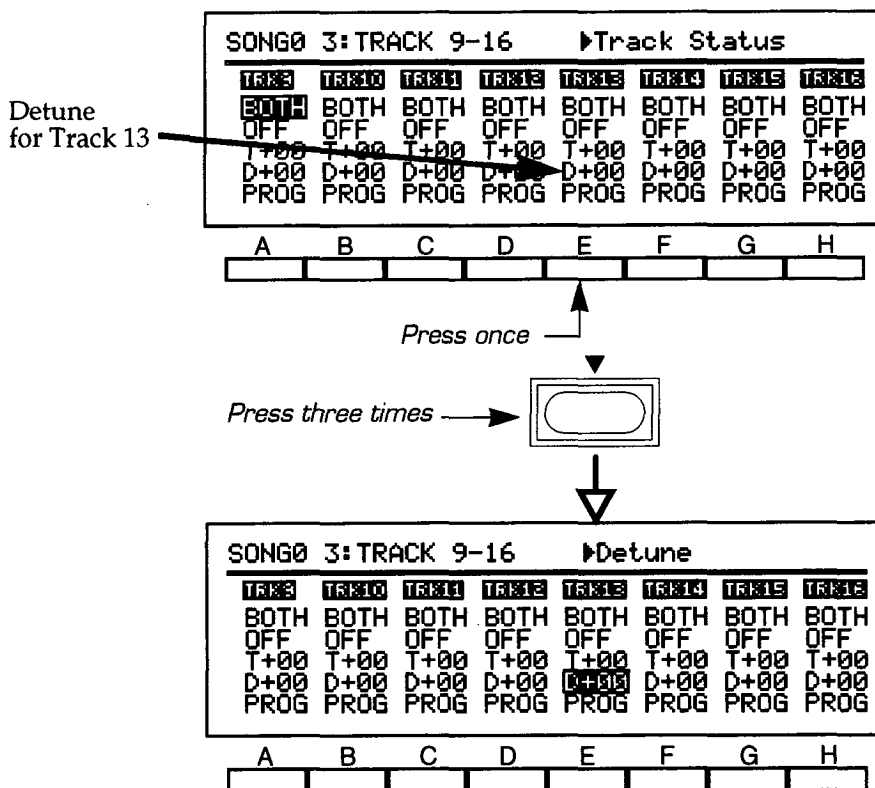
When you move the cursor to a parameter, its name will usually appear in the upper-right corner of the display. As you can see, the Track Status parameter has been selected in the illustration below.



You can use the *arrow keys* (▲ and ▼) to move the cursor up and down in the display, and the *cursor keys* (labelled A through H under the display) to move the cursor left and right. Together these keys (▲, ▼, and A through H) are known as the *CURSOR POSITION keys*. By using different combinations of these keys, you can easily move to any location on the display.

To select Track 13's Detune parameter on the display below, for example, first press cursor key E, then press the down arrow key three times. The

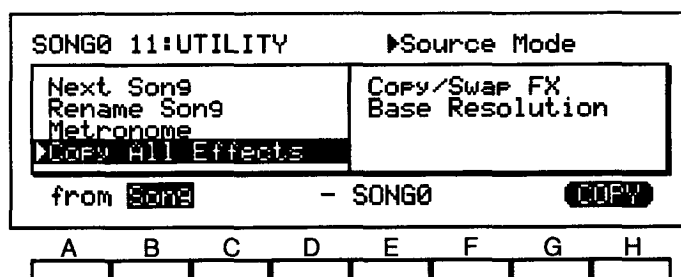
order in which you press the keys is not important: you can press the arrow key first, and then the cursor key, if you prefer.



When you use the arrow keys, the cursor will wrap around the display if you move it beyond the top or bottom line. For example, if you repeatedly press the ▼ key while the display above is showing, the cursor will cycle through the settings BOTH, OFF, T+00, D+00, PROG, and back to BOTH.

**Moving the cursor within function pages**

On pages that contain functions rather than parameters, you can use the arrow keys (▲ and ▼) to select the desired function.



Use the cursor keys (A through H) to select the parameters for that function as well as execute the operation. In the above display, for example, press cursor key B to select which mode to copy effects from, press cursor key E to select the number of the program, song, arrangement, or backing sequence to copy from, and press cursor key H to initiate the copy operation.

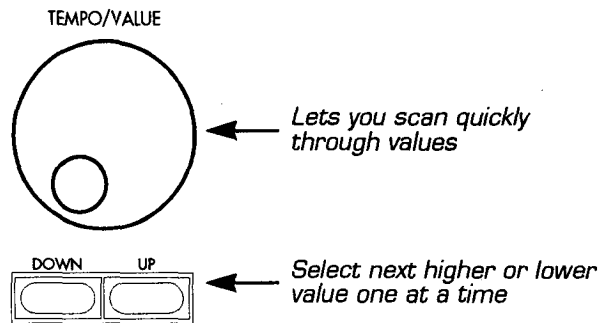
On this type of page, the function cursor will wrap around the display after it reaches the first or last function in the list (in this case, Next Song or Base Resolution).

### 3.5 Entering values

There are many ways to set or reset values for the parameters. These include using the VALUE controls, the DATA ENTRY keys, the PROGRAM keys, and the keyboard.

#### Using the VALUE controls

Use the UP and DOWN keys to enter values in increments of 1. Use the VALUE dial to quickly scroll through all the values. Together the UP and DOWN keys and VALUE dial are referred to as the VALUE controls.



#### Using the DATA ENTRY keys

You have probably noticed that some of the ARRANGEMENT/STYLE keys are labelled with a second number in parentheses. When used together with the cursor keys, these keys double as the DATA ENTRY keys. They are very convenient when you want to enter values directly.

For example, to enter a value of 86 for the volume parameter on the display below, hold down cursor key E and press DATA ENTRY key 8 followed by DATA ENTRY key 6. When you release the cursor key, the value will be entered.

ARR: 11 2: TRACK PARAM 1 ▶ Program

▶DRUM: 071	GM Kit	V100	PRG	C3	D0
PERC: 076	Perc Kit	V100	PRG	C3	D0
BASS: A52	Deep Bass	V100	CNT	C3	D1
ACC1: A11	Piano	V100	CNT	C3	D1
ACC2: A43	JazzGuitar	V100	CNT	C3	D1
ACC3: A86	Brass	V100	CNT	C3	D1

Volume

←

+

Press DATA ENTRY key 8, then 6

↓

(DATA ENTRY)

5 (5)	6 (6)	7 (7)	8 (8)
-------	-------	-------	-------

↑

↓

A	B	C	D	E	F	G	H
---	---	---	---	---	---	---	---

↑  
Hold

To enter a 9, 0, or "-" (for negative numbers), press 1, 2, or 3 respectively in the lower row of ARRANGEMENT/STYLE keys.

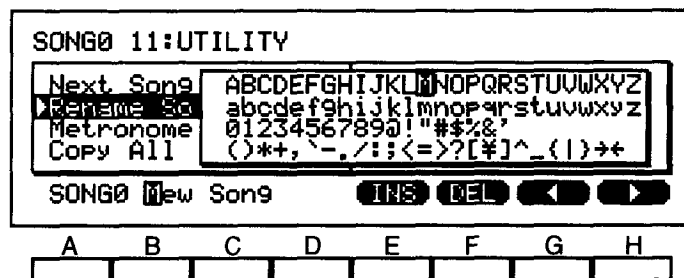
#### Naming things

Each arrangement, style, program, backing sequence, and song can have a name of up to 10 characters. Likewise, each file you save on a disk can have a name of up to eight characters. In both cases, the procedure for naming is the same.

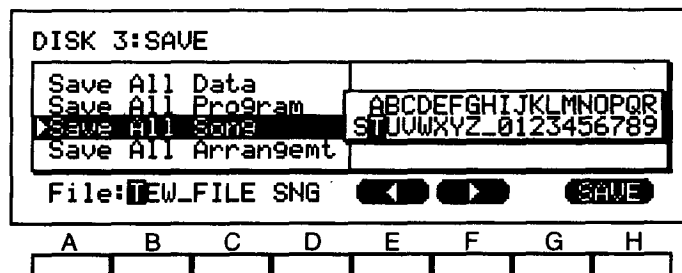
Each of the modes associated with the data types mentioned above includes a rename function. When you first select one of these functions, the display will show you the current name as well as insert, delete, and left and right arrow keys. Use cursor key H to highlight the next character in the name, and cursor key G to highlight the previous one.

You can change the selected character using the VALUE controls, at which point a pop-up menu will appear showing all the available characters, with the current character highlighted.

When you are done, there is no need to execute the naming function—as you would with other functions—because it is really just a special type of parameter.



Disk file names are not only shorter in length than the other types, but also have a smaller set of characters to choose from. This is because the disk file names must follow the same conventions prescribed by the MS-DOS™ disk operating system.



There are no insert or delete keys for disk-related naming functions. However, you can use the space character to delete characters from the end of a filename. If you try to insert a space in the middle of a name, it will be replaced with the underline character as soon as you initiate the save operation. This is because spaces cannot be used in MS-DOS™ file names.

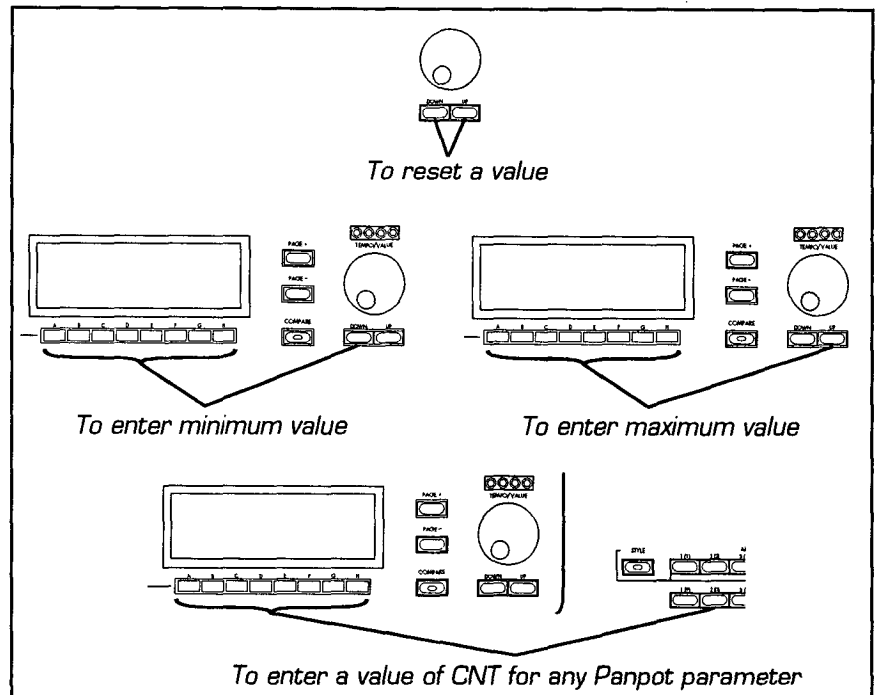
**Entering key and velocity values with the keyboard**

You can use the keyboard to enter key values, such as C4 (middle C) or velocity values such as 110, for those parameters which require such values. Just press a key on the keyboard while holding down the cursor key under the parameter you are adjusting.

**Shortcuts**

You can reset the currently selected parameter to its original value by pressing the DOWN and UP keys simultaneously.

You can select the minimum or maximum value for any parameter by holding the cursor key below the parameter and pressing the DOWN or UP key respectively.



When setting values for Panpot parameters in any mode, you can quickly select a value of CNT (center) by holding the cursor key and pressing DATA ENTRY key 0.

### 3.6 Transposing the keyboard

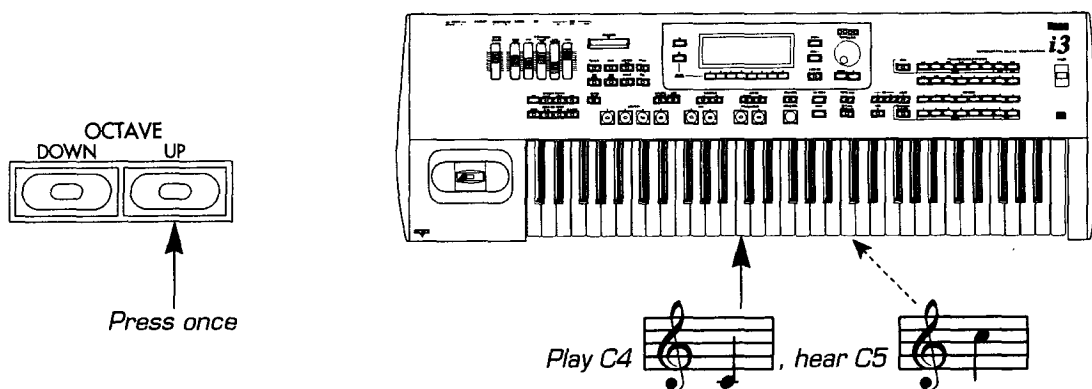
It is possible to transpose the keyboard by octaves or semitones. Transposing by octaves gives you more keyboard range. Transposing by semitones makes it easy to accommodate vocalists or other instrumentalists, without having to learn the music in a new key.

#### **Transposing the keyboard by octaves**

Use the OCTAVE keys to transpose the keyboard by as much as two octaves up or down. The key you press will light steadily to indicate a transposition of one octave, and will blink to indicate a transposition of two octaves. In Arrangement Play mode, the amount of transposition will also be shown on the display as a value from -2 to +2, with 0 indicating no transposition.

If you want to transpose the keyboard up one octave, press the OCTAVE UP key once. All notes for the current program will be raised one octave.

The OCTAVE UP key will light and a value of +1 will appear in the display if you are using Arrangement Play mode.



When you select arrangements in Arrangement Play mode, the current octave setting will change to the value saved with the selected arrangement. In other modes, the OCTAVE keys' current setting will not change when you select a new program or track; it will stay in effect until you change it, or turn the power off.

In Program or Edit Program mode, the current OCTAVE key setting will not be saved as part of a program when you write it to memory. Use the performance edit Octave parameter instead (see page 39).

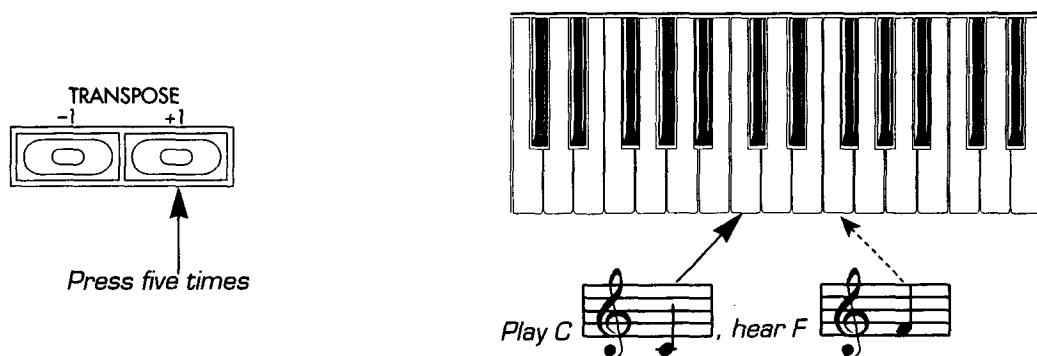
Please be aware that since every multisound has an upper limit to its pitch range, some multisounds will produce no sound when played in the higher octaves.

To quickly return this setting to 0 (that is, to cancel the octave transposition), press the OCTAVE UP and DOWN keys simultaneously.

**Transposing the keyboard by semitones**

Use the TRANPOSE -1 and +1 keys to transpose the keyboard in semitone increments up to 11 semitones up or down. The amount of transposition will be shown in the right portion of the display. A value of 0 indicates no transposition.

For example, if you would like to play in the key of C, but have the i2/i3 transpose the music up to the key of F while you play, press the TRANPOSE +1 key five times. All notes will be raised five semitones, indicated on the display as +5.

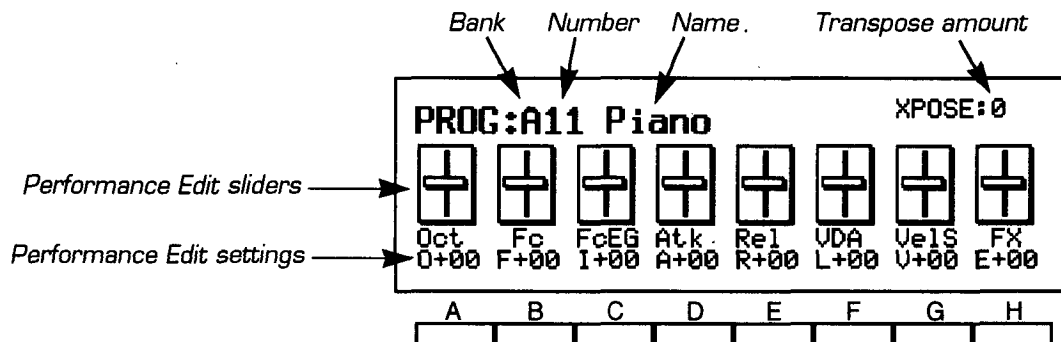


To quickly return this function to 0 (that is, to cancel the semitone transposition), press the TRANPOSE -1 and +1 keys simultaneously.

## 4 PROGRAM MODE

Program mode lets you select programs to play on the *i2/i3* keyboard. Use this mode for live performance or to audition the various programs available for use in the sequencing modes.

- Press the PROG key to enter Program mode.



Program mode has only one display page. Here you can see the program's bank, number, and name. In addition, there are eight on-screen sliders that let you make quick changes to the selected program. This ability to make quick changes is called *performance editing*. See Section 4.3 on page 39 for information on performance editing.

### 4.1 Program organization

The *i2/i3* has two types of programs: normal programs, which are pitched and consist of one type of sound spread across the keyboard; and drum programs, which have a different drum sound assigned to each key.

The *i2/i3* has four banks of 64 normal programs and one bank of 8 drum programs:

Bank	Description	Memory type
A	General MIDI programs	ROM
B	General MIDI programs	ROM
C	Additional preset programs	ROM
D	User programs	RAM
DRUM PROG	Drum programs	ROM (1-6) RAM (7-8)

As the above table shows, Bank A contains General MIDI programs 1 through 64. Bank B contains General MIDI programs 65 through 128.



*General MIDI*, or GM, is an addition to the MIDI specification that makes it easier to share sequences between a wide variety of MIDI instruments, without much alteration.

GM specifies a list of programs that includes sounds from all major musical instrument groups, each assigned to a specific program number. Also specified are the relative volume levels for each program, as well as guidelines for envelope settings (attack, release, etc.) and velocity response (touch sensitivity). In addition, a drum kit map specifying the layout of drum sounds across the keyboard is included.

For more information about General MIDI see Chapter 11.

Bank C contains 64 *i2/i3* programs that are not part of the General MIDI program list. The programs in banks A, B, and C reside in ROM, so any changes you make to these programs cannot be saved to these banks; you must save them to bank D.

Bank D contains 64 additional programs that reside in RAM. If you have made changes to the programs in this bank, you can restore them to their original settings using the Load All Program or Load One Program functions in Disk mode. See pages 235 through 237 in the Reference Guide for details on these functions.

The DRUM PROG bank contains six preset drum programs stored in ROM, and two user drum programs stored in RAM. Drum programs are based on drum kits which you can edit in Global mode. See Chapter 6 of this manual for more information.

## 4.2 Selecting programs

### ***Program numbering***

Each normal program bank contains eight groups of eight programs. The *i2/i3* program numbers reflect this grouping.

The first program in bank A is not A0 or A1, as you might expect, but A11: bank A, group 1, number 1. The next seven programs are numbered A12 through A18. These are followed by A21–A28, A31–A38, and so on. After program A88, the last program in bank A, comes B11.

There are many ways to select programs. The most common way to select programs is by using the VALUE controls or the PROGRAM keys, as we have already explained on pages 27 through 28. It is also possible to select programs using a footswitch or MIDI program change messages.

### ***Using a footswitch***

You can use the optional Korg PS-1 or PS-2 footswitch or the EC5 External Controller footswitch to select programs. The footswitch lets you select consecutive programs in either ascending or descending order, leaving your hands free to play the keyboard.

To use a PS-1 or PS-2 footswitch for selecting programs:

- Go to Global mode and press the PAGE+ key once to get to Page 2.
- Using the arrow keys, cursor to Assignable Pedal 1, and choose PROGRAM UP or PROGRAM DOWN with the VALUE controls.

When set to Program Up, the footswitch acts just like the UP key on the front panel—the program selection will advance to the next number each

time you press the footswitch. When set to Program Down, the footswitch emulates the DOWN key, and will select the previous program number.

- Connect the footswitch jack to the ASSIGN PDL/SW 1 jack on the rear panel of the *i2/i3*.

Now you can return to Program mode and use the footswitch to select programs.

You can also use the ASSIGN PDL/SW 2 jack for this function if you are already using ASSIGN PDL/SW 1 for another purpose—just be sure to choose PROGRAM UP or PROGRAM DOWN for Assignable Pedal 2 in Global mode.

To use the EC5 External Controller footswitch for selecting programs:

- Go to Page 3 of Global mode.
- Using the arrow keys, cursor to Switch A, B, C, D, or E, and choose PROGRAM UP or PROGRAM DOWN with the VALUE controls.
- Connect the EC5 to the EC5 jack on the rear panel of the *i2/i3*.

Operation is the same as for Assignable Pedals 1 and 2.

### **MIDI program change messages**

You can select programs via an external source such as a sequencer or master MIDI controller by sending MIDI program change messages to the *i2/i3*. If you use MIDI bank change messages as well, it is possible to select all 264 *i2/i3* programs via MIDI. The table on page 141 shows the MIDI bank and program numbers that correspond to the *i2/i3* program numbers.

## **4.3 Performance editing**

Usually, in order to make changes to a program, you must use Edit Program mode, described in the next chapter. Although this mode lets you adjust every aspect of a program with fine precision, the amount of detail offered is sometimes a bit unnecessary for the task at hand.

*Performance editing* lets you adjust some of the more important program parameters without having to leave Program mode, and without having to get involved with detailed editing. Often you will find that you can get the sound you are looking for by making just a few quick changes.

Let's take a look at the performance editing settings one by one. Each of these settings changes one or more parameters for both oscillators (except for the Dry:FX Balance setting, which is not oscillator-specific).

We'll use program C68 SynPad for this tutorial. Because this is a double-oscillator program, the parameters for OSC1, OSC2, VDF1, VDF2, VDA1, and VDA 2 will appear in the performance editing displays. When you edit single-oscillator programs with this function, the parameters for OSC2, VDF2, and VDA2 will not be displayed.

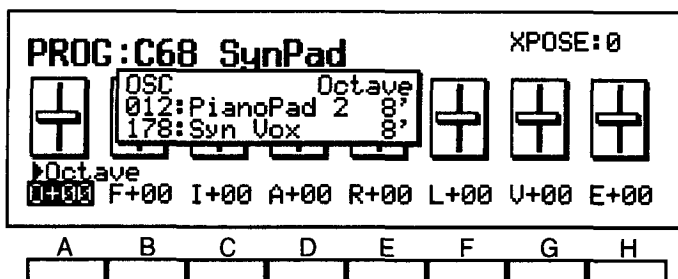
When you edit double-oscillator programs with this function, the parameters for both OSCs, VDFs, or VDAs will change proportionally. To change them individually, you must do so in Edit Program mode. See pages 124 through 143 of the Reference Guide for more details.

- Select program C68 SynPad.

### **Octave (Oct)**

This setting changes the octave of each oscillator.

- Press cursor key A.



The display will show you the names of the multisounds that are used in this program, and the current octave settings.

- Play middle C and listen to its pitch.
- Press the DOWN key once.
- Play middle C again. The note should now sound one octave lower.
- Press the DOWN and UP keys simultaneously to reset the value of this setting.

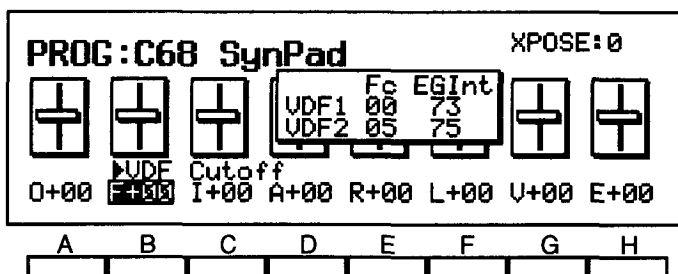
Unlike the OCTAVE UP and DOWN keys on the front panel, which affect the keyboard, this setting affects the tone generator directly. This means that only the *i2/i3* internal sounds will be transposed; notes sent out via MIDI will not be affected.

Also, since this is a performance edit setting, changes that you make to it will only affect the current program, and will be lost unless you write the program to memory (see After editing on page 44).

### VDF Cutoff (Fc)

The VDF cutoff controls the program's overall brightness.

- Press cursor key B.



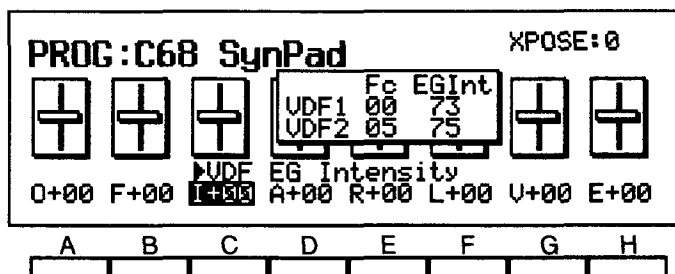
The display will show the current values for the filter cutoff (Fc) and intensity of the filter's envelope generator (EGInt) for both VDF1 and VDF2. The EGInt parameters are displayed here for reference only; they will not be affected by changes to this performance edit setting.

- While holding down some notes on the keyboard, turn the VALUE dial to the right and listen to the sound. It will become brighter.
- Continue holding the notes and turn the dial to the left until the slider on the display has reached the bottom. The sound will become darker.
- Press the DOWN and UP keys simultaneously to reset the value of this setting.

**VDF EG Intensity (FcEG)**

The EG, or Envelope Generator, controls how the filter cutoff changes over time. It adjusts the filter cutoff automatically, and can be used to simulate the way an acoustic instrument's brightness changes over time, or for creating special effects, etc. This setting controls the intensity of the envelope generator.

- Press cursor key C.



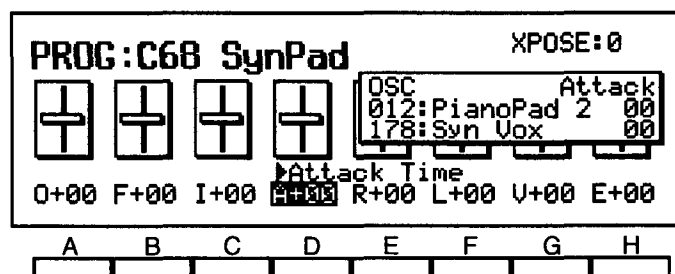
The display will show you the current values for the filter cutoff (Fc) and intensity of the filter's envelope generator (EGInt) for both VDF1 and VDF2. The Fc parameters are displayed here for reference only; they will not be affected by changes to this performance edit setting.

- Turn the VALUE dial to the right.
- Hold down some notes on the keyboard and listen to how the brightness changes over time.
- Release the notes and turn the VALUE dial to the left.
- Restrike the notes and listen to the how the brightness changes over time.
- Press the DOWN and UP keys simultaneously to reset the value of this setting.

**Attack Time (Atk)**

The attack time controls the time it takes for the sound to fade in when you play a note.

- Press cursor key D.



The display will show the current attack time values.

- Turn the VALUE dial to the right.
- Hold down some notes on the keyboard. Notice how the sound fades in.

As you can see, the range of each slider on this display page is limited to values of +10 and -10. Although the value on the bottom line of the display is set to the maximum value of +10, the Attack Time parameters have only

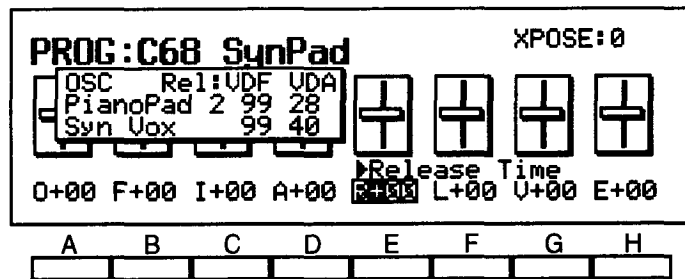
reached a value of 50. To get values beyond this, press the EDIT PROG key followed by the PROG key. All changes you have made with performance editing will remain, but all the sliders will be reset to their center position, giving you an additional +10 or -10.

- Release the notes and turn the VALUE dial to the left.
- Restrike the notes. Notice that the sound plays instantaneously.
- Press the DOWN and UP keys simultaneously to reset the value of this setting.

**Release Time (Rel)**

The release time controls the time it takes for the sound to fade out after you release a key.

- Press cursor key E.



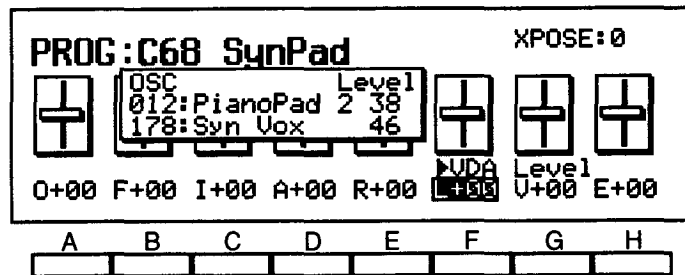
The display will show you the current release time values for both the VDF and VDA.

- Turn the VALUE dial to the right.
- Hold down some notes on the keyboard and release them. Notice how the sound fades out slowly.
- Turn the VALUE dial to the left.
- Restrike the notes and release them. Notice that the sound ends instantaneously.
- Press the DOWN and UP keys simultaneously to reset the value of this setting.

**VDA Level (VDA)**

The VDA controls the overall amplitude, or volume, of the sound.

- Press cursor key F.



The display will show you the current VDA levels.

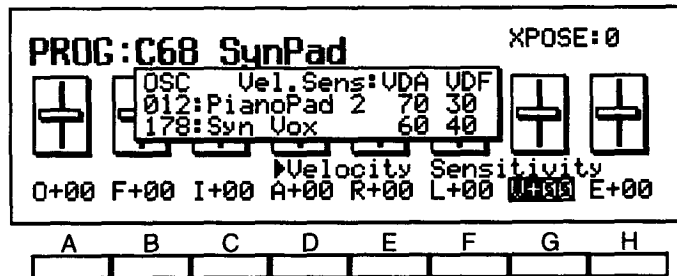
- Play some notes on the keyboard and listen to the volume level.
- Turn the VALUE dial to the right.

- Play some notes on the keyboard and notice that the volume level has increased.
- Turn the VALUE dial to the left.
- Play some notes on the keyboard and notice that the volume level has decreased.
- Press the DOWN and UP keys simultaneously to reset the value of this setting.

**Velocity Sensitivity (VelS)**

This setting controls the degree of the change in sound in response to how hard (actually, how fast) you strike a key on the keyboard.

- Press cursor key G.



This display will show you the values for the VDA and VDF velocity sensitivity parameters.

- Turn the VALUE dial to the right.
- Play some notes on the keyboard and notice that the sound is very responsive to your touch.
- Turn the VALUE dial to the left.
- Play some more notes and notice that no matter how hard or soft you play, the sound plays as if you played at the maximum velocity.

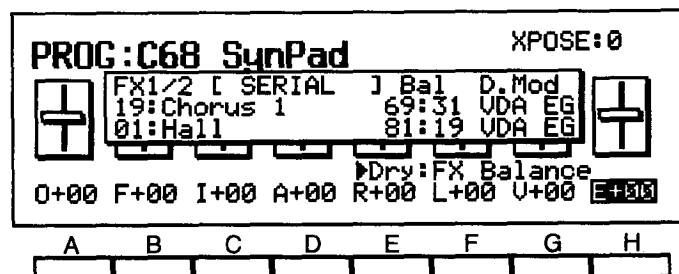
Remember, this parameter adjusts the velocity sensitivity for the current program only. To adjust the overall velocity response for the whole instrument, you must use the Velocity Curve parameter on Page 2 of Global mode.

- Press the DOWN and UP keys simultaneously to reset the value of this setting.

**Dry:FX Balance (FX)**

This setting controls the balance of the dry, unaffected sound and the wet, effect-only sound.

- Press cursor key H.



The display will show you the effect placement, the current effects, the effect balance values, and the dynamic modulation sources.

- Turn the VALUE dial to the right.
- Play some notes on the keyboard and notice that the sound is “drowning” in effects.
- Turn the VALUE dial to the left.
- Play some more notes and notice that the sound is completely dry.

If you want to adjust the Dry:FX Balance for each effect separately, you must do so in Edit Program mode.

- Press the DOWN and UP keys simultaneously to reset the value of this setting.

### ***After editing***

Press the up or down arrow key (▲ or ▼) when you want to exit performance editing.

After making changes to a program, you might want to write them to memory. Since the program you have just edited is in a ROM bank, you must use the Write Program function in Edit Program mode to store the edited program to bank D (see page 152 in the Reference Guide).

When you edit a program in bank D, you can use the REC/WRITE key to store the edited program to the same location—for example, program D32 will be written to D32. You will be asked if you are sure that you want to write the program. Press cursor key E to answer “yes,” or cursor key H to answer “no.” If you would like to store an edited program to a different location, you must use the Write Program function in Edit Program mode.

# 5 EDITING PROGRAMS

You can use the *i2/i3* Edit Program mode either to create your own programs from scratch, or to modify existing programs.

Creating programs is an art in itself. Even if space permitted us to cover all the basics of synthesizer programming, we couldn't hope to pass on the profusion of insights and shortcuts that come with experience. Old hands in this field should be able to find their way around the *i2/i3* with little trouble; for those new to the subject, a book on synthesizer fundamentals would be a good additional reference.

In this chapter, we will use some of the basic Edit Program parameters to create our own original program by transforming A12 BritePiano into Pluck Pad, a mellow, ethereal sound with a velocity-sensitive plucked attack. For a complete explanation of all the parameters in this mode, please refer to Chapter 6 of the Reference Guide.

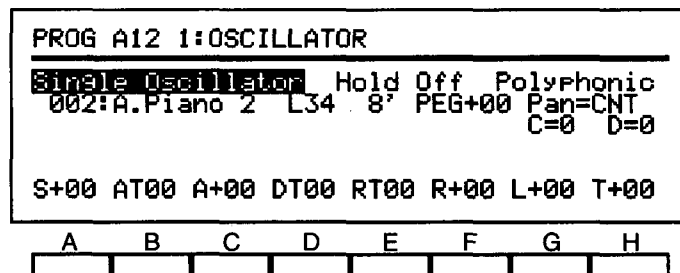
### **Preparing to edit**

In order to edit a program, you must first select it in Program mode.

- Press the key labelled PROG.
- Select program A12 BritePiano by pressing the A bank key followed by PROGRAM key 1 in the upper row and 2 in the lower row.

## 5.1 Selecting the multisound

- Press the EDIT PROG key.



You should now see Page 1 of Edit Program mode. This page lets you adjust various settings, including the program type—which determines how many oscillators the program will use—and the multisound selection, level, and octave for each oscillator.

### **About multisounds**

A multisound is the most basic element of sound in the *i2/i3*. It is a digitally recorded sound or collection of sounds, set up to play across the keyboard. For example, multisound 002:A.Piano 2 is actually made up of 11 individual sounds, each assigned to a different range of the keyboard.

The multisound you choose thus determines the waveform you will be working with. It is like a sculptor's clay or rock, which is then shaped with



various tools. With the *i2/i3*, your tools are filters (VDF), amplifiers (VDA), envelope generators (EG), modulation generators (MG), and effects.

Let's select multisound 180:White Pad as the basis for our new program. This is a synthetic sound that exhibits characteristics of mellow brass and flute sounds. (For a complete list of multisounds, see the Performance Notes that came with the *i2/i3*.)

- Press the ▼ key once to highlight the Multisound parameter.
- Use the VALUE controls or the DATA ENTRY keys to select multisound 180:White Pad.

Now when you play the keyboard, you will find that changing the multisound has had a big effect on the overall sound of the program. Still, no matter how much it has changed, it still exhibits many of the piano program's characteristics, such as its brightness and attack.

## 5.2 Adjusting the brightness

Brightness is controlled by the VDF (Variable Digital Filter). As we described on page 22, a filter adjusts a multisound's brightness by removing some of its harmonics.

- Press the PAGE+ key to select Page 2.

```

PROG A12 2:VDF 1
Cutoff=28 EG Intensity=56 Color=00
KBD Track: Amount=-55 Key=F3 ALL
           Time=08 AT:0 DT:+ ST:+ RT:0
Vel.Sense: Amount=+75 Color=+00
           Time=00 AT:0 DT:0 ST:0 RT:0
AT00 A+99 DT89 B+30 ST30 S+30 RT90 R+06
    
```

A	B	C	D	E	F	G	H

This is the VDF page for OSC1. Here you can set the initial brightness, and make settings for parameters that control how keyboard position and velocity affect it. You can also adjust the VDF EG, which controls how the brightness changes over time.

Let's increase the VDF's EG Intensity parameter to make it easier to hear the effect of the VDF EG.

- Press cursor key E to select the EG Intensity parameter.
- Enter a value of 94.

When you play the keyboard, you will notice that the "breathy" part of the sound stays bright for a little too long. Let's lower the overall brightness.

- Press cursor key A to select the Cutoff parameter.
- Enter a value of 5.

Now when you play the keyboard, you will notice that the brightness fades sooner.

## 5.3 Adjusting the attack

The sound's overall attack is controlled by the VDA (Variable Digital Amplifier). As we mentioned on page 22, an amplifier sets a multisound's volume by adjusting the oscillator output level.

- Press the PAGE+ key once to select Page 4.

When you press the PAGE+ key, the *i2/i3* will skip over Page 3 because this page contains the VDF parameters for a second oscillator. The program is currently made up of only one oscillator.

```

PROG A12 4:VDA 1
-----
KBD Track: Amount=-12      Key=F2  HIGH
              Time=06      AT:0  DT:+  ST:0  RT:+
Vel. Sense: Amount=+70
              Time=00      AT:0  DT:0  ST:0  RT:0
AT00 A+99 DT92 B+00 ST00 S+00 RT39
-----
  A   B   C   D   E   F   G   H
  [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
    
```

This is the VDA page for OSC1. Here you can make settings for parameters that control how keyboard position and velocity affect the volume. You can also adjust the VDA EG, which controls how the volume changes over time. (The overall level of each oscillator is set on Page 1).

Let's increase the VDA EG's attack time so that the sound will have a slower, more gentle attack.

- Press the ▼ key four times to move the cursor to the bottom line of the display.

When the cursor reaches the bottom line, the *i2/i3* will show you a graphic representation of the current VDA EG settings.

```

PROG A12 4:VDA 1      ▶Attack Time
-----
KBD Track: Amount=-12
              Time=06
Vel. Sense: Amount=+70
              Time=00      AT:0  DT:0  ST:0  RT:0
AT00 A+99 DT92 B+00 ST00 S+00 RT39
-----
  A   B   C   D   E   F   G   H
  [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
    
```

- Press cursor key A to select the Attack Time parameter.
- Enter a value of 24.

When you play the keyboard, you will hear that the attack has become softer. This, combined with the new multisound and the slight change to the VDF EG, has already made a big difference in the sound.

## 5.4 Using the Compare function

You can use the Compare function to compare the original program with the edited version.

- Press the COMPARE key.

The COMPARE key will light to show you that you are playing the version of the program that is stored in ROM. If you play the keyboard, you will hear the difference between the two programs.

- Press the COMPARE key again to return to the edited version of the program.

## 5.5 Adding a second oscillator

As we described on page 22, programs can use one or two oscillators. Let's add a second oscillator to create the pluck sound that will become the new attack portion of our program.

### Setting the program type

As we mentioned on page 45, the number of oscillators used by a program is determined by the Program Type parameter on the OSCILLATOR page.

- Return to Page 1 of Edit Program mode.
- Press the ▲ key once to select the Program Type parameter.

In addition to Single Oscillator and Double Oscillator settings, this parameter also has a Drums setting that is used by drum programs. We will discuss drum programs in the next chapter.

- Set this parameter to **Double Oscillator**.

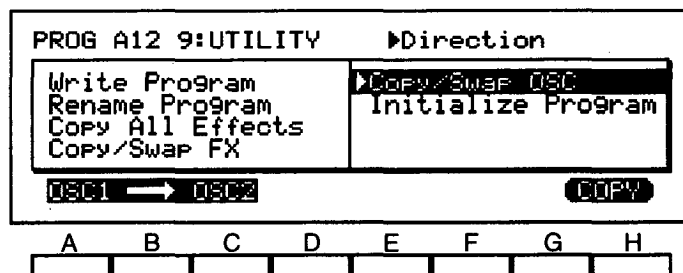
### Copying oscillators

If you play the keyboard now, you will hear that the second oscillator is using the default initialized settings: immediate attack, immediate decay, and so on. We will use the Copy/Swap OSC function to duplicate the settings of the first oscillator system in the second one. This way, we can use the copied settings as a starting point, and make only a few changes.

- Go to Page 9 either by pressing the PAGE+ key eight times, or by pressing the DATA ENTRY 9 key while holding the EDIT PROG key.

This is the Edit Program mode UTILITY page. Here you can write and rename programs; copy effects from other programs, songs, arrangements or backing sequences; copy or swap effect or oscillator settings; and initialize programs.

- Press the ▼ key four times to select the Copy/Swap OSC function.



The setting above cursor key A should already read OSC1 → OSC2.

- Press cursor key H to execute the copy operation.

The *i2/i3* will ask "Are you sure?"

- Press cursor key E or F to confirm the operation.

## 5.6 Adjusting the settings for OSC2

Now that you have some basic settings for the second oscillator, let's modify them to be the pluck attack.

**Assigning the multisound**

Select multisound 056:E.Gtr Harm to use as the pluck attack. This multisound is made up of sampled electric guitar harmonics.

- ☛ Return to Page 1.
- ☛ Press the ▼ key three times to highlight the Multisound parameter for OSC2.
- ☛ Use the VALUE controls or the DATA ENTRY keys to select multisound 056:E.Gtr Harm.

You will find that when editing double-oscillator programs, it helps to isolate individual oscillators so you can concentrate on the sound of each one separately. You can mute an oscillator by reducing its level to 0.

Let's mute OSC1 for now.

- ☛ Press the ▲ key twice to move the cursor to the second line of the display.
- ☛ Press cursor key D to select the Level parameter for OSC1.
- ☛ Set the Level parameter to 0 using the VALUE controls or the DATA ENTRY keys.

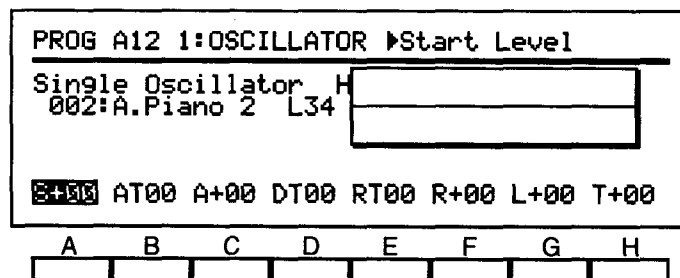
You should now hear only OSC2 when you play the keyboard.

**Creating a pitch slide**

We will now adjust the pitch EG so that notes will start slightly below pitch and scoop up to the desired note when you first play the key; and drop in pitch when you release the key.

- ☛ Press the ▼ key four times to move the cursor to the bottom line of the display.

When the cursor reaches the bottom line, the *i2/i3* will show you a graphic representation of the current pitch EG settings.



Let's adjust several of these parameters.

- ☛ Press cursor key A to select the Start Level parameter.
- ☛ Enter a value of -30.
- ☛ Press cursor key B to select the Attack Time parameter.
- ☛ Enter a value of 25.
- ☛ Press cursor key E to select the Release Time parameter.
- ☛ Enter a value of 30.
- ☛ Press cursor key F to select the Release Level parameter.
- ☛ Enter a value of -15.

- ☛ Press cursor key G to select the Level Velocity Sensitivity parameter.
- ☛ Enter a value of **-60**.

You have just set the pitch EG so that it will create the pitch variation described above. By setting the Level Velocity Sensitivity parameter to **-60**, you have also specified that the effect of the pitch EG will become less pronounced when you play at higher velocities.

When you play the keyboard, you will not be able to hear the effect of the pitch EG because we haven't yet set its intensity.

- ☛ Press the ▲ key two times to move the cursor to the fourth line.
- ☛ Press cursor key F to select the Pitch EG Intensity parameter for OSC2.
- ☛ Enter a value of **+99**.

The effect of the pitch EG may sound strange now, but will add character to the program when we add it to OSC1.

### ***Adjusting the VDA EG***

Now we are going to set the VDA EG so that notes you play softly will have a slower attack, and those you play more forcefully will have an instantaneous attack.

- ☛ Press the PAGE+ key four times to select Page 5.
- ☛ Press the ▼ key four times to move the cursor to the bottom line of the display.
- ☛ Press cursor key A to select the Attack Time parameter if it isn't selected already.
- ☛ Enter a value of **22**.
- ☛ Press the ▲ key once to select the Vel. Sense Time parameter.
- ☛ Enter a value of **88**.
- ☛ Press cursor key E to select the Vel. Sense Attack Time parameter.
- ☛ Press the UP key to enter a value of **"+"**.

Now the attack will become faster as you play harder.

### ***Balancing the oscillators***

The process of balancing the oscillators includes setting their relative volume levels, pan positions, and tuning.

First, let's set the volume levels.

- ☛ Return to Page 1.
- ☛ Press the ▲ key twice to move the cursor to the second line of the display.
- ☛ Press cursor key D to select the Level parameter for OSC1.
- ☛ Enter a value of **61**.
- ☛ Press the ▼ key twice to select the Level parameter for OSC2.
- ☛ Enter a value of **83**.

When setting the levels, you must be careful not to set them too high, as it is possible for the signal to overload the effects, resulting in distortion.

Now let's set OSC1's pan position slightly to the right.

- ☛ Press the ▲ key twice to move the cursor to the second line of the display.
- ☛ Press cursor key G or H to select the Panpot parameter for OSC1.
- ☛ Enter a value of R02.

Finally, let's detune the oscillators slightly to "fatten up" the sound a bit.

- ☛ Press the ▼ key three times to move the cursor to the fifth line of the display.
- ☛ Press cursor key D to select the Detune parameter.
- ☛ Enter a value of +10.

### 5.7 Adjusting the pitch bend range

Normally you can move the joystick left or right to bend the pitch of a program. This is useful for imitating slurs or the bending techniques of various instruments. Pitch bend was turned off for program A12 because pianos aren't capable of producing such sounds.

The *i2/i3* can bend pitch as much as one octave when the joystick is moved all the way to the left or right. Let's set this program to use a pitch bend range of one whole tone.

- ☛ Go to Page 7.

```

PROG A12 7:VDF MG/JS ▶Waveform
-----
VDFMG TRIANGLE Freq=50 DL00 I:00
OSC:OFF AT00 JS00 S:OFF

Pitch Bend: Joystick=+00 Aftertouch=+00
Cutoff: Joystick=+00 Aftertouch=+00
Level: Aftertouch=+00
    
```

A	B	C	D	E	F	G	H

- ☛ Press the ▼ key twice to select the Pitch Bend Joystick parameter.
- ☛ Enter a value of +02.

Now you can bend a note's pitch up to two semitones (one whole tone) using the joystick. You may want to experiment with different settings for this parameter.

### 5.8 Applying effects

Usually, applying effects will be the last step in creating a program. You may even want to turn the effects off while editing programs, to create a program that stands on its own, then use effects to add a finishing touch.

The *i2/i3* effects system is made up of two signal processors, known as FX1 and FX2. You can select different effects for each processor, and combine them in one of four configurations or *effect placements*.

You can then route sounds to both processors via four effect inputs (A, B, C, and D). The way you route signals to these inputs, combined with which effect placement you use, plays a big role in how the final output will sound.

Let's take a look at the EFFECT page.

- Go to Page 8.

PROG A12 8:EFFECT				Effect Type			
FX1 28:Exciter	:ON	Mod:UDA EG I+07					
D+99 HS01		L+04 H+05 →50:50					
FX2 01:Hall	:ON	Mod:UDA EG I-04					
2.3 P060 E62 HD15		L+00 H+02 →81:19					
[ SERIAL ] C Pan =	L	D Pan =	R				
A	B	C	D	E	F	G	H

You can set the effect types for FX1 and FX2 on the first and third lines of this display, and the effect placement on the last line. To route signals to the effect system, you must use the Panpot and Effect Send Level parameters on the OSCILLATOR page.

**Selecting the effects**

As you can see in the last illustration, FX1 was originally set to an exciter effect for the piano program we are editing. Let's change this to a multiple-repeating delay effect to add motion to our new program.

- Using the VALUE controls or the DATA ENTRY keys, select effect 17:Multitap Dly2.

When you change this setting, you may notice that the parameters on the line below also change. Each of the effects comes with default settings which are designed to sound good without any modifications. If you want, you can try to tailor these settings to your tastes.

Be aware, however, that any custom settings you make will be lost as soon as you switch to a different effect type. To avoid this, you should store any programs with custom effect settings using the Write Program function described later in this chapter.

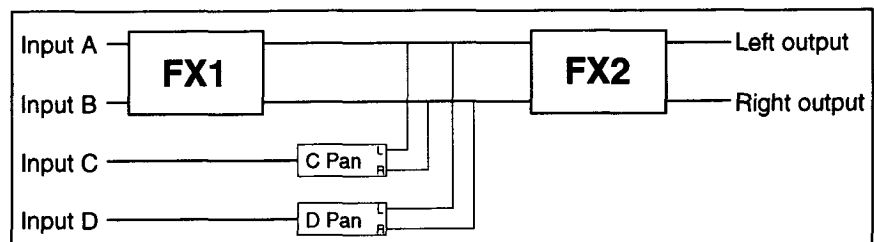
We will leave FX2 set to 01:Hall, as this effect provides a good, standard reverb effect.

**About the Serial effect placement**

As we mentioned above, the Effect Placement setting is on the bottom line of the display. It appears in brackets above cursor keys A and B.

- Press the ▼ key four times to select the Effect Placement parameter.

The i2/i3 will display a graphic that looks something like the figure below. As this graphic shows, the piano program we're editing has been set to use the Serial placement.



With this setting, signals that are routed to effect inputs A or B will go through FX1 and then pass on to FX2. Signals routed to effect inputs C or

D will go through FX2 only. This can be used, for example, to apply both effects to one oscillator, while bypassing FX1 for the other oscillator.

Most programs use this placement because it is convenient for applying both signal processors to the entire sound output. We will use this setting for our new program as well.

### ***Routing the oscillators to the effects***

When you play the keyboard, you will notice that both the pad sound of OSC1 and the plucked attack of OSC2 are being processed by the multitap delay. To find out why, let's take a look at how our oscillators are being fed to the signal processors.

- ☛ Return to Page 1.

When you use the Serial effect placement, the Panpot parameters not only set the stereo positions of their sounds, but also send the sound to effect inputs A and B. As the OSCILLATOR page shows, both oscillators are being sent to the effects system via channels A and B; hence, both are being processed by the delay.

Let's set the plucked attack so that it bypasses the delay effect. We can do this by sending OSC2 to inputs C and D only. First, we must route this oscillator away from channels A and B.

- ☛ Press the ▲ key once.
- ☛ Press cursor key G or H to select OSC2's Panpot parameter.
- ☛ Using the VALUE controls, set this parameter to OFF.

If you play the keyboard now, you will notice that the plucked sound has disappeared altogether. To bring it back, we will route it directly to FX2 via channels C and D.

- ☛ Press the ▼ key once to select the Effect Send C Level parameter.
- ☛ Enter a value of 9.
- ☛ Press cursor key H to select the Effect Send D Level parameter.
- ☛ Enter a value of 9.

If you play the keyboard, you will now hear that OSC2 is being processed by the hall reverb (FX2) only, while OSC1 is being processed by both effects.

## **5.9 Naming and writing the program**

Now that we have finished making all the adjustments to our program, it is time to name it and write it to memory.

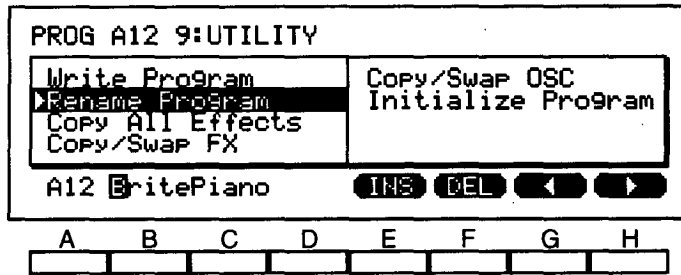
### ***Naming a program***

Let's give this program the descriptive name we mentioned at the beginning of this chapter: "Pluck Pad."

- ☛ Go to Page 9.

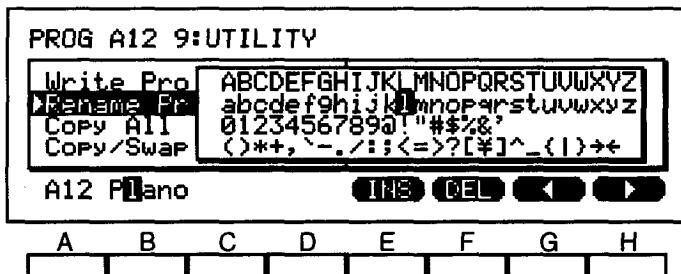


- Press the ▼ or ▲ key three times to highlight the Rename Program function.



- Press cursor key F five times to delete the first five characters. The name should now read "Piano." Because the first character is now a "P," we won't need to change it.
- Press cursor key H to move to the second character.
- Press the UP key three times to change the "i" in "Piano" to an "l."

A pop-up menu will appear showing all the available characters, with the current character highlighted.



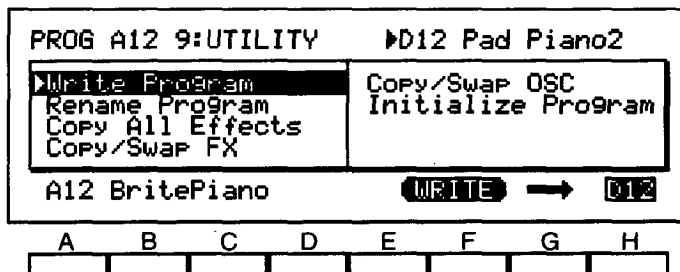
- Press cursor key H to move to the next character.
- Use the VALUE controls to change the "a" to a "u."
- Press cursor key H to move to the next character.
- Use the same method to enter the c, k, space, P, a, and d.

When you're done making these changes, you'll be ready to store the program in the i2/i3 memory.

**Writing a program to memory**

Whenever you create a program you want to keep, you should store it to bank D, the USER bank.

- Press the ▲ key once to highlight the Write Program function.



The destination program number is displayed above cursor key H. The name of the program currently stored in that location will appear in the upper-right portion of the display. Because this program will be replaced by the new program when you execute the Write Program function, choose the destination carefully.

If you write over one of the programs that came with the *i2/i3*, and want to retrieve it at a later time, you can load it from the supplied factory data disk using the Load One Program function in Disk mode. However, if the program you want to retrieve was never saved to disk, it will be impossible to get it back.

For now, let's write our program to D12, which has already been selected.

• Press cursor key F to write the program to memory.

The display will ask "Are you sure?"

• Press cursor key E or F to confirm this operation.

Congratulations! You have just created your first *i2/i3* program. As you experiment with creating your own programs, you will find that your programming abilities will improve with practice.



## 6 WORKING WITH DRUMS

### 6.1 What is a drum program?

As we mentioned in Chapter 4, the *i2/i3* contains four banks of 64 normal programs and one bank of eight drum programs. You may be wondering what distinguishes drum programs from normal programs. Let's use program Dr1 GM Kit to find out.

- Go to Program mode by pressing the PROG key.
- Select program Dr1 GM Kit by pressing the DRUM PROG bank key followed by PROGRAM key 1 in the lower row.

When you play the keyboard, you'll notice an obvious difference—each key plays a different sound. But let's look a little deeper into the program parameters themselves.

- Press the EDIT PROG key.

```

PROG Dr1 1:OSCILLATOR
-----
Drums      Hold On  Polyphonic
3:GMStandard L56 8' PEG+00      C=4 D=4

S+00 AT00 A+00 DT00 RT00 R+00 L+00 T+00
  A   B   C   D   E   F   G   H
  [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

```

As we observed in the previous chapter, this is Page 1 of Edit Program mode. However, it looks slightly different than the one we encountered before.

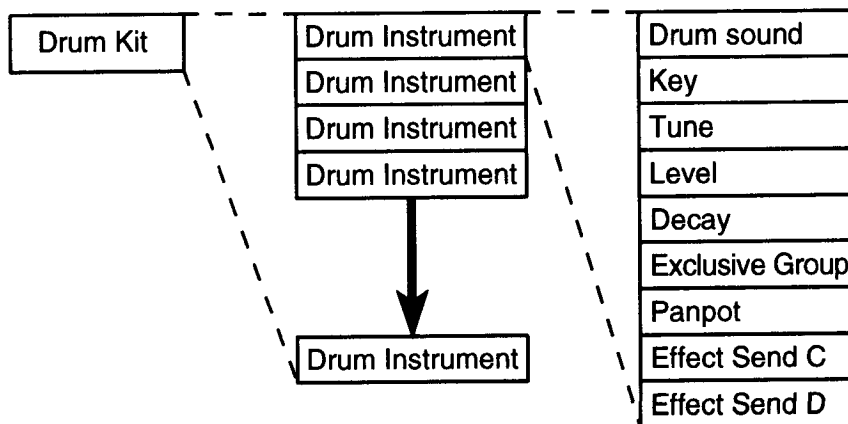
First of all, the Program Type parameter is set to Drums. Programs that use this setting have the same parameters as those that use a setting of Single Oscillator, with two exceptions. The Multisound parameter is replaced by the Drum Kit parameter, and the Panpot parameter is not displayed at all.

With the Drum Kit parameter, instead of selecting a multisound for the oscillator, you to select a *drum kit*.

#### **What is a drum kit?**

A drum kit is a setup that specifies the layout, or *mapping*, of up to 60 drum sounds across the keyboard. Each of these drum sounds has associated parameters that set its tuning, level, decay, exclusive group, panning, and ef-

fect send levels. One drum sound and its associated parameters are collectively known as a *drum instrument*.



The fact that each drum instrument has its own pan setting explains why the Panpot parameter is not available on Page 1 of Edit Program mode.

This may lead you to ask why the C and D Effect Send Level parameters appear here. After all, there are separate C and D level parameters for each drum instrument. Those that you see on this page act as master controls for the individual C and D levels, adjusting the overall C and D level of all drum instruments proportionally.

**Selecting drum kits**

The *i2/i3* comes with a total of eight drum kits. Six of these are *preset kits* which reside in ROM. The other two are *user kits* which reside in RAM. You can edit the two user kits in Global mode.

If you don't want to get involved with editing drum kits, the simplest way to edit a drum program is to change its drum kit assignment. Let's try this now.

- Press the ▼ key once to highlight the Drum Kit parameter.
- Using the VALUE controls, select drum kit 1:User Kit 1

When you play the keyboard, you will hear a different set of drum sounds.

**About the Hold parameter**

The Hold parameter determines whether note off messages (such as those generated when you release a key on the keyboard) will end notes played by the program.

When it is set to Hold On, notes will continue sounding even after the keys are released. This makes it possible for sounds to decay naturally, without having to hold the key for the duration of each drum sound.

- Play the crash cymbal assigned to C#3; the toms assigned to A2, G2, and F2; and the snare assigned to E2.

Notice that regardless of how long you hold the keys, the sounds' decay stays the same.

- Press the ▲ key once to move the cursor to the first line of the display.
- Press cursor key E to select the Hold parameter.
- Set this to **Hold Off**.

Notice that the sounds only play for as long as you hold the keys, now.

If you are creating a program which has this parameter set to Hold On, be sure to set the VDA EG's Sustain Level parameter to a value of 0. Otherwise the sound will never decay completely.

- Return this parameter to the **Hold On** setting.

## 6.2 Preparing to edit a drum kit

As mentioned above, you can edit the two user drum kits in Global mode. Parameters for User Kit 1 appear on Page 5 and those for User Kit 2 on Page 6. Let's take a look at Page 5 now.

- Press the GLOBAL key to go to Global mode.
- Press the PAGE+ key four times to get to Page 5.

GLOBAL 5:USER KIT 1								Dance Kick	
#00	006	C2	+000	L+60	D+00	---			
#01	036	C#2	+000	L-24	D-82	---			
#02	030	D2	+000	L+51	D+00	---			
#03	094	D#2	+000	L+24	D-57	---			
#04	022	E2	+000	L-09	D+00	---			
#05	060	F2	-074	L+00	D-30	---			

A	B	C	D	E	F	G	H

This is the USER KIT 1 page. Its parameters are actually divided between two sub-pages. The page shown above is the left sub-page, where you can adjust the settings for each drum instrument's drum sound assignment, key assignment, tuning, decay, level, and exclusive group assignment. The settings for panning and effect send levels are set on the right sub-page.

### Drum kit monitoring

When editing a drum kit in Global mode, the *i2/i3* will play it using whatever program was last selected in Program mode. This program selection can either help or get in the way of the editing process. Let's see why.

- Press the PROG key to go to Program mode.
- Select program **B47 Halo Pad** by pressing the B bank key followed by the 4 key in the upper row of PROGRAM keys and 7 in the lower row.

If you play the keyboard, you will hear that this program has a somewhat slow attack and is being processed by a flanger effect.

- Return to Global mode.

Page 5 should already be selected.

- Play the crash cymbal (C#3), the toms (A2, G2, F2), and the snare (E2).

You can hear that User Kit 1 is now being played by program B47 Halo Pad. This makes it difficult to adjust the settings for the drum kit effectively.

(You may find this, or other programs, to be musically useful for processing drum kits, however. If you would like to use a normal program as a starting point for creating an original drum program, set the normal pro-

gram's Program Type parameter to Drums. You can then assign it one of the eight drum kits. Also, be sure to set the program's Octave parameter to 8', otherwise the mapping will be offset.)

Since we want to hear this drum kit without any fancy processing, we will select a drum program.

- ☛ Return to Program mode.
- ☛ Select program Dr1 GM Kit.
- ☛ Return to Global mode.

### 6.3 Editing the drum kit

Perhaps the simplest way to make a customized drum kit is to edit one of the existing kits. If you want, however, you can start from scratch, and build your drum kit from the bottom up.

#### **Editing existing drum kits**

If you want to modify one of the user kits, you can do so on Pages 5 and 6. However, if you want to modify one of the preset kits, you must first copy its settings to one of the user kits. The Load One Drum Kit function on Page 7 allows you to do this.

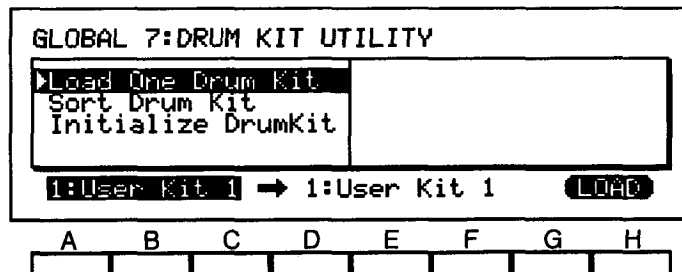
You can also use this function to restore either of the two user kits to their original factory settings. See page 227 in the Reference Guide for details.

For this tutorial, we will create our own drum kit from the bottom up.

#### **Starting from scratch**

To create our drum kit, let's start by resetting all the parameters in User Kit 1 to their default values. This will help to avoid confusion when making our settings.

- ☛ Press the PAGE+ key twice to go to Page 7, the DRUM KIT UTILITY page.



- ☛ Press the ▼ key two times to highlight the Initialize Drum Kit function.
- ☛ Make sure 1:User Kit 1 is selected.
- ☛ Press cursor key H to initialize the drum kit.
- ☛ Press cursor key E or F to confirm this operation.
- ☛ Return to Page 5.

You will notice that all the parameters have been reset to their default values, and there is no sound when you play the keyboard. Now we can start to create our drum kit.

### Assigning drum sounds

Each of the 60 drum kit instruments is assigned an *index number* from zero to 59. This number is shown above cursor key A.

When you initialize a drum kit, each drum instrument is assigned a key starting from C2 (the bottom C) and continuing chromatically up to B6 (the top B).

Let's start by assigning a bass drum to C2.

- ☛ Press cursor key B to select the Drum Sound parameter.
- ☛ Press the UP key once to enter drum sound **0, Fat Kick**.

The *i2/i3* will display the name of the current drum sound in the upper-right portion of the display. When you play C2 on the keyboard, you will hear this drum sound. (For a complete list of drum sounds, see the Performance Notes that came with the *i2/i3*.)

### Adjusting the tuning

Next, we'll assign a snare drum to D2 and adjust its tuning using the Tune parameter.

- ☛ Press the ▼ key twice to select the Drum Sound parameter for index #02.

(It is possible to change index #01's Key parameter from its current setting of C#2 to D2. However, you'll find that if you try to change it, the *i2/i3* will only let you select a key that isn't already assigned. D2 has already been assigned to index #02.)

Since the Key parameters for all the index numbers have been assigned chromatically from C2 to B6, we would have to set index #02 to a key outside that range before adjusting the setting for index #01.)

- ☛ Use the VALUE controls or DATA ENTRY keys to enter drum sound **14, Snare 1**.

When you play D2 on the keyboard, you will hear this drum sound. Now let's tune it.

- ☛ Press cursor key D to select the Tune parameter.
- ☛ Repeatedly play D2 while adjusting the Tune parameter with the VALUE dial.

The maximum value for this setting is +120, which will raise the pitch one octave. Likewise, the minimum value of -120 will lower the pitch one octave.

Let's raise the pitch of the snare.

- ☛ Enter a value of +12.

### Assigning exclusive groups

Exclusive groups allow you to create groups of drum instruments that play monophonically rather than polyphonically. This means that instruments set to the same exclusive group will cut off each other's sound.

The most common use for this is to have the closed hi-hat sound cut off the open hi-hat sound, just like a real hi-hat. Let's try this now.

First we have to assign the closed and open hi-hat sounds to the keyboard.

- ☛ Press the ▼ key four times to select index #06 (F#2).



- ☛ Press cursor key B to select the Drum Sound parameter.
- ☛ Use the VALUE controls or DATA ENTRY keys to enter drum sound 48, Tite HH.
- ☛ Press the ▼ key four times to select index #10 (A#2).
- ☛ Use the VALUE controls or DATA ENTRY keys to enter drum sound 49, Open HH.

Notice that the sound of the open hi-hat (A#2) is not cut off by the closed hi-hat (F#2) when you play them one after the other. This is unnatural, as a real hi-hat could not do this. Let's assign both hi-hat sounds to exclusive group 1.

- ☛ Press cursor key G to select the Exclusive Group parameter for index #10.
- ☛ Press the UP key once to enter a value of EX1.
- ☛ Press the ▲ key four times to select index #06 (F#2).
- ☛ Press the UP key once to enter a value of EX1.

Now when you play the hi-hat sounds, they will cut each other off.

### ***Adjusting the decay***

As we mentioned earlier, each drum instrument has its own decay setting. This is useful for controlling the decay time of continuous, or *looped*, drum sounds such as the crash cymbal, snare roll, vibraslap, triangle roll, and bell tree. Let's assign the crash cymbal to C#3 and adjust its decay time.

- ☛ While holding cursor key A, play C#3 on the keyboard.

The display will jump to index #13. This is a quicker method for selecting drum instruments.

- ☛ Press cursor key B to select the Drum Sound parameter.
- ☛ Use the VALUE controls or DATA ENTRY keys to enter drum sound 40, Crash Cym.

When you play C#3, you'll notice that the crash cymbal's decay is a bit long.

- ☛ Press cursor key F to select the Decay parameter.

The decay setting made here is relative to the current program's VDA EG Decay Time parameter. A setting of 0 will use the decay time specified by the current program. Higher settings will produce longer decay times, and lower settings, shorter decay times.

- ☛ Using the VALUE controls or DATA ENTRY keys, enter a value of +99.

If you play C#3 now, you'll hear the crash cymbal with an unusually long decay. Because it will take some time to decay completely, stop the sound by pressing the RESET key on the front panel. (You can press the RESET key at any time to stop any stuck notes.)

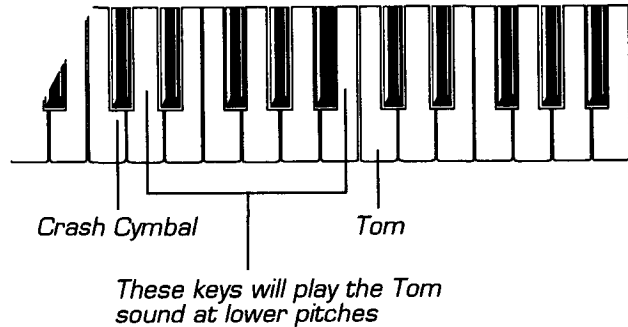
If you set this parameter to a value of -99, you'll hear the crash cymbal reduced to a short burst of noise. Let's set the decay time to a more appropriate value.

- ☛ Using the VALUE controls or DATA ENTRY keys, enter a value of -15.

When you play C#3, you will hear the crash cymbal with a more musically useful decay.

**Drum instrument transposition**

Any keys that have not been assigned a drum sound will play the sound of the next higher key. For each unassigned key, the *i2/i3* will automatically transpose the next higher key's drum sound down until it reaches an assigned key. This is useful for creating ranges of drum sounds which you can play chromatically on the keyboard.



Let's try this now.

- Play C4 on the keyboard while holding cursor key A, to select index #24.
- Press cursor key B to select the Drum Sound parameter.
- Use the VALUE controls or DATA ENTRY keys to enter drum sound 58, Tom Hi.

When you play C4, you will hear the tom sound at its original pitch. If you play in the range of D3 to B3, you will hear the tom sound transposed chromatically. You may have noticed that all the other drum instruments we have assigned behave this way too.

(If you want a key to be silent, assign a drum sound to the corresponding drum instrument and set the Level parameter, above cursor key E, to -99. All keys below it that have no drum sound assigned to them will also be silent.)

**Adjusting the pan position**

As we mentioned earlier, drum programs don't have a Panpot parameter that can be set on Page 1 of Edit Program mode. Instead, each drum instrument has its own Panpot parameter that can be set on the USER KIT pages of Global mode.

This parameter, along with the C and D Effect Send Levels, can be found on the right sub-page.

- Press cursor key H to select the right sub-page.

GLOBAL 5:USER KIT 1		▶Tom Hi			
#24	<input checked="" type="checkbox"/> 58	C4	Pan=CNT	C=0	D=0
#25	---	C#4	Pan=CNT	C=0	D=0
#26	---	D4	Pan=CNT	C=0	D=0
#27	---	D#4	Pan=CNT	C=0	D=0
#28	---	E4	Pan=CNT	C=0	D=0
#29	---	F4	Pan=CNT	C=0	D=0

A   B   C   D   E   F   G   H

You'll notice that the parameters above cursor keys A, B, and C do not change. This allows you to see their values easily.

Let's adjust the panning for the open and closed hi-hats and the crash cymbal.

- ☛ Play **F#2** on the keyboard while holding cursor key A, to select the closed hi-hat.
- ☛ Press cursor key D to select the Panpot parameter.
- ☛ Using the VALUE controls, set this to **L05**.
- ☛ Play **A#2** on the keyboard while holding cursor key A, to select the open hi-hat.
- ☛ Press cursor key D to select the Panpot parameter.
- ☛ Using the VALUE controls, set this to **L05** as well.
- ☛ Play **C#3** on the keyboard while holding cursor key A, to select the crash cymbal.
- ☛ Press cursor key D to select the Panpot parameter.
- ☛ Using the VALUE controls, set this to **R05**.

When you play the keyboard, you will hear the changes we made.

### ***Panning the toms***

You may want a range of tom sounds to pan from one side to the other, thus simulating what drummers hear when they play from the high tom to the low tom.

Although it seems as though there are many tom sounds assigned to the keyboard, we can only set one pan position for all of them. This is because they are all the same drum instrument. In order to achieve the effect described above, we must create several tom instruments and assign a different pan setting to each.

Let's assign the tom sound to F2, A2, and C3.

- ☛ Play **F2** on the keyboard while holding cursor key A, to select index #05.
- ☛ Press cursor key B to select the Drum Sound parameter.
- ☛ Use the VALUE controls or DATA ENTRY keys to enter drum sound **58, Tom Hi**.
- ☛ Do the same for A2 and C3.

You should now hear the same tom at the same pitch when you play those three keys. Notice that D#2, E2, G2, G#2, and B2 play transposed versions of this sound.

Let's adjust the tuning of F2 and A2.

- ☛ Press cursor key H to select the left sub-page.
- ☛ Play **F2** on the keyboard while holding cursor key A, to select index #05.
- ☛ Press cursor key D to select the Tune parameter.
- ☛ Using the VALUE controls or DATA ENTRY keys, set this to a value of **-100**.

- ☛ Play A2 on the keyboard while holding cursor key A, to select index #09.
- ☛ Press cursor key D to select the Tune parameter.
- ☛ Using the VALUE controls or DATA ENTRY keys, set this to a value of -50.

When you play the range of white keys from C3 down to F2, the pitch drops naturally. Now we can set the pan position for each instrument.

- ☛ Press cursor key H to return to the right sub-page.
- ☛ Play C3 on the keyboard while holding cursor key A, to select index #12.
- ☛ Press cursor key D to select the Panpot parameter.
- ☛ Set it to L06.
- ☛ Play F2 on the keyboard while holding cursor key A, to select index #05.
- ☛ Press cursor key D to select the Panpot parameter.
- ☛ Set it to R06.

When you play from C3 to F2, you will hear the toms dropping in pitch and panning from left to right.

Before moving on, you may want to use the Level parameter (above cursor key E on the left sub-page) to adjust the volume of each drum.

## 6.4 Applying effects

Now that you have a basic drum kit to play, let's apply some effects to add a finishing touch. We are going to create an effect setup in which we process all drum sounds equally through an exciter effect, and send varying amounts of selected drum sounds through an early reflection effect.

(This type of effect setup is also very useful for arrangements, backing sequences, and songs. For example, you can send all tracks through an exciter effect, and send varying amounts of selected tracks through a reverb effect.)

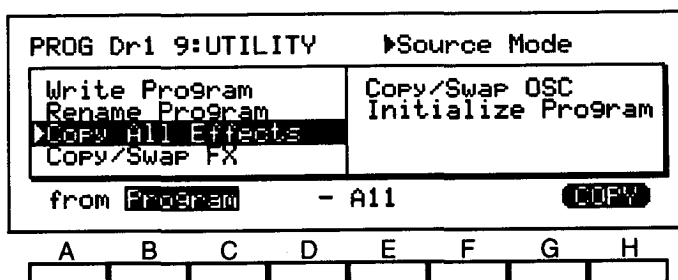
### **Copying effects**

To save time, we will copy the effect settings from program Dr7 Dance Kit and use them as a starting point for our effect setup.

You can copy the effect settings from any *i2/i3* program, arrangement, backing sequence, or song using the Copy All Effects function. This provides an easy way to get professional-sounding effect setups without having to set all the parameters yourself.

- ☛ Return to Edit Program mode.
- ☛ Go to Page 9 by holding the EDIT PROG key and pressing the DATA ENTRY 9 key.

- Press the ▼ key twice to highlight the Copy All Effects function.



- Using the bank and PROGRAM keys, select program Dr7. You can also press cursor key E and use the VALUE controls to select this program.
- Press cursor key H to initiate the Copy All Effects function. The i2/i3 will ask if you are sure.
- Press cursor key E or F to confirm the Copy All Effects function. A "Completed" message will appear when the copy operation is finished.
- Go to Page 8.

Program Dr1 should now have the same effect settings as Dr7: an early reflection effect assigned to FX1 and the exciter effect assigned to FX2.

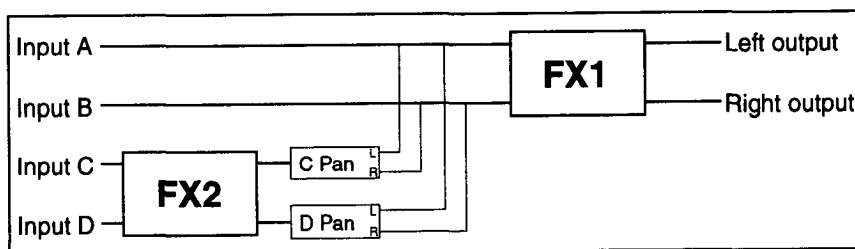
To create the effect setup mentioned above, we need to use the Parallel 2 effect placement. The current effect setup uses the Serial setting.

**About the Parallel 2 effect placement**

Let's take a look at the Parallel 2 effect placement.

- Press the ▼ key four times to select the Effect Placement parameter.
- Press the UP key twice to select PARALLEL 2.

The i2/i3 will display a graphic that looks something like the figure below.



With this setting, signals that are routed to effect inputs A or B will go through FX1 only. Signals routed to effect inputs C or D will go through FX2 and then pass on to FX1.

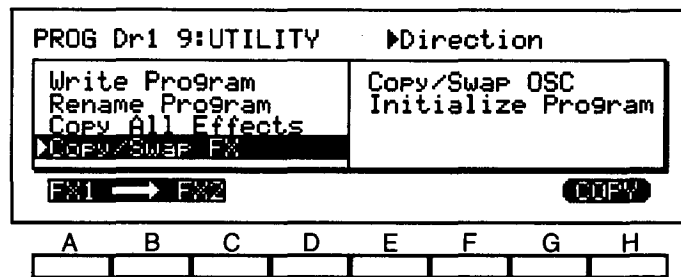
In order for our effect setup to work as described, the exciter effect must be assigned to FX1, and the early reflection effect to FX2. Currently, these assignments are reversed.

**Swapping the effects**

We can use the Copy/Swap FX function to switch the settings of FX1 and FX2.

- Return to Page 9.

- Press the ▼ key once to select the Copy/Swap FX function.



- Press the UP key twice to select the FX1 ↔ FX2 setting.

The word COPY above cursor key H will change to SWAP.

- Press cursor key H to swap the effects.

The *i2/i3* will ask if you are sure.

- Press cursor key E or F to confirm the Copy All Effects function.

A "Completed" message will appear when the swap operation is finished.

### Routing drums to the effects

Let's process the snare drum with the early reflection effect only. In order to do this, we must first route the sound away from inputs A and B.

When you use the Parallel 2 effect placement, the Panpot parameters not only set the stereo positions of each sound, but also send the sound to effect inputs A and B.

- Return to Global mode.
- Play D2 on the keyboard while holding cursor key A, to select index #02.
- Press cursor key D to select the Panpot parameter.
- Set this to OFF.

Now we can route the snare to inputs C and D.

- Press cursor key E to select the Effect Send Level C parameter.
- Set this to 5.
- Press cursor key F to select the Effect Send Level D parameter.
- Set this to 5.

Next, we will process the hi-hats with the exciter effect, and just a touch of the early reflection effect.

- Play F#2 on the keyboard while holding cursor key A, to select index #06.
- Set both the C and D Effect Send Level parameters to 1.
- Do the same for the open hi-hat (A#2).

Finally, we will process the toms with both the exciter effect and the early reflection effect.

- Play C3 on the keyboard while holding cursor key A, to select index #12.
- Set the C and D Effect Send Level parameters to 5.
- Do the same for the toms assigned to A2 and F2.

## **6.5 Final notes**

All the settings we have made for our drum kit are retained automatically; there is no need to write them to memory. The changes we made to the drum program, however, must be saved to memory. Use the Write Program function, described on page 54 of this manual, to do so.

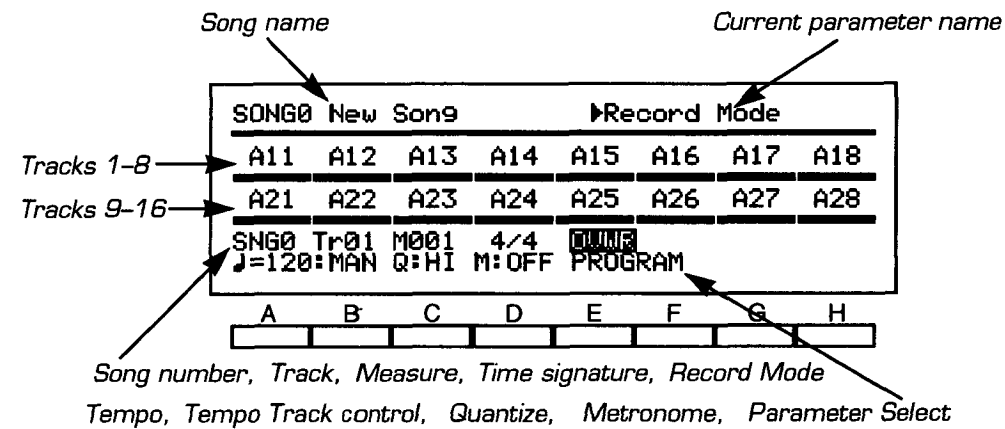
It is not necessary to restrict the writing of drum programs to Dr7 or Dr8; they can also be stored to any of the 64 D bank program locations.

If you want to create a drum kit that will be used to play arrangements, you should use the same mapping as the factory drum kits.

## 7 SONG MODE

Song mode—the most basic of the sequencing modes—lets you record songs using a straight-forward, full-function 16-track sequencer.

- Go to Song mode by pressing the SONG mode key.



This is Page 1 of Song mode. This page lets you set the program number, volume, panning (stereo position) and effect send levels for each of the 16 tracks. You can also set the tempo, time signature, quantizing value, metronome mode and recording mode for the current song.

### 7.1 Working in Song mode

There are many different methods you can use for recording music in Song mode:

- Realtime recording** is the method you will probably use most often. Recording with this method is similar to recording with a tape recorder, and is good for music that is linear in nature, such as piano and melody parts. There are five realtime recording modes that let you perform tasks such as overdubbing and fixing mistakes.
- Step recording** allows you to enter music one note (or chord) at a time, without having to play to a metronome. This method is good for recording complex rhythmic passages, or if you have difficulty playing the keyboard in real time.
- Pattern recording** is useful for recording musical phrases that repeat often, such as drum and percussion parts. Using this method means you only have to record a pattern once. You can then place copies of that pattern into your tracks. Patterns can be recorded in real time or step time.

In this tutorial we will record the eight measure song that appears on the following page using the recording methods outlined above. You may want to first listen to the pre-recorded version of this song which is included on the data disk that came with the *i2/i3*.

Open this page for the score



*i*-Lands

Mid tom B2  
Snare drum E2  
Bass drum C2  
Low tom G2  
Ride bell F3

Drum legend

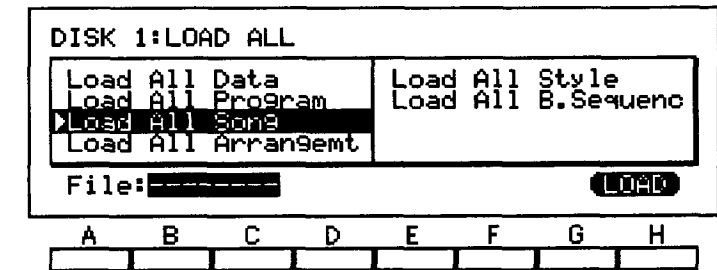
Clave C2  
Cabasa A#2

Percussion legend

Loading the tutorial song

If you would like to listen to the finished version of the song we are about to record, you must first load it from disk.

- Insert the IFD-00P data disk that came with the *i2/i3*.
- Press the DISK key to go to Disk mode.
- Press the ▼ key two times to highlight the Load All Song function.



- Press cursor key A, B, or C.
- The *i2/i3* will scan the disk for song files.
- Use the VALUE controls to select the file "*\_I\_LANDS*".
  - Press cursor key H to load the song file.
- The *i2/i3* will display an "Are you sure?" message.
- Press cursor key E or F to confirm this operation.
- The *i2/i3* will display a "Now loading songs..." message. After a moment, this will change to "Completed".
- Press the SONG key to return to Song mode.
- The song *i*-Lands was recorded as Song 0. When you are ready to start the tutorial, use Song 1 to record your own version of *i*-Lands.
- Press the START/STOP key to listen to Song 0 (*i*-Lands).
  - When you are ready to begin the tutorial, press the UP key to select Song 1.

If you will be learning the song entirely by ear, you may find it helpful to listen to each of the tracks individually. To find out how to use this technique, known as *soloing*, refer to the second paragraph under the heading "Muting and soloing" on page 101.

Try to follow along in the score on page 70, even if your ability to read music is somewhat limited. You will find it to be helpful as you proceed through the tutorial.

## 7.2 Preparing to record

Before you record, you need to assign programs to the tracks, set the metronome, and set the tempo.

### Setting up the tracks

First, set up the tracks with the programs you will use to play each part. You can always change this setup later.

- ☛ Using the CURSOR POSITION keys and VALUE controls, cursor to the Track parameter (second line from the bottom, cursor key B) and select **Tr01** (Track 1).
- ☛ Enter program **Dr1 GM Kit** by pressing the DRUM PROG key followed by the 1 key in the lower row of PROGRAM keys.
- ☛ Press the UP key to select **Tr02** (Track 2) and assign to it program **Dr6 Perc Kit** by pressing the DRUM PROG key followed by the 6 key in the lower row of PROGRAM keys.
- ☛ By pressing the appropriate bank and PROGRAM keys, assign program **A54 Fretless** to Track 3, **A41 ClassicGtr** to Track 4, **A25 Marimba** to Track 5, and **B24 Pan Flute** to Track 6.

It is also possible to assign programs to tracks using the VALUE controls or DATA ENTRY keys. To do this, make sure that the Parameter Select setting (bottom line, cursor key E) is set to PROGRAM. Then cursor to the track's program number and select the program using the VALUE controls or DATA ENTRY keys.

### Setting the metronome

To set up the metronome:

- ☛ Cursor to the metronome parameter (the parameter labelled "M:" on the bottom line of the display):

There are three options for the metronome: OFF, ON, and REC. You can turn the metronome on or off, or set it to REC so that it will only sound when you are recording.

- ☛ Set this to **ON** for now.

### Setting the tempo

To set the tempo:

- ☛ Cursor to the tempo parameter and change it to a value of **150** using the VALUE controls or the DATA ENTRY keys.
- ☛ To hear the current tempo, press the REC/WRITE key.

If the tempo of 150 is too fast for you, try a lower value such as 130. You can set the tempo back to 150, after you finish recording, to hear the song at the correct tempo.

- ☛ Press the REC/WRITE key again to stop the metronome.

### About the time signature

Whenever you record a new song, the *i2/i3* will automatically set the time signature—which is formally known as the *Beat* parameter—to the default value of 4/4. We don't need to change this for "*i*-Lands", of course, because the song is written in 4/4 time.

But if you ever want to record a song in another beat, you can change this parameter before you start recording. When you press the REC/WRITE key, the numbers in the time signature will change to asterisks. You can then use the VALUE controls to change the time signature.

The range of available time signatures will vary depending on the song's Base Resolution setting. This parameter determines the maximum precision with which the i2/i3 can record song data. (For details on the Beat and Base Resolution parameters, please refer to page 82 and 116 in the Reference Guide.)

### 7.3 Realtime recording

Many people like to record the drums on Track 1, then the bass on Track 2, piano on Track 3, and so on, but this is just a matter of preference. Although we have set up the tracks in this order, we will start with the bass track. Let's record this track using the simplest recording method—real-time recording.

- Using the CURSOR POSITION keys and VALUE controls, cursor to the Track parameter (second line from the bottom, CURSOR key B) and select Tr03 (Track 3).

When you play the keyboard you should be able to hear program A54 Fretless, the program you have assigned to Track 3.

If you look at the clef in the first measure of the bass part on page 70, you'll notice a small "8" just underneath it. This means that the part should be played one octave lower than written. This is how bass and guitar parts are notated, although the "8" is not usually written.

If you try to play the bass part this low on the i3, you'll notice that you can't play notes below the first C that appears in the score, because the keyboard only goes as low as that C. This is not a problem on the i2 however, because it has an extended keyboard range. To overcome this limitation on the i3, we will transpose the keyboard down one octave. (If you are using the i2, you can disregard this step.)

- Press the OCTAVE DOWN switch on the front panel once.

Now, the bass will play one octave lower.

#### **Recording the bass**

- Press the REC/WRITE key.

The REC/WRITE key's LED should light up. The metronome will start clicking.

- When you are ready, press the START/STOP key to start recording.

The i2/i3 will count off a two-bar lead-in before it starts recording. During this lead-in, the measure field will show first "-002," then "-001." The tempo LEDs will light up in time with the tempo, with all four lighting simultaneously to indicate the downbeat of each measure. The i2/i3 will start recording after the two-bar lead-in. (You can change this lead-in to 1 bar or no lead-in using the Metronome function described on page 99 of this manual and page 115 of the Reference Guide.)

- Play the bass part and press the START/STOP key to stop recording when you have finished.

If you make a mistake, stop the *i2/i3*, press the RESET key, and repeat the last three steps to re-record the bass part.

If you pressed the OCTAVE DOWN switch before recording, be sure now to press the OCTAVE UP switch once to return the octave to normal (so that neither switch is lit). Otherwise, each track that you record afterwards will be recorded one octave down.

### **Playing back a track**

To listen to what you have just recorded, press the START/STOP key. When the song reaches the end, the *i2/i3* will stop automatically and reset to measure 001. If you stop the song before it reaches the end, be sure to press the RESET key before you proceed. Also, notice that Track 3's activity bar has changed from REC to PLAY.

## **7.4 Overdub recording**

Now we will record the drums. But before we do that, take a moment to familiarize yourself with the drum program you have assigned to Track 1.

- ☛ Using the CURSOR POSITION keys and VALUE controls, cursor to the Track parameter (second line from the bottom, CURSOR key B) and select Tr01 (Track 1).
- ☛ Play the keyboard.


When you play the keyboard you should be able to hear program D1 GM Kit, the program you have assigned to Track 1.

You will notice that a different drum sound is assigned to each key. Look at the drum legend on the bottom of page 70. This tells you which sounds the notes in the score represent.

- ☛ On the keyboard, find the drum sounds used in the score.

With practice, you will be able to play an entire drum part from the keyboard. If you find that difficult to do now, you may want to break down the drum part into smaller groups to make it easier to record. *Overdub recording*, a form of realtime recording, allows you to add new parts on top of old ones for just this purpose.

For example, according to the drum legend, five drum sounds are being used for this song. You may find it easier to record the bass drum and snare drum first, then overdub the low tom and mid tom sounds, followed by the ride cymbal. You can even record the track one sound at a time, if you prefer.

- ☛ First, cursor to the Quantize parameter (bottom line, cursor key C) and select a value of  (eighth note).

This will "tighten" the rhythmic accuracy when you record. We will go into more detail about quantizing later in this chapter (see Section 7.10, Quantizing).

### **Recording the bass drum and snare drum**

We will start by recording the bass drum and snare drum.

- ☛ Press the REC/WRITE key.
- ☛ When you are ready, press the START/STOP key to start recording.

The *i2/i3* will start recording after the two-bar lead-in.

- Play the bass and snare drum parts. Press the START/STOP key to stop recording when you have finished.

If you make a mistake, stop the i2/i3 and press the RESET key. Repeat the last three steps to re-record the bass drum and snare drum.

**Recording the toms**

When you are ready to record the toms, switch to overdub record mode. This is a sort of realtime recording that lets you record on top of the existing track without erasing any of the previous data.

- Cursor to the Record Mode setting, which should currently read OVWR (overwrite). Change it to OVDB (overdub).

SONG0 New Song				▶Record Mode			
A11	A12	A13	A14	A15	A16	A17	A18
A21	A22	A23	A24	A25	A26	A27	A28
SONG0 Tr01		M001	4/4	OVDB	PROGRAM		
J=120:MAN		Q:HI	M:OFF				
A	B	C	D	E	F	G	H

Now record the toms using the overdub recording mode.

- Press the RESET key to return to the beginning of the track.
- Press the REC/WRITE key. When you are ready, press the START/STOP key to start recording.
- Play the low and mid tom sounds. When you have finished, press the START/STOP key to stop recording, followed by the RESET key.


If you make a mistake, stop the i2/i3 and press the COMPARE key once. This will undo your last action (in this case, recording the toms). Then re-record the toms.

Now that you are using the overdub mode, you cannot simply re-record the track without first undoing the previous take. If you did, the new notes would be added to the existing ones instead of replacing them.

We will cover the COMPARE key in more detail later in this chapter (see Section 7.7, Comparing and undoing on page 81).

**Recording the ride cymbal**

To finish the drum track, record the ride cymbal.

- Cursor to the Quantize parameter and select a value of  (sixteenth note). Repeat the last two steps to record the ride cymbal.
- Play back the song to hear the completed drum track.

Another way to build drum tracks is to record the different sets of drum sounds on separate tracks, and then use the Bounce Track function to merge the tracks. See page 92 of the Reference Guide for details on this function.

## 7.5 Pattern recording

Pattern recording is useful for recording musical phrases that repeat often, such as drum and percussion parts. The *i2/i3* lets you record up to 100 patterns, then place them in the songs you create.

If you examine the percussion part on page 70, you'll notice that it is composed of two measures which repeat throughout the song. Instead of recording these same two measures over and over, we will record them only once, as a pattern. We can then place copies of this pattern into the percussion track.

- Using the CURSOR POSITION keys and VALUE controls, cursor to the Track parameter and select Tr02 (Track 2).

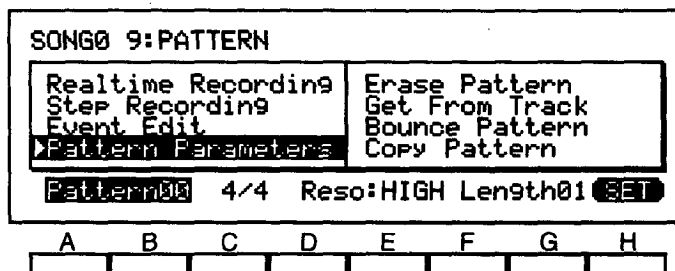
When you play the keyboard you should be able to hear program D6 Perc Kit, the program you have assigned to Track 2.

Look at the percussion legend on the bottom of page 70. This tells you which sounds the notes in the score represent.

- On the keyboard, find the percussion sounds used in the score.

### Setting the pattern parameters

- Go to Page 9 by pressing the PAGE+ key eight times, or by pressing the DATA ENTRY 9 key while holding down the SONG mode key.
- Press the down arrow key (▼) three times to move the cursor to the Pattern Parameters function.



The *Pattern Parameters* function allows you to set the time signature, base resolution, and length of each pattern. (The Base Resolution parameter sets the precision with which the *i2/i3* records pattern data. See page 116 in the Reference Guide for details.)

The display will also indicate the track and song numbers that a pattern has been placed in. When you first select this function, this "usage display" will not appear because no patterns have been placed.

We will record our pattern data as Pattern 00. Let's start by giving this pattern a length of two measures. (Patterns can be up to 99 measures long, but are most convenient at shorter lengths of only one to eight measures.)

- Press cursor key G to select the length parameter, and set it to 2.

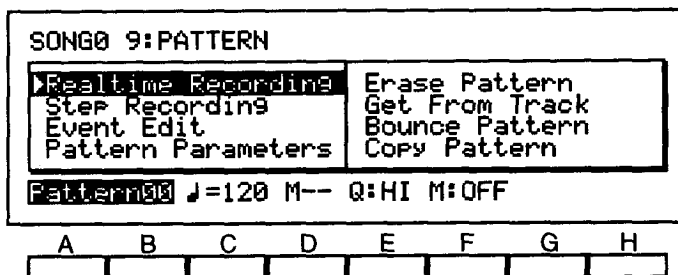
It won't be necessary to change the time signature, as the default setting is 4/4, the same as our song.

- Press cursor key H to set this change.

A "Completed" message will appear.

### Recording the pattern

- Press the up arrow key (▲) three times to get to Realtime Recording.



This is where you record patterns. The settings for tempo (cursor key C), quantize (cursor key E), and metronome (cursor key F) should be the same as those on Page 1.

Pattern recording is much like recording on a standard drum machine. The *i2/i3* will play the pattern over and over, allowing you to add new notes each time.

You will only be able to hear one track at a time when recording patterns.

- First, cursor to the Quantize parameter (cursor key E) and select a value of ♩ (eighth note).
- Press the REC/WRITE key.
- When you are ready, press the START/STOP key to start recording.

The *i2/i3* will start recording after a two-bar lead-in.

- Play the first two measures of the clave part *only once*.

The pattern should loop around to the beginning after the second measure.

You will notice that two new functions appear when you start recording: [ADD] above cursor key G and [ERA] above cursor key H.

[ADD] is the normal setting for pattern recording. It means that any new notes you play will be added to the pattern.

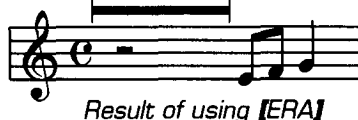
You can press and hold [ERA] (cursor key H), to erase all notes that play while you are holding this key.

You can press cursor key G to change [ADD] to [RMV] (remove), then hold down any notes you want to erase. The *i2/i3* will erase only the notes you hold down, during the time that you hold them. Use this feature to remove any unwanted notes without affecting other notes.

Here are some examples showing the difference between the [ERA] and [RMV] functions using a simple melody part:



Press the [ERA] key



Result of using [ERA]

Play C & E



Result of using [RMV]

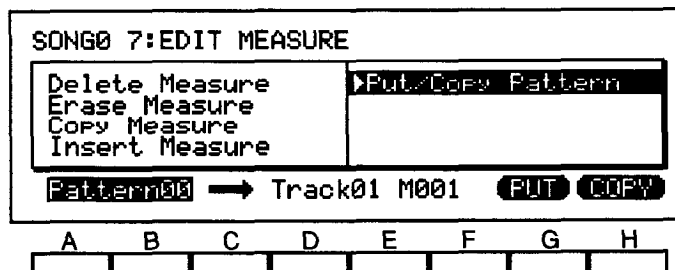
Now, back to the tutorial:

- Wait for the *i2/i3* to loop around to measure 1 and record the first two measures of the cabasa part.
- Press the START/STOP key to stop recording.

**Putting the pattern in the song**

Now that you have recorded a pattern, we must place it into a track using the Put/Copy Pattern function.

- Press the PAGE- key two times to get to Page 7.
- Press the down arrow key (▼) four times to move the cursor to the Put/Copy Pattern function.



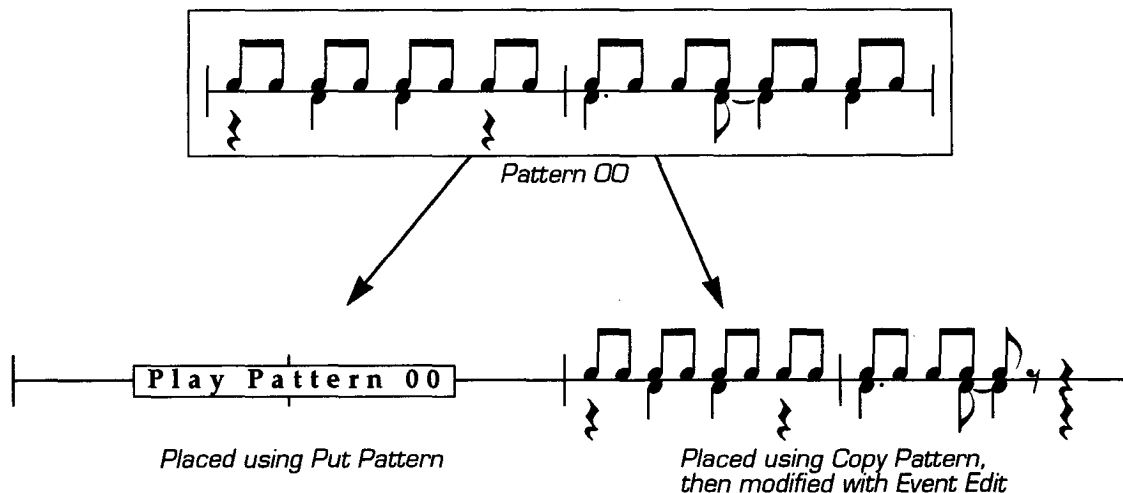
Here you can choose the pattern number, destination track, and starting measure where you want to place the pattern. There are two options: PUT (cursor key G) and COPY (cursor key H).

*Put Pattern* does not actually place the note data itself into the track, but instead places a reference to the pattern number. This method uses less memory because the *i2/i3* stores note data for only this one "master" pattern. If you change the master pattern, however, all occurrences of it in the song will follow suit.

*Copy Pattern* places a copy of the note data itself into the track. This method allows you to make changes to one occurrence of the pattern without affecting the others.



The following figure shows Pattern 00 placed into a track using both Put Pattern and Copy Pattern. The one placed with Copy Pattern has been modified using the Event Edit function (see page 83).



Place Pattern 00 into Track 2:

- Press cursor key D to select the track parameter, and choose Track 2.
- Press cursor key G [PUT] once.

The destination measure parameter will change to indicate the next available measure. This should be measure 3, because we started at measure 1 and Pattern 00 is two measures long.

- Press cursor key G two more times.
- Press cursor key H [COPY] once to *copy* the pattern into the last two measures of the song.

A "Completed" message will appear.

- Return to Page 1 by pressing the PAGE- key six times, or by pressing the DATA ENTRY 1 key while holding down the SONG mode key.
- Press the START/STOP key to hear the song with the new percussion part.

You will notice that the percussion continues playing to the end of the last measure. We used the Copy Pattern function for the last two measures of the song instead of Put Pattern so that we can delete those last notes later in this chapter (see Section 7.9, Editing events).

If you would like to record patterns while listening to the other tracks, you can set the Record Mode setting to LOOP. The LOOP recording mode is similar to pattern recording, except that the data you record goes directly into the track. You can then select the track and range of measures from which you can create a pattern using the Get From Track function on Page 9. (See page 111 of the Reference Guide for a description of this function.)

Now that you have laid down a solid rhythm section, you can turn the metronome off if you like. (See Setting the metronome on page 71.)

## 7.6 Using auto punch recording to fix mistakes

There are many ways to fix a track if you make a mistake when recording. One way would be to re-record the entire track, as you may have done

when recording the bass part in Section 7.3. But that can be very inconvenient, especially for long songs. So let's look at some other options.

*Punch-in recording* is a variety of realtime recording that allows you to listen to a track as it is playing back and start recording just before the section that needs to be fixed. Then you can stop recording just after that section, leaving the rest of the track unaffected.

*Auto punch recording* allows you to set the start measure and end measure of the section to be re-recorded, so that the *i2/i3* automatically switches between playing and recording, saving you the trouble.

To illustrate this technique, we will record the melody part on Track 6 with a few mistakes.

- Using the CURSOR POSITION keys and VALUE controls, cursor to the Track parameter and select Tr06 (Track 6).

When you play the keyboard you should be able to hear program B24 Pan Flute, the program you have assigned to Track 6.

- Make sure the Quantize parameter (bottom line, cursor key C) is set to a value of  $\text{♪}$  (eighth note).
- Cursor to the Record Mode setting, which should currently read OVDB (overdub). Change it to OVWR (overwrite).
- Record the melody, but play a D-sharp instead of a D-natural for the first note of measure 2. Also, change the D-natural in measure 4 to a C-sharp, and play it an eighth note early as shown below.



- Play back the song and check the mistakes in measures 2 and 3.

**Auto punch recording**

Now we will use auto punch recording to correct the mistake in measure 2.

- Cursor to the Record Mode setting, which should currently read OVWR (overwrite).
- Change it to AOTP (auto punch).

SONG0 New Song								▶Record Mode
A11	A12	A13	A14	A15	A16	A17	A18	
A21	A22	A23	A24	A25	A26	A27	A28	
SNG0 Tr:01 M001 4/4				PULSE: 001 → 001				
J=120:MAN Q:HI M:OFF				PROGRAM				
A	B	C	D	E	F	G	H	

You will notice two new parameters which automatically appear: Start Measure and End Measure. These two parameters correspond to the "punch-in point" and "punch-out point" in conventional multitrack recording.

- Enter a value of 002 for both the Start Measure and End Measure parameters.

The *i2/i3* will start recording at measure 2 and stop at the end of measure 2, leaving the other measures unaffected.

- Press the RESET key to make sure you are starting from the beginning of the song.
- Press the REC/WRITE key. When you are ready, press the START/STOP key to start recording.
- When you get to measure 2, play the correct notes for that measure. After measure 2 is finished, press the START/STOP key.

If you want to, you can play during the other measures as well, since the *i2/i3* will record measure 2 only. However, try not to play any notes just before the punch-in point.

It is not necessary to start at the beginning of the song every time, by the way. If you wanted to punch in at measure 56 of a longer song, for example, you wouldn't have to start the song at measure 1 and wait 55 measures before recording.

Instead, you could cursor to the Measure parameter (second line from the bottom, CURSOR key C) and enter the number of the measure you would like to start listening from (measure 52, for example) using the VALUE controls or the DATA ENTRY keys. Playback would then start at measure 52 and recording would start at measure 56.

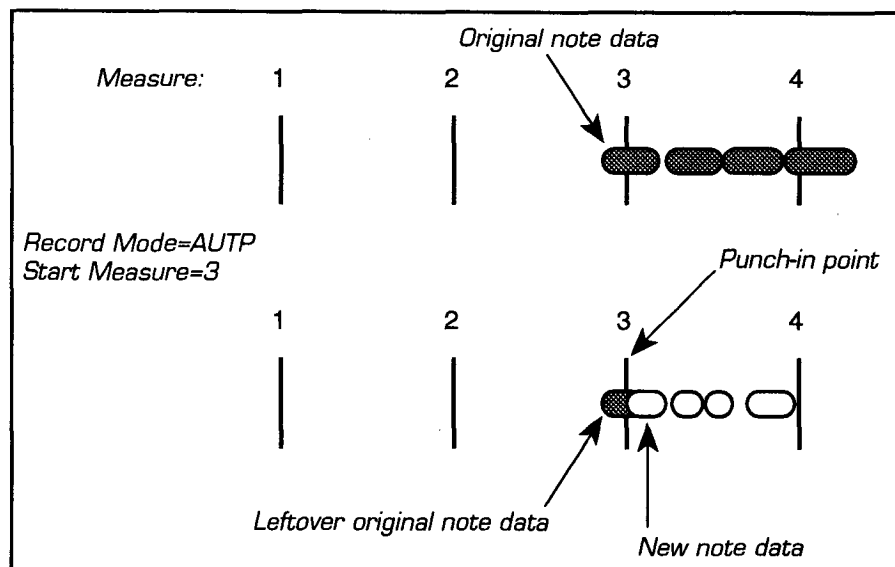
Now back to our tutorial:

- Press the RESET key, then press the START/STOP key to hear what you have just recorded.

Auto punch recording is fine for re-recording entire measures, but it cannot be used to fix mistakes that occur in the middle of a measure, without also affecting the rest of the measure. This is because you can only set it to punch in and out at the beginnings and ends of measures.

There may be times—particularly when recording with the Quantize parameter set to HI—that you will hear leftover notes at the beginning of a punch-in measure together with new notes you have recorded using auto punch recording. This is because the leftover notes were actually recorded at the very end of the previous measure.

Because these notes occur just *before* the punch-in point, they do not get recorded over (see the figure below). You can fix this problem using manual punch recording to re-record the part, or Event Edit to delete the leftover notes.



To further illustrate this leftover note problem, let's try using auto punch recording to fix the C-sharp that is tied into the beginning of measure 4. Unlike the subtle timing difference of the leftover note in the hypothetical situation described above, this C-sharp occurs an entire eighth note before measure 4, making this problem more obvious.

- If the *i2/i3* has not yet stopped playing, press the START/STOP key followed by the RESET key.
- Enter a value of **004** for both the Start Measure and End Measure parameters.
- Press the REC/WRITE key. When you are ready, press the START/STOP key to start recording.
- When you get to measure 4, play the D-natural as in the score on page 70, and hold it to the end of the measure.
- After measure 4 is finished, press the START/STOP key.
- Press the RESET key, then press the START/STOP key to hear what you have just recorded.

The track should sound like this:



As you can see, auto punch recording does not erase the note just before the punch-in point because the Start Measure parameter can only be set to the beginning of a measure. We will use manual punch recording to fix the C-sharp, but first we must do something about our unsuccessful auto punch correction. Once again, we will use the Compare function to undo this change.

## 7.7 Comparing and undoing

Immediately after changing a track's data (by recording, editing, etc.), you can use the Compare function to compare the new version of the track with the version before the change was made. You can also use this function to undo the last action you performed.

Let's compare this new version of Track 6 with the original:

- If the *i2/i3* has not yet stopped playing, press the START/STOP key followed by the RESET key.
- Now press the COMPARE key once.

The COMPARE key's LED should light up to indicate that the Compare function is on.

- Press the START/STOP key and listen to the original version.

You can switch freely between the original and new versions by pressing the COMPARE key after stopping the sequencer between each playback. When you have decided on which version to keep, you can proceed with whatever operation you would like to perform next, without pressing the COMPARE key. The COMPARE key works in this fashion for any of Song mode's edit and record functions.

For our example, we will keep the old version (COMPARE key LED lit).

### 7.8 Using manual punch recording to fix mistakes

*Manual punch recording* allows you to punch in (start recording) and punch out (stop recording) at any time during playback of a song. This is useful for re-recording sections of a song which start in the middle of a measure, for example.

To illustrate this, we will fix the C-sharp at the end of measure 3.

- Cursor to the Record Mode setting which should currently read AUTP (auto punch).
- Change it to MANP (manual punch).

SONG0 New Song				▶Record Mode			
A11	A12	A13	A14	A15	A16	A17	A18
A21	A22	A23	A24	A25	A26	A27	A28
SONG0 Tr01 M001 4/4				REC			
♩=120:MAN Q:HI M:OFF				PROGRAM			
A	B	C	D	E	F	G	H

- Press the RESET key to make sure you are starting from the beginning of the song.
- Press the START/STOP key to start *playback*.
- During the eighth rest (r) in the middle of measure 3, press the REC/WRITE key with your free hand and play the C followed by the D.

The *i2/i3* will start to record and continue recording until you press the REC/WRITE key again, at which point the *i2/i3* will stop recording, but continue playing.

- Press the REC/WRITE key at the end of measure 4 to stop recording.



When you press the REC/WRITE key to stop recording, the timing of the music may seem to hesitate. This is normal. When you play back what you have just recorded, you will hear no flaw in the timing.

It is possible to punch in and out more than once during the playback of a song. However, you must be careful because the Compare function will allow you to undo only the *last* punch-in.

- If the *i2/i3* has not yet stopped playing, press the START/STOP key, followed by the RESET key.
- Press the START/STOP key again and listen to what you have recorded.

### Using a footswitch for manual punch recording

You can also use an optional Korg PS-1 or PS-2 footswitch or the EC5 External Controller for manual punch recording. This way your hands are free to play the keyboard.

To use a footswitch for manual punch recording:

- Go to Global mode and press the PAGE+ key once.
- Cursor to Assignable Pedal 1, and choose PUNCH IN/OUT with the VALUE controls.
- Connect the footswitch jack to the ASSIGN PDL/SW 1 jack on the rear panel of the *i2/i3*.

Now you can return to Song mode and use the footswitch instead of the REC/WRITE key to control punch-in recording.

You can also use the ASSIGN PDL/SW 2 jack for this function if you are already using ASSIGN PDL/SW 1 for another purpose—just be sure to choose PUNCH IN/OUT for Assignable Pedal 2 in Global mode.

See page 2 for information on how to use the EC5.

## 7.9 Editing events

A single step of musical data—such as a note, a program change, or a “sustain pedal on” message—is called an *event*. The Event Edit function allows you to modify, insert, or delete individual events from a track, giving you precise control over the data in the tracks. Think of it as a “track data microscope.”

In this example, we are going to record the guitar part on Track 4 with a wrong note, and use the *i2/i3* Event Edit function to change it.

- Using the CURSOR POSITION keys and VALUE controls, cursor to the Track parameter and select **Tr04** (Track 4).

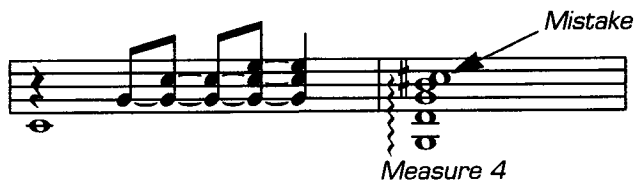
**Recording the guitar part**

When you play the keyboard you should be able to hear program A41 ClassicGtr, the program you have assigned to Track 4.

- Cursor to the Quantize parameter (bottom line, cursor key C) and select a value of HI (no quantizing).
- Cursor to the Record Mode setting, which should read MANP (manual punch). Change it to OVWR (overwrite).

When you play the guitar part, remember to play it an octave lower than written, as indicated by the small "8" under the clef in the score.

- Record the guitar part, but play a C-sharp for the top note of the chord in measure 4 instead of a D-natural.

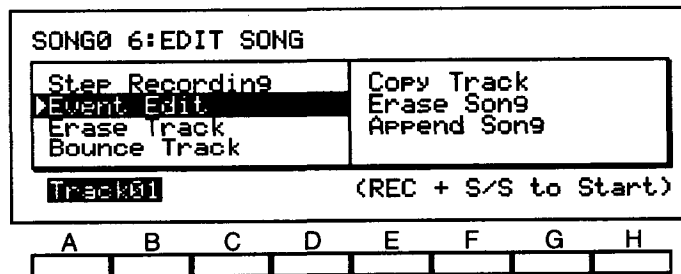


- Play back the song to hear the mistake in measure 4.

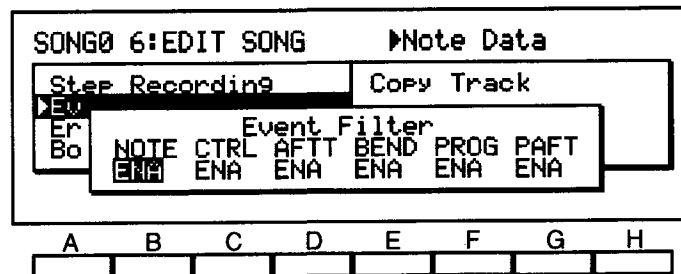
**The Event Edit function**

Before we fix this mistake, let's take a look at the Event Edit function.

- Press the RESET key.
- Go to Page 6 by pressing the PAGE+ key five times, or by pressing the DATA ENTRY 6 key while holding down the SONG mode key.
- Press the down arrow key (▼) once to select Event Edit.



- Use the VALUE controls to select Track04 on the bottom of the display, if it is not already selected.
- Press the REC/WRITE key once.



This brings up the *event filter*, which allows you to select the type(s) of events you would like to view and edit with the Event Edit function. You may find it helpful to disable the viewing of certain types of events—espe-

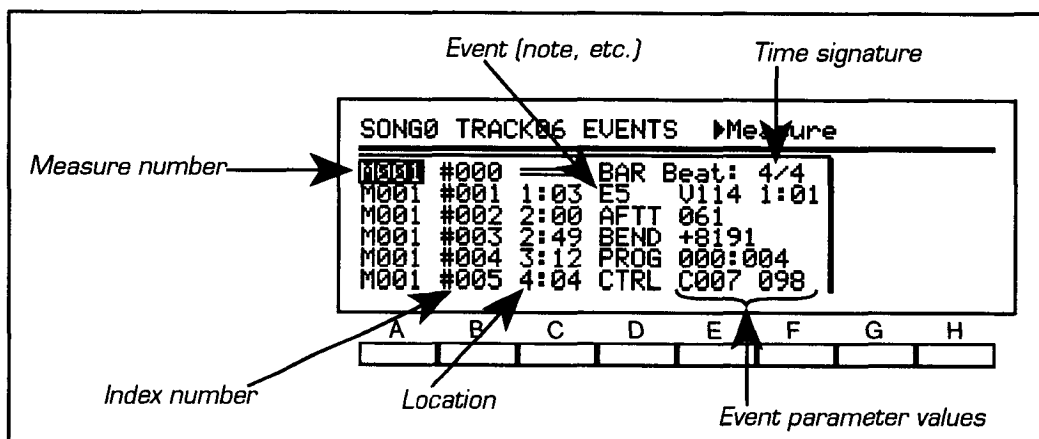
cially those which tend to be recorded in large amounts, such as aftertouch—to make it easier to view a specific event type.

There are six different event types:

NOTE	note data
CTRL	control change
AFTT	aftertouch
BEND	pitch bend
PROG	program change
PAFT	polyphonic aftertouch

All six event types can be either enabled (ENA) or disabled (DIS). For now, leave all of them set to ENA. (The *i2/i3* does not respond to polyphonic aftertouch, but it can record these messages for controlling other instruments.)

- Press the START/STOP key to enter the Event Edit function.



A typical Event Edit display looks like the one shown above. Reading from left to right, we first encounter the measure number. With the cursor highlighting this parameter, you can enter measure numbers using the VALUE controls or the DATA ENTRY keys. Doing so will take you to the beginning of that measure.

- Press the UP key three times to get to measure 4.

Next is the index number, which numbers events consecutively from the start of each measure. It is used to keep track of the events in each measure.

The location parameter, above cursor key C, indicates the start time of events. It is expressed in terms of the beat number within the measure, and the *pulse*, or subdivision, of that beat. One pulse is equal to 1/96th of a quarter note.

The possible range of values for the location parameter is 0:00–9:95, depending on the current time signature. If a note is held over from one measure to the next, it will be treated as two tied notes. A value of TIE will be specified as the location of the second of these notes.



The following table shows some location settings that correspond to common musical note values.

<b>Musical value</b>	<b>Location value</b>
♪	1:00, 2:00, etc.
♪	1:00, 1:48, 2:00, etc.
♪ triplet	1:00, 1:32, 1:64, 2:00, etc.
♪	1:00, 1:24, 1:48, 1:72, 2:00, etc.
♪ triplet	1:00, 1:16, 1:32, 1:48, 1:64, 1:80, 2:00, etc.

Events which have the same location value will occur simultaneously, even though they have separate index numbers. If you move an event by changing its location value, the *i2/i3* will reassign the index numbers in the measure accordingly.

Next is the event parameter, above cursor key D. This can be any one of the six event types listed in the event table on page 85. When you edit the Tempo Track—which is located after Track 16—a seventh event type, TEMPO, will appear instead.

Each event type also has one or more associated data values.

In the case of NOTE events, the note name and number are displayed above cursor key D. You can change the value of this parameter either by using the VALUE controls or by playing the desired note on the keyboard while pressing cursor key D. The new note will sound as you change this value. The possible values for NOTE events range from C-1 (C minus 1) to G9. Middle C is C4 (see the chart in Appendix C of the Reference guide).

Above cursor key E is the velocity parameter. You can change the value of this parameter by using the VALUE controls, DATA ENTRY keys or by playing any note on the keyboard at the desired velocity while pressing cursor key E. The note will sound at the new velocity when you change this value. The range of possible velocities is from 2 to 126, in increments of 2.

Finally, above cursor key F, is the length parameter, expressed in terms of beats and pulses. This parameter determines how long a note will sound (that is, how long the note was held on the keyboard). You can change the value of this parameter using the VALUE controls or the DATA ENTRY keys. The possible range of values for the length parameter is 0:00–9:00, depending on the current time signature and the location of the current event. If a note is held over from one measure to the next, it will be treated as two tied notes. A value of TIE will be specified for the length parameter of the first of these notes.

For BAR events, which mark the beginning of each measure, the only editable parameter is the Beat (time signature) parameter located above cursor key F. Use caution when editing this parameter, because changing its value on one track will change it for all the tracks.

Use the VALUE controls to edit the Beat parameter. The possible values for this parameter depend on the song's base resolution (see page 83 in the Reference Guide for details).

Refer to the Event Edit table on page 87 for a complete list of the possible values of all event types.

**Event Edit**

Cursor key	Parameter	Range of values	Note
A	Measure (M)	001-999	The measure to be edited
B	Index number (#)	000-	Number depends on how many events occur in each measure
C	Location	TIE, 1:00-9:95	Start time of event within the measure
D	Event type	BAR	Indicates new measure (barline)
		C-1 to G9 (NOTE)	Note name and octave number (note event)
		BEND	Pitch bend event
		AFTT	Monophonic aftertouch event
		PROG	Program change event
		CTRL	Control change event
		PAFT	Polyphonic aftertouch event
E	Beat (for BAR events)	1/4-9/4 1/8-16/8 1/16-16/16	Low base resolution
		1/4-5/4 1/8-10/8 1/16-16/16	High base resolution
	Velocity (V)	2-126	For NOTE events
	Bend amount	-8192...+8191	For BEND events (+0000=no bend)
	Aftertouch amount	000-127	For AFTT events
	Program bank number	AB, CD, DRM, 3-127, ---	For PROG events (Values 3-127 are used for connected MIDI instruments.)
	Controller number <sup>†</sup> (C)	000-127 <sup>‡</sup>	For CTRL events
	Polyphonic aftertouch key	C-1 to G9	For PAFT events
F	Tempo (♩=)	40-240	For TEMPO events (tempo track only)
	Length	0:00-9:00, TIE	Duration for NOTE events
	Program number	000-127	For PROG events (Refer to page 141.)
	Control amount <sup>†</sup>	000-127	For CTRL events
	Polyphonic aftertouch amount	000-127	For PAFT events
G	Insert	INS	Press this key to insert an event just before the current event.
H	Delete	DEL	Press this key to delete the current event.

<sup>†</sup>See the Controllers table below for a list of recognized controller numbers and ranges.

<sup>‡</sup>If messages for controllers 120-127 exist in a Song mode track, the i2/i3 will transmit these messages, but will not respond to them. It will, however, respond to these messages if received at the MIDI IN jack.

**Controllers**

Controller Number	Type of control	Range of values	Note
1	Pitch modulation	0 (off)–127 (max.)	Push joystick forward (+Y)
2	VDF modulation	0 (off)–127 (max.)	Pull joystick back (–Y)
4	Scale change	0–63 (Main Scale), 64–127 (Sub Scale)	When a value between 64 and 127 is received, the <i>i2/i3</i> will switch to the Sub Scale specified in Global mode.
7	Volume	0 (min.)–127 (max.)	Controls the overall volume of a track
10	Panning	0–63 (L15–L01), 64 (CNT), 65–127 (R01–R15)	Controls the stereo position for a track
11	Expression	0 (min.)–127 (max.)	For crescendi, decrescendi, etc.
12	Effect 1 control	0–63 (–15...–1), 64 (0), 65–127 (+1...+15)	Dynamic modulation of FX1
13	Effect 2 control	0–63 (–15...–1), 64 (0), 65–127 (+1...+15)	Dynamic modulation of FX2
64	Damper pedal	0–63 (off), 64–127 (on)	Sustain pedal
72	Release time	0 (faster)–64–127 (slower)	A value of 64 will set the release time to the program's original value.
73	Attack time	0 (faster)–64–127 (slower)	A value of 64 will set the attack time to the program's original value.
74	Brightness (VDF cutoff)	0 (low)–64–127 (high)	A value of 64 will set the VDF cutoff to the program's original value.
91	C Level	0–127 (0–9)	Effect send level
92	Effect 1 on/off	0 (off), 1–127 (on)	Switch for FX1
93	D Level	0–127 (0–9)	Effect send level
94	Effect 2 on/off	0 (off), 1–127 (on)	Switch for FX2

**Changing notes with Event Edit**

Now we will use Event Edit to change the C-sharp we played on page 84 to a D-natural.

- ☛ Press cursor key B to highlight the index number parameter.
- ☛ While listening to the *i2/i3*, repeatedly press the UP key until you hear the C-sharp. You can also use the arrow keys (▲ and ▼) to move through the events, regardless of which parameter is currently highlighted.
- ☛ Press cursor key D to highlight the note parameter.
- ☛ Press the UP key once to raise the C-sharp to a D-natural.

You should hear the D-natural play.

- ☛ Press the START/STOP key to exit Event Edit.

- Return to Page 1 by pressing the PAGE- key five times, or by pressing the DATA ENTRY 1 key while holding down the SONG mode key.
- Press the START/STOP key and listen to the guitar part with the fixed note.

If you want to cancel all of the changes made during an Event Edit session, press the COMPARE key before performing any other edit or recording operations.

### Removing notes with Event Edit

You will recall that all the instruments end on the third beat of the last measure. All, that is, except the percussion part. This part—which we recorded as a pattern—continues through the fourth beat. Now let's use the Event Edit function to remove those extra notes.

- Go to Page 6.

Event edit should still be highlighted.

- Select Track02.
- Press the REC/WRITE key.
- Set AFTT (above cursor key D) to DIS (disable).

This way, if there are any aftertouch events in the track, you won't see them; you should only see note data.

- Press the START/STOP key to enter Event Edit.
- Go to measure 8.
- Press the down arrow key (▼) eight times.

The cursor should be at measure 8, index #008, location 3:48. The note should be A#2.

SONG0 TRACK02 EVENTS						▶Measure
M008	#003	1:48	A#2	U120	0:20	
M008	#004	2:00	A#2	U120	0:16	
M008	#005	2:48	A#2	U124	0:20	
M008	#006	2:48	C2	U116	0:32	
M008	#007	3:00	A#2	U122	0:18	
<b>M008</b>	<b>#008</b>	<b>3:48</b>	<b>A#2</b>	<b>U120</b>	<b>0:18</b>	<b>INS DEL</b>

A	B	C	D	E	F	G	H

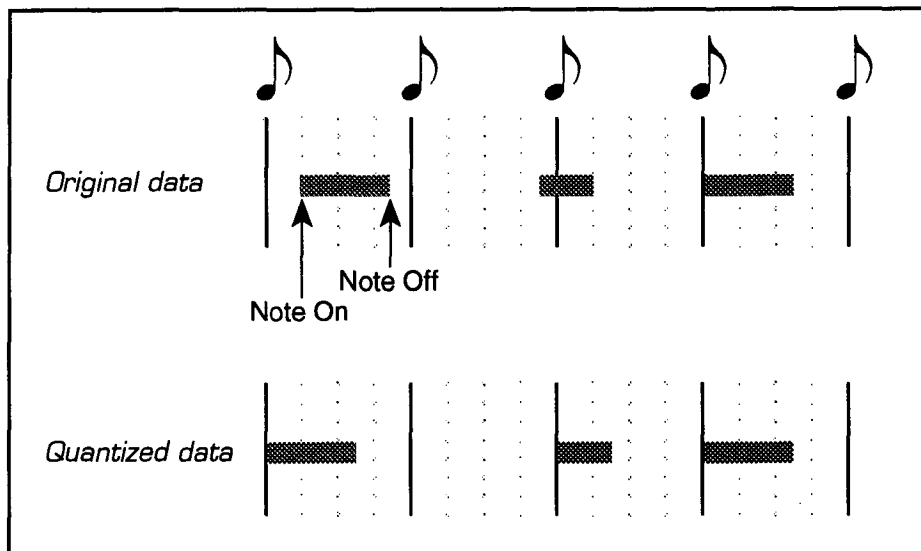
- Press DEL (cursor key H) to erase this event.

If you accidentally delete the wrong event, immediately press INS (insert, cursor key G). This will re-insert the last deleted event.

- Press DEL (cursor key H) three more times to erase the last three events.
- Press the START/STOP key to exit Event Edit.
- Return to Page 1 by pressing the PAGE- key five times, or by pressing the DATA ENTRY 1 key while holding down the SONG mode key.
- Press the START/STOP key and listen to the percussion part.

## 7.10 Quantizing

The *Quantize* function is used to tighten the rhythmic accuracy of a track. This is done by "rounding off" the beginning of notes to the nearest rhythmic value you specify. For example, if you specify a value of ♩ (eighth note), all notes will be aligned to a theoretical eighth note grid. It is also possible to quantize other events such as pitch bend and aftertouch.



There are two ways to quantize on the *i2/i3*. One is *input quantizing*, in which the notes are quantized as you play them. The other, more flexible option, is *quantizing after-the-fact*.

### Quantizing on input

You have already used this function for most of the tracks in this tutorial. By selecting a quantizing value on Page 1 (bottom line, cursor key C), the notes you play (as well as all other event types) will be quantized as you record them.

You can quantize events to the nearest quarter note (♩), eighth note (♩<sub>2</sub>), eighth note triplet (♩<sub>3</sub>), sixteenth note (♩<sub>4</sub>), sixteenth note triplet (♩<sub>3</sub>), thirty-second note (♩<sub>8</sub>), or thirty-second note triplet (♩<sub>3</sub>).

If you would like the *i2/i3* to play back the track exactly as you recorded it, without any quantization, set this parameter to a value of HI. The *i2/i3* will record at its maximum timing resolution, which is 96 pulses per quarter note (when the Base Resolution parameter is set to HI). Musically that's equivalent to 256th-note triplets!

You can figure out what value to use by determining the smallest rhythmic value in the music you would like to record, and assign that value to the quantize parameter. All data is quantized to that value for as long as you have it set to that value.

This can be a problem, however, if you want to record a part that contains two rhythmic values that cannot be quantized using the same value, such as eighth notes and eighth note triplets. And, although quantizing can be very helpful for fixing the timing of a track, it can make your tracks seem stiff and robot-like. Quantizing after-the-fact can help solve these problems.

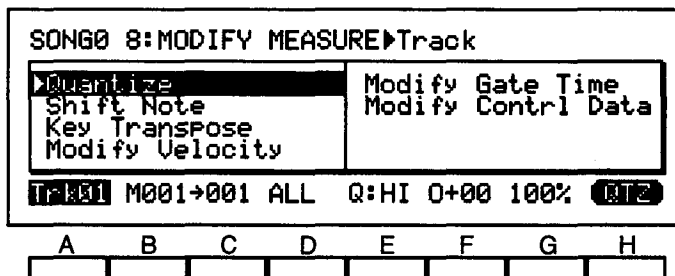
**Quantizing after-the-fact**

Quantizing after-the-fact gives you the option of selecting which measures, as well as which event types, will be quantized. You can also specify the quantize intensity, or how closely the track is quantized to the grid.

There is also a quantize offset, which allows you to shift the timing of events. This is useful for adjusting the "feel" of a drum track, for example. But most importantly, quantizing after-the-fact allows you to try different levels of quantization, and pick which one sounds best.

Let's quantize the bass track, the first track we recorded.

- Go to Page 8 and select Quantize (if it's not already selected).



- Press cursor key A and select Trk03.
- Press cursor key B and enter a value of 001.

This specifies measure 1 as the beginning of the range of measures to be quantized.

- Press cursor key C and enter a value of 008.

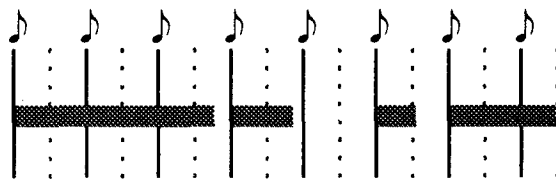
This specifies measure 8 as the end of the range of measures to be quantized.

- Press cursor key E and select a value of ♩ (sixteenth note).
- Press cursor key H to quantize the track.

A "Completed" message will appear.

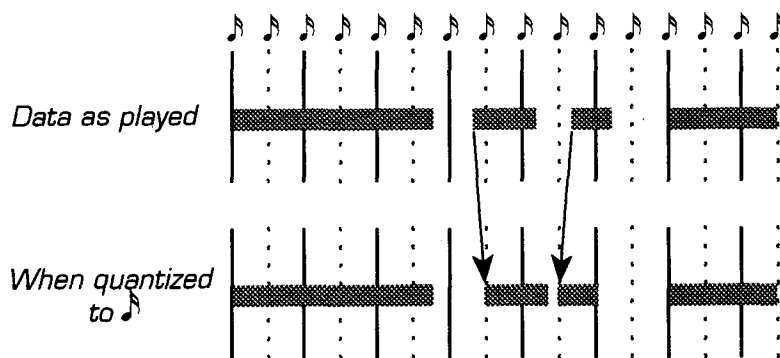
- Return to Page 1 by pressing the PAGE- key seven times, or by pressing the DATA ENTRY 1 key while holding down the SONG mode key.
- Press the START/STOP key and listen to the bass part.

If your timing was a little off when you originally recorded the bass part, some notes may have been quantized to the wrong grid point. To illustrate this, here is the first measure of the bass part as it should be:



Let's say, for example, you have played the second note a little too late, and the third note too early, as shown in the illustration below. When you

quantize the measure using the sixteenth note setting mentioned above, these notes will be moved to the nearby sixteenth note grid points.



The resulting music will be different from the bass part in the score on page 70. It will now look something like this:



If you quantize using the eighth note setting instead, the *i2/i3* will move the notes you played to the desired eighth note grid points. Since the smallest rhythmic value in the bass part is an eighth note, quantizing to eighth notes will likely yield more accurate results.

- If the *i2/i3* has not yet stopped playing, press the START/STOP key.
- Now press the COMPARE key once.

The COMPARE key's LED should light up to indicate that the Compare function is on.

- Return to Page 8.

Quantize should already be selected.

- Make sure the End Measure parameter above cursor key C is set to 8.
- Press cursor key E and select a value of  $\text{♪}$  (eighth note).
- Press cursor key H to quantize the track.

A "Completed" message will appear.

- Return to Page 1.
- Press the START/STOP key and listen to the bass part.

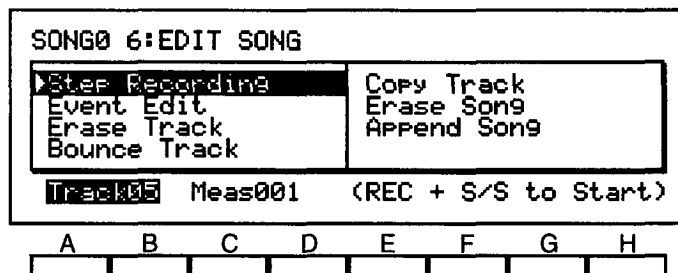
## 7.11 Step recording

Step recording allows you to enter music one note or chord at a time, without having to play to a metronome. We will use step recording to record the marimba part, the final track to record.

- Using the CURSOR POSITION keys and VALUE controls, cursor to the Track parameter (second line from the bottom, CURSOR key B) and select Tr05 (Track 5).

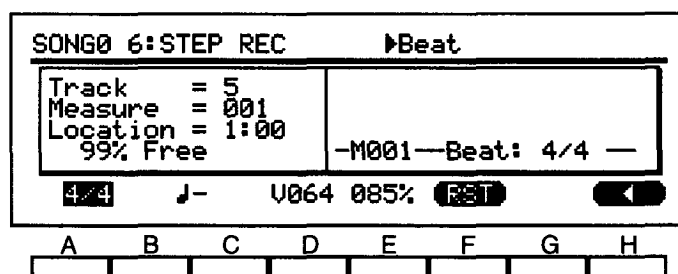
When you play the keyboard you should be able to hear program A25 Marimba, the program you have assigned to Track 5.

- Go to Page 6 by pressing the PAGE+ key five times, or by pressing the DATA ENTRY 6 key while holding down the SONG mode key.
- Press the up arrow key (▲) once to select Step Recording.



Track 5 should already be selected.

- Press the REC/WRITE key followed by the START/STOP key to enter the Step Recording function.



The box on the left half of the display shows the current track, measure, and location, as well as the percentage of memory remaining. The box on the right half of the display shows the location, note name and number, velocity and length of each note you play. The *i2/i3* will constantly update this box to show the most recent note events.

Cursor key A shows the current time signature. If you change this value here, it will change for all the tracks.

Above cursor key B is the step time. Each time you play a note or chord on the keyboard, it will be entered with the note value you specify here regardless of how fast or slow you play, or how long you hold each note. All notes that you play at the same time will be entered at the same step. The *i2/i3* will advance to the next step when you release all the notes.

You can specify a triplet (3) or a dot (·) for the current step time by changing the value of the Triplet/Dot parameter above cursor key C. A value of “-” indicates that the step time is that specified above cursor key B.

Above cursor key D is the Velocity parameter, which determines the velocity for each note you play. If you leave this set to **V064**, for example, all notes will be entered with a velocity of 64. The actual velocity at which you play each note will be ignored.

If you would like the *i2/i3* to record the actual velocities you play, set this parameter to **KEY**, the value after 126.

Above cursor key E is the Note Length parameter. This sets the note length as a percentage of the step time you specified above cursor key B.

Each time you press [RST] (cursor key F), a rest will be entered for the duration specified above cursor key B, and the *i2/i3* will advance to the next step.



Once notes have been entered, the label [TIE] will appear above cursor key G. Pressing this key will lengthen the previous step by the amount specified above cursor key B.

Each time you select [◀] (cursor key H), the *i2/i3* will move back one step (using the step time specified above cursor key B). Any notes which exist at or after that position will be erased.

If you step record over a measure that contains data, the old data will be erased.

### Recording the marimba

- Press cursor key B and select a value of ♪ (eighth note).
- Press cursor key D and enter 114.
- Play each chord in the marimba part, making sure to release all notes before playing the next chord.
- Before playing the last chord, press cursor key B and enter a value of ♩ (quarter note).
- Play the last chord.
- Press the START/STOP key to exit Step Recording.
- Return to Page 1.
- If the tempo is set to a value other than 150, change it to 150 now.
- Press the START/STOP key and listen to the marimba part.

Congratulations! You have finished recording all the tracks for this tutorial. Let's give this song a name and save it to disk.

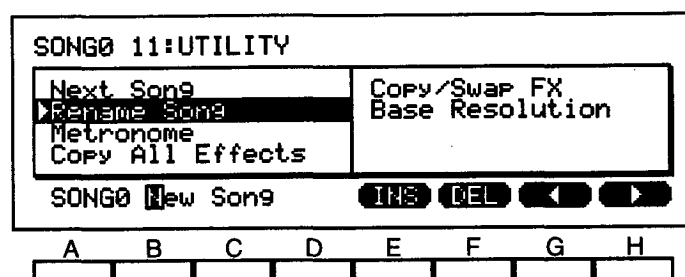
## 7.12 Naming and saving songs

It is important, when working in Song mode, to save your songs to disk on a regular basis. Song mode (and Backing Sequence mode) does not use battery-backed RAM. This means that if you accidentally shut off the power, or if there is a power failure, you will lose all your data, not to mention all your hard work.

### Naming

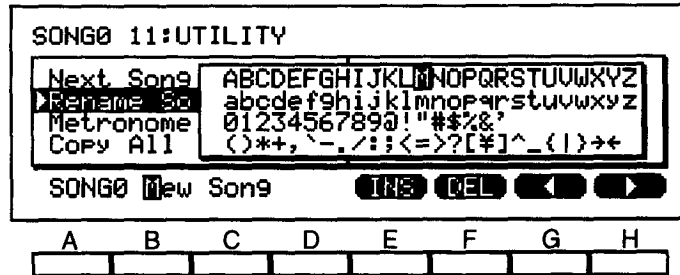
You don't need to name songs before saving them. If you save an unnamed song, the default title "New Song" will be saved as its name. However, since we've finished the recording of this song, we might as well give it a name before we save it. Let's name this song "My Song."

- Go to Page 11 by holding the SONG key and pressing the 3 (-) key.
- Press the down arrow key (▼) once to highlight the Rename Song function.



- Press the DOWN key once to change the "N" in "New Song" to an "M."

A pop-up menu will appear showing all the available characters, with the current character highlighted.



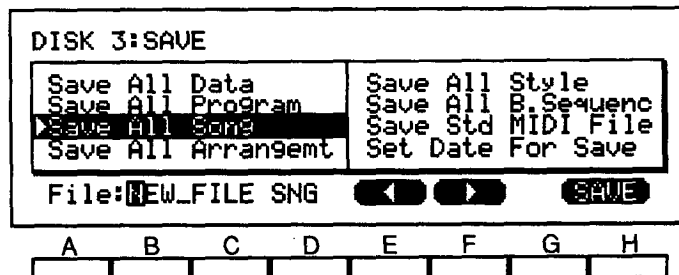
- Press cursor key H to move to the next character.
- Use the UP key or the VALUE dial to change the "e" to a "y."
- Press cursor key H to move to the next character.
- Press cursor key F to delete the "w."

The song name should now be "My Song." If you return to Page 1, you will find this new name at the top of the display.

### Saving

Now we will save this song to disk.

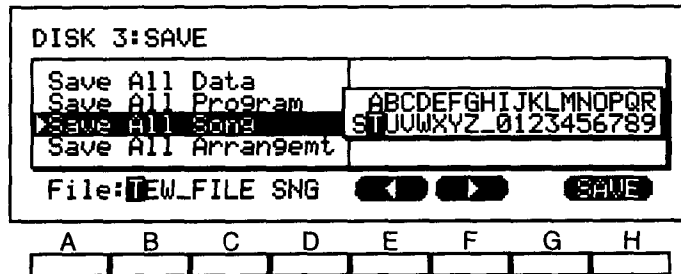
- Insert the disk you formatted in Chapter 1 into the disk drive.
- Make sure the write protect tab is set so that the window is closed. This way, it will be possible to save information to the disk.
- Press the DISK mode key.
  - Go to Page 3 and press the down arrow key (▼) two times to highlight the Save All Song function.



This function will save all Song mode data as a single file on the disk. If you loaded the "\_I\_LANDS" file at the start of this tutorial, both songs will be saved to the same file. You must give the file a name of up to eight characters. The three letter filename extension, or suffix, "SNG" will automatically be tagged onto the file so that you can easily identify it as a song file.

Let's name this file "TUTORIAL."

- Using the VALUE controls, change the "N" to a "T."



A pop-up menu will appear showing all the available characters, with the current character highlighted.

- Press cursor key F to move to the next character.
- Using the VALUE controls, change the "E" to a "U."
- Press cursor key F to move to the next character.
- Using the VALUE controls, change the "W" to a "T."
- Press cursor key F to move to the next character.
- Use the same method to enter the O, R, I, A, and L.

The file name should now be "TUTORIAL."

- Press cursor key H to save this file to the disk.

A message will appear stating "Now saving songs..." After a moment, the message will change to "Completed."

You could also use the Save Std MIDI File function to save this song as a standard MIDI file, which you could share with computers and other MIDI instruments. See Chapter 11 of this manual, and Chapter 9 of the Reference Guide for information regarding standard MIDI files and this function.

Now that you have saved your work to disk, let's take a break from the tutorial and look at the various functions available in Song mode.

### 7.13 Other functions in Song mode

You should be familiar with Page 1 of Song mode by now; however there are still some functions which we have not yet covered.

The *Tempo Track* parameter (bottom line, cursor key B) determines the source of the current tempo. When set to MAN, the tempo set on Page 1 will be used. When set to AUT, values played back from the Tempo Track will be used. If it is set to REC, you can record tempo changes onto the Tempo Track. See the Reference Guide page 85 for more information.

The *Parameter Select* setting (bottom line, cursor key E) determines which of five parameters is displayed for each track in the first and third lines of the display. The choices are PROGRAM, VOLUME, PANPOT, C LEVEL, and D LEVEL. We will use these settings starting in Section 7.15.

You have probably noticed the black bars in the second and fourth lines of the display. These *track activity bars* indicate whether the track is playing or recording. They can also be used to mute or solo individual tracks. See Muting and soloing on page 101 for details on how to use these functions.

SONG0 2: TRACK 1-8 ▶Track Status							
TRK1	TRK2	TRK3	TRK4	TRK5	TRK6	TRK7	TRK8
BOTH	BOTH	BOTH	BOTH	BOTH	BOTH	BOTH	BOTH
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
T+00	T+00	T+00	T+00	T+00	T+00	T+00	T+00
D+00	D+00	D+00	D+00	D+00	D+00	D+00	D+00
PROG	PROG	PROG	PROG	PROG	PROG	PROG	PROG
A	B	C	D	E	F	G	H

On Page 2 we have five parameters for Tracks 1–8. *Track Status* determines whether the track will play the *i2/i3* internal tone generator, transmit notes to another MIDI tone generator, or play both internal and MIDI tone generators. The track can also be turned off. *Protect* prevents accidentally erasing or recording over a track. *Transpose* lets you transpose a track up or down two octaves. *Detune* offsets the pitch of a track up or down 50 cents. One cent is equal to 1/100th of a semitone. *Pitch Bend Range* sets the pitch bend range for each track up or down one octave, or will use the value stored in the program.

The same parameters for Tracks 9–16 can be found on Page 3.

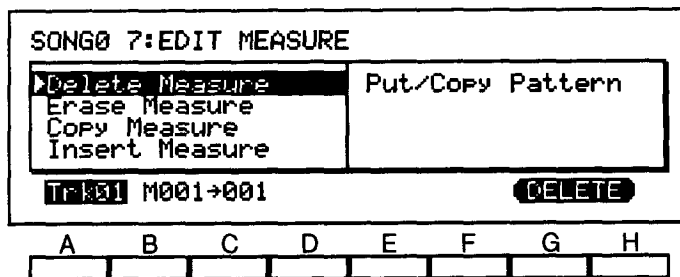
SONG0 4: CH/WINDOW 1-8 ▶Channel							
TRK1	TRK2	TRK3	TRK4	TRK5	TRK6	TRK7	TRK8
01	02	03	04	05	06	07	08
127	127	127	127	127	127	127	127
001	001	001	001	001	001	001	001
G9	G9	G9	G9	G9	G9	G9	G9
C-1	C-1	C-1	C-1	C-1	C-1	C-1	C-1
A	B	C	D	E	F	G	H

Page 4 contains the *MIDI Channel*, *Velocity Window*, and *Key Window* parameters for Tracks 1–8. The *Velocity Window* parameters let you specify how hard and how soft a key must be played in order for the program to be heard. The *Key Window* parameters allow you limit the range of notes a program will play. See pages 89 and 90 of the Reference Guide for more information on these parameters.

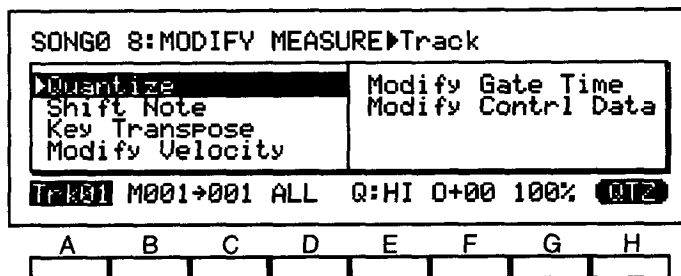
Page 5 contains the same parameters as Page 4, but for Tracks 9–16.

SONG0 6: EDIT SONG							
Step Recording				Copy Track			
Event Edit				Erase Song			
Erase Track				Append Song			
Bounce Track							
Track01 Meas001 (REC + S/S to Start)							
A	B	C	D	E	F	G	H

Page 6 contains several editing functions, including *Step Recording* and *Event Edit*, which you have used already. The *Erase Track* function erases a track you specify. The *Bounce Track* function removes the data from one track and merges it with the data of another. *Copy Track* copies the data from one track to another, replacing any data in the destination track. *Erase Song* erases the current song. *Append Song* allows you to “tack on” one song to the end of another song—or even to itself. See pages 91 through 94 of the Reference Guide for more information on these functions.

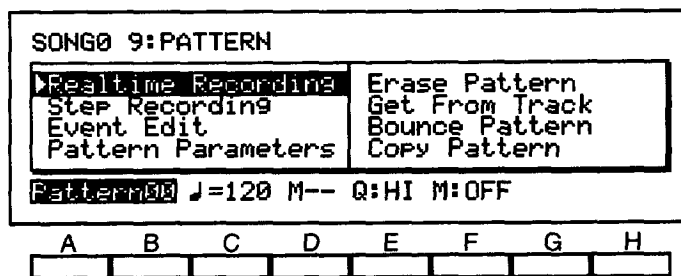


Page 7 lets you edit individual measures. *Delete Measure* lets you delete a specified range of measures from either a single track or all tracks simultaneously. *Erase Measure* lets you specify a specific data type to be erased from a range of measures in a track, or all tracks. *Copy Measure* copies a range of measures from one track to another. *Insert Measure* inserts a measure or measures into a track, or all tracks. *Put/Copy Pattern*, as you already know, places a pattern into a track. See pages 95 through 102 of the Reference Guide for more information on these functions.



Page 8 allows you to modify track data in various ways. *Quantize*, as you discovered in Section 7.10, lets you adjust the timing of data by aligning it to a rhythmic grid. *Shift Note* transposes note data in a track up to two octaves up or down. This parameter is unlike the Transpose parameter on Pages 2 and 3 in that it modifies the actual note data in the track, as opposed to simply transposing the tone generator. You can specify the track, a range of measures, and a range of notes to shift.

The *Key Transpose* function lets you transpose tracks from one key to another. Like the Shift Note function, it transposes the actual note data in the track. *Modify Velocity* allows you to alter the velocities of note data to conform to a specified curve. *Modify Gate Time* lets you change the length of note data. *Modify Control Data* lets you create or erase MIDI controller data on a track, for creating various effects such as fade ins and fade outs. See pages 103 through 107 of the Reference Guide for more information on these functions.



Page 9 gives you control over patterns. *Realtime Recording* lets you record patterns in real time. *Step Recording* lets you record patterns in step time. *Event Edit* lets you edit the individual events in a pattern. *Pattern Paramete-*

ters lets you set the time signature, base resolution, and length for a pattern. *Erase Pattern* lets you erase a specified pattern. *Get From Track* lets you copy data from a track into a pattern. *Bounce Pattern* removes the data from one pattern and merges it with the data of another. *Copy Pattern* copies the data from one pattern to another, replacing any data in the destination pattern. See pages 108 through 112 of the Reference Guide for more information on these functions.

SONG0 10:EFFECT		Effect Type	
FX1 19:Chorus 1	:OFF Mod:NONE I+00	D010 S0.30 M60 TRI	L+00 H+00 →60:40
FX2 01:Hall	:OFF Mod:NONE I+00	3.2 D060 E62 HD30	L-04 H+00 →75:25
[PARALLEL3] FX1:L5	R5 FX2:L5	R5	R5

A	B	C	D	E	F	G	H
---	---	---	---	---	---	---	---

Page 10 is the Effects page. Here you can set the effect type for each of the two effect processors, as well as the effect placement. See Chapter 7 in the Reference Guide for a complete description of the effects.

SONG0 11:UTILITY	
Next Song	Copy/Swap FX
Rename Song	Base Resolution
Metronome	
Copy All Effects	
Next:OFF	Auto Start:ON

A	B	C	D	E	F	G	H
---	---	---	---	---	---	---	---

Page 11 is the utility page. *Next Song* lets you choose which song will follow the current one. *Rename Song* lets you change the name of the current song. *Metronome* lets you set the level of the metronome, the number of measures for the lead-in, and a pan position for the metronome. *Copy All Effects* lets you copy the effects settings from any program, song, style, arrangement or backing sequence into the current song. *Copy/Swap FX* lets you copy the settings from one effect processor to the other, or switch the settings of one with the other. *Base Resolution* lets you choose a high or low base resolution for the current song. See pages 114 through 116 of the Reference Guide for more information on these functions.

Experiment with different settings, and remember that you can use the Compare function to undo the last edit you have performed for any of the functions on Pages 6, 7, 8, and 9.

Now that you have seen the various functions Song mode has to offer, let's explore some of the various techniques that you can use to give your song a more polished sound.

### 7.14 Layering sounds

A good way to enhance a part is to layer it with another sound. There are many different combinations of sounds you can create with this layering technique. Let's layer the Pan Flute on Track 6 with a string section on Track 7.

- Make sure you are on Page 1 of Song mode.

- Cursor to the Track parameter, and select **Tr07** (Track 7).
- Using the PROGRAM keys, assign program **A71 Marcato** to Track 7.
- Go to Page 4 by pressing the PAGE+ key three times, or by pressing the DATA ENTRY 4 key while holding down the SONG mode key.

This page contains the MIDI Channel, Velocity Window, and Key Window parameters for Tracks 1 through 8, as we mentioned on page 97.

The MIDI channel parameter not only determines which MIDI channel each track will transmit on (for controlling other MIDI instruments), but also can be used for layering the internal sounds of the i2/i3.

You will notice that the MIDI channel set for each track matches the track number. This is the default setting for this parameter.

- Cursor to Track 7's MIDI Channel parameter (cursor key G), and change it to a value of **6**, the same setting as that for Track 6.

Now, whenever you play Track 6, you will hear both sounds. It is not necessary to copy the note data from Track 6 onto Track 7—Track 7 will follow Track 6 automatically.

- Return to Page 1.
- Press the START/STOP key and listen to the strings layered with the pan flute.

By combining this technique with the Key Window parameters (see page 97), you can create split keyboard configurations. This is useful if you want to record a split part such as a bass sound on the lower half of the keyboard together with a piano sound on the upper half. You record data onto one track, but both tracks will play. The Key Window parameters will prevent the bass from playing on the upper part of the keyboard and the piano from playing on the lower part.

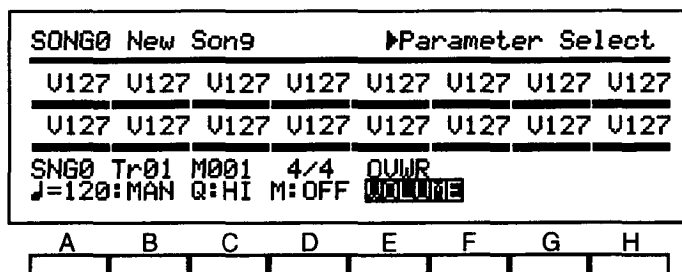
This split keyboard setup can also be played live along with your previously recorded tracks. (See page 90 of the Reference Guide for more information on the Key Window parameters.)

## 7.15 Adjusting volume levels

Now that you have recorded all your tracks, you are ready for the final stage of creating a song—*mixing*. Mixing is an essential part of song production. It involves balancing the levels of the tracks, positioning the sounds in the stereo field, and adding effects such as reverb and chorus to give the sounds more depth.

Let's start with the VOLUME parameter.

- Cursor to the Parameter Select setting, which should currently read PROGRAM. Press the UP key to change it to VOLUME.



(You can also use the STYLE key to change this setting. Each time you press the STYLE key, the *i2/i3* will cycle through the Parameter Select settings: PROGRAM, VOLUME, PANPOT, C LEVEL, D LEVEL, then back to PROGRAM.)

You will notice that each track now displays its volume level. The volume parameter has a range of 0–127. A setting of 0 results in no sound, and a setting of 127 is maximum volume.

Because this song is only eight measures long, let's set it to loop. This way, the song will repeat automatically, allowing you to adjust the volume of each track without having to press the START/STOP key each time the song ends.

- Cursor to the Record Mode setting, which should currently read OVWR (overwrite). Change it to LOOP (loop).

You will notice two new parameters which automatically appear: Start Measure and End Measure.

- Make sure the Start Measure parameter is set to 001.
- Enter a value of 008 for the End Measure parameter.

The *i2/i3* will play from measure 1 to measure 8, return to measure 1 and repeat.

- Press the START/STOP key and listen to the song.

Chances are that you will need to adjust the volume levels of the tracks to create a more balanced sound.

### ***Muting and soloing***

Start by listening to only a few tracks at a time, such as the drum, percussion and bass tracks. Mute the other tracks so that you can concentrate on the first three tracks.

The most convenient way to mute and solo tracks is by using the ARRANGEMENT/STYLE keys. Keys 1 through 8 in the upper row control muting and soloing for Tracks 1 through 8, and keys 1 through 8 in the lower row control muting and soloing for Tracks 9 through 16. Each time you press a key, the activity bar for the corresponding track will change from PLAY, to MUTE, to SOLO, then back to PLAY.

- Press the upper-row 6 key once.

PLAY should change to MUTE, and you should no longer be able to hear the melody. (The string sound on Track 7 will also stop playing because it is being controlled by Track 6.)

- Repeat the last step for Tracks 4 and 5.

If you want to listen to just one track, use the Solo function.

- Press the upper-row 2 key twice.

PLAY will change to SOLO, and you will hear the percussion part by itself. You can solo other tracks, too; if you do they will play along with the percussion part.

- Press the upper-row 4 key once.

MUTE will change to SOLO, and you will hear the guitar part along with the percussion part.



You can also cursor to a track's activity bar and use the VALUE controls to mute or solo the track.

**Balancing the tracks**

The best approach to the whole mixing process is to make rough settings for the various parameters, listen to the results, then fine-tune the settings. You'll often find that after changing one parameter, you may need to re-adjust other parameters.

Mixing is an art in itself, so don't be discouraged if you are dissatisfied with the results of your first try.

- Press the upper-row 4 key twice to return Track 4 to the MUTE setting.
- Press the upper-row 2 key once to return Track 2 to the PLAY setting.
- Cursor to the volume setting for Track 1 and adjust its volume using the VALUE controls and DATA ENTRY keys.
- Repeat the above step for Tracks 2 and 3.
- Press the upper-row 4 key twice to set Track 4 to PLAY.
- Adjust the volume for Track 4.
- Repeat the last two steps for Tracks 5 and 6.
- Adjust the volume for Track 7.

You will probably need to fine-tune the volume for each track. Also, try listening at different levels using the MASTER VOLUME slider.

**7.16 Positioning sounds in stereo**

Placing sounds in the stereo field is called *panning*. Panning adds a sense of depth and reality to your songs.

Let's set the pan position for the tracks:

- Cursor to the Parameter Select setting, which should currently read VOLUME. Press the UP key to change it to PANPOT (or press the STYLE key).

SONG0 New Song				▶Parameter Select			
CNT	CNT	CNT	CNT	CNT	CNT	CNT	CNT
CNT	CNT	CNT	CNT	CNT	CNT	CNT	CNT
SNG0 Tr01 M001 4/4 QUWR				PANPOT			
J=120:MAN Q:HI M:OFF							
A	B	C	D	E	F	G	H

Each track will now display its pan position. This parameter lets you pan the track to the left, right, or center of the stereo field.

A value of CNT will place the sound in the center of the stereo field. A value of L01 will place the sound slightly to the left of center, and a value of L15 will move it completely to the left. Likewise, a value of R01 will place the sound slightly to the right of center, and a value of R15 will move it all the way to the right.

Another setting, PRG, uses the pan settings that have been saved for each oscillator in the current program. In the case of drum programs, each drum sound has its own pan setting that will be used when this parameter is set to PRG.

### **Panning the tracks**

Try experimenting with different settings for the tracks. Typically, the bass drum, snare drum, bass, and melody should be panned to the center position.

- Cursor to the pan setting for Track 1 and set it to **PRG** using the VALUE controls.
- Keep the pan setting for Tracks 2 and 3 set to **CNT**.
- Cursor to the pan setting for Track 4 and set it to **L06** using the VALUE controls.
- Cursor to the pan setting for Track 5 and set it to **R06** using the VALUE controls.
- Keep the pan setting for Tracks 6 and 7 set to **CNT**.

The pan parameter also determines the amount of signal that is sent to effect inputs A and B.

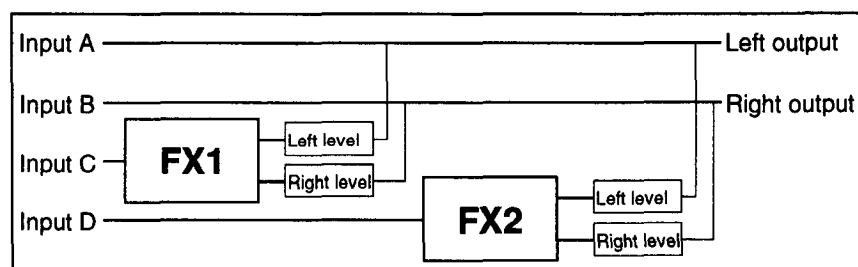
## **7.17 Applying effects**

The final stage of mixing involves adding effects such as reverb and chorus to add depth to your song. Each new song includes a default effects setup consisting of effect 01:Hall assigned to FX1 and effect 19:Chorus 1 assigned to FX2.

The default setting for the Effect Placement parameter is PARALLEL 3. This is used as the default setting for songs because it provides separate effect send levels for each effect processor for each track. We will use these default settings for our song as well.

### **About the Parallel 3 effect placement**

When you set the Effect Placement parameter to PARALLEL 3, the *i2/i3* will display a graphic that looks something like the figure below.



With this setting, signals that are routed to effect inputs A or B will go directly to the left and right outputs. Signals routed to effect input C will go through FX1 and then get mixed into the left and right outputs. Those signals routed to input D will go through FX2 and then get mixed into the left and right outputs.

Using this setup, the Panpot setting's only function is to position the tracks in stereo. You can use the C Level and D Level settings on Page 1 as effect

sends which control the amount of signal that is sent to FX1 and FX2 respectively.

Because each track's dry signal is already being sent directly to the left and right outputs, you should set both FX1 and FX2's Dry:FX Balance parameter to the FX setting. This way, there will be no additional dry signals coming from FX1 or FX2.

You can then use the FX1 and FX2 left and right level parameters (Page 8, bottom line, above keys D, E, G, and H) as stereo effect returns to control the amount of effect-only signal coming from FX1 and FX2.

**Adjusting the effect send levels**

Now we will set the amount of signal from each track that will get sent to the effects.

- Make sure you are on Page 1.
- Cursor to the Parameter Select setting, which should currently read PANPOT. Press the UP key to change it to C LEVEL (or press the STYLE key).

SONG0 New Song				▶Parameter Select			
3	3	3	3	3	3	3	3
3	3	3	3	3	3	3	3
SONG0 Tr:01 M001 4/4 DUWR				C LEVEL			
J=120:MAN Q:HI M:OFF							
A	B	C	D	E	F	G	H

The values for this parameter range from 0 to 9, with 0 sending no signal to FX1, and 9 sending the most. Another setting, P, uses the C LEVEL setting for each oscillator in the current program. (In the case of drum programs, each drum sound has its own C LEVEL setting.)

Try experimenting with different settings for the tracks. Be careful not to overdo the effects—this will reduce their effectiveness. Usually, the bass should not get much reverb.

- Press the START/STOP key to start the song if it is not playing already.
- Cursor to the C LEVEL setting for Track 1 and adjust the amount of signal that is sent to FX1 using the VALUE controls.
- Repeat this for the other tracks.
- Cursor to the Parameter Select setting, which should currently read C LEVEL. Press the UP key to change it to D LEVEL (or press the STYLE key).

SONG0 New Song				▶Parameter Select			
1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
SONG0 Tr:01 M001 4/4 DUWR				D LEVEL			
J=120:MAN Q:HI M:OFF							
A	B	C	D	E	F	G	H

---

The values for this parameter range from 0 to 9, with 0 sending no signal to FX2, and 9 sending the most. Another setting, P, uses the D LEVEL setting for each oscillator in the current program. (In the case of drum programs, each drum sound has its own D LEVEL setting.)

Try experimenting with different settings for the tracks.

- ☛ Cursor to the D LEVEL setting for Track 1 and adjust the amount of signal that is sent to FX2 using the VALUE controls.
- ☛ Repeat this for the other tracks.

### ***Completing the mixing process***

Now it's time to fine-tune all the mixing parameters to obtain the best balance for the song. While the song loops continuously, adjust the volume, panning, and effect send levels for all the tracks. Mute and solo tracks as necessary, and try listening to the whole mix at different levels using the MASTER VOLUME slider.

When you are satisfied with the results, save your song to disk.

- ☛ Press the DISK mode key.

The file name "TUTORIAL" should still be entered from the last time you saved the song file.

- ☛ Press cursor key H to save the file to disk.

A message will appear stating "Warning: TUTORIAL.SNG already exists," with a box asking if you would like to continue. If you press cursor key E to continue, the old TUTORIAL.SNG file on the disk will be replaced with the new version that is currently in memory.

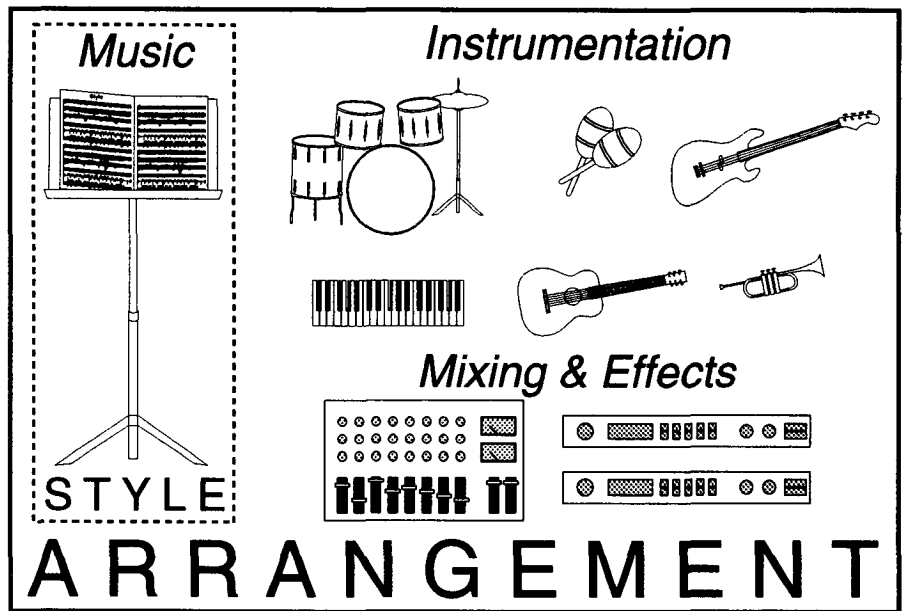
- ☛ Press cursor key E to save this new version to disk.

A message will appear stating "Now saving songs..." After a moment, the message will change to "Completed."



# 8 EDITING ARRANGEMENTS

Arrangements give you tremendous flexibility for performing music, as you have seen in Chapter 1. In addition to giving you interactive realtime control over styles, arrangements let you customize the instrumentation and production aspects of your musical performance. Think of an arrangement as a group of musicians in a studio, and a style as the sheet music the musicians will play from.



In this chapter, we will examine some of the various parameters you can use to create your own arrangements.

- Press the key labelled ARR PLAY to enter the Arrangement Play mode.

```

ARR:11 Mick&Keith
J=130 STYLE:P11 Open Rock SPLIT:C4
CHORD: XPOSE:0
▷KBD1:A47 DistGuitar OCTAVE=-1 DRUM:5
DRUM PERC BASS ACC1 ACC2 ACC3 LOWER UPPER
PLAY PLAY PLAY PLAY PLAY PLAY — ON
A B C D E F G H
    
```

## 8.1 Selecting styles

Usually, the first step when creating an arrangement is to select a style. The style contains all the sequence data that the arrangement will play, and thus determines the music you will hear.

Each style also contains basic program, volume, and panpot settings for the six backing tracks, as well as a tempo setting. This allows you to hear

each style with its most common instrumentation and tempo. You can then modify these settings in the arrangement. We will talk about these settings later in this chapter.

There are two ways to select a style: when the arrangement is playing, and when the arrangement is not playing.

If the arrangement is *not* playing when you select a style, the *i2/i3* will copy the program, volume, panpot, and tempo settings from the style you select into the arrangement. It will also reset the Octave and Wrap-Around settings for the bass and accompaniment tracks to 0 and STY respectively. We will cover these settings later in this chapter.

If the arrangement *is* playing, the *i2/i3* will use the new style without changing the arrangement's backing track settings. This allows you to use the arrangement's instrumentation instead of that of the style. (This also allows you to switch styles as you play an arrangement, without causing abrupt sound changes.) The tempo will change to that set as the default for the style, unless the TEMPO LOCK key is lit.

To illustrate how this works, let's start with arrangement 11 Mick&Keith.

- If it is not already selected, press the 1 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 1 key in the lower row.

If you look at the second line of the display, you will notice that this arrangement uses style P11 Open Rock.

- Press the VARIATION 1 key.
- Play the C at the bottom of the keyboard.
- Press the START/STOP key.

When the arrangement starts, notice the instrumentation: heavy drums, electric bass, and distorted guitars.

- Press the START/STOP key to stop the *i2/i3*.
- Press the STYLE key (it will light up).

Now the ARRANGEMENT/STYLE keys will select styles instead of arrangements.

- Press the 6 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 8 key in the lower row, to select style P68 Dixieland.
- Press the START/STOP key to start the *i2/i3*.

When the arrangement starts, notice how the instrumentation has changed to match the music: marching drums, acoustic bass, banjo, clarinet and trumpet.

- Press the START/STOP key to stop the *i2/i3*.
- Press the 2 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 4 key in the lower row, to select style P24 Rap.
- Press the START/STOP key to start the *i2/i3*.

This time you will hear beatbox drums, scratching, synth bass, orchestra hits, distorted guitar and synth stabs.

- Press the START/STOP key to stop the *i2/i3*.

Now let's hear how these styles sound *without* changing the instrumentation.

- ☛ Press the 6 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 8 key in the lower row, to select style **P68 Dixieland**.
- ☛ Press the VARIATION 4 key.
- ☛ Press the START/STOP key to start the *i2/i3*.
- ☛ While the *i2/i3* continues to play, press the 2 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 4 key in the lower row, to select style **P24 Rap**.

The *i2/i3* will change the style at the start of the next measure. As you will hear, different instrumentation can drastically alter the sound of a style.

Although this particular instrumentation sounds a little strange with the rap style, it sounds good with style P63 2/4 March.

- ☛ While the *i2/i3* is playing, press the 6 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 3 key in the lower row, to select style **P63 2/4 March**.

This style sounds somewhat more natural with the current instrumentation than the rap style did. Let's listen to this style's default instrumentation.

- ☛ Press the START/STOP key to stop the *i2/i3*.
- ☛ Press the 3 key in the lower row of ARRANGEMENT/STYLE keys to re-select style **P63 2/4 March**.

This will call up the style's default instrumentation. Notice that it is not necessary to press the 6 key in the upper row because a style from group 6 had already been selected.

- ☛ Press the START/STOP key to start the *i2/i3*.

Listen to the arrangement with the style's default instrumentation.

- ☛ Press the START/STOP key to stop the *i2/i3*.

Because the *i2/i3* has no arrangement compare buffer, it is a good idea to update arrangements as you work on them. You can do this by pressing the REC/WRITE key on the front panel.

This Write function will automatically select the current arrangement number as the writing destination. If you want to preserve the original arrangement, use the Write Arrangement function on Page 7 to write the arrangement you are editing to a different number.

## 8.2 Changing the instrumentation

Once you have selected a style, you may want to change some (or all) of the instrumentation. You can select the programs that will be used for the backing tracks on Page 2.

Let's use arrangement 13 Shufflin' for this example.

- ☛ Press the STYLE key (the light will go out).

Now you can use the ARRANGEMENT/STYLE keys to select arrangements.

- ☛ Press the 1 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 3 key in the lower row, to select arrangement **13 Shufflin'**.
- ☛ Press the VARIATION 3 key.



- ☛ Play the C at the bottom of the keyboard.
- ☛ Press the START/STOP key.
- ☛ Press the PAGE+ key to go to Page 2.

ARR: 13 2: TRACK PARAM 1 ▶ Program						
▶ DRUM:	Dr2	Power Kit	U116	PRG	CP	D1
PERC:	Dr6	Perc Kit	U079	PRG	C3	D3
BASS:	A52	Deep Bass	U115	CNT	C0	D0
ACC1:	C46	DistoMutes	U090	PRG	C3	D3
ACC2:	C47	StereoDist	U078	R08	C3	D4
ACC3:	C48	PowerChord	U109	L08	C2	D2

A	B	C	D	E	F	G	H

On this page you can adjust the program, volume, panpot, and effect send level settings for each of the six backing tracks. The *i2/i3* gives you access to all Arrangement Play mode display pages, even while an arrangement is playing. This allows you to make changes to the arrangement in real time.

Let's give this arrangement a more acoustic sound.

The arrow on the left side of the display should be pointing to the DRUM track. If it is not, you can move it using the ▲ and ▼ keys.

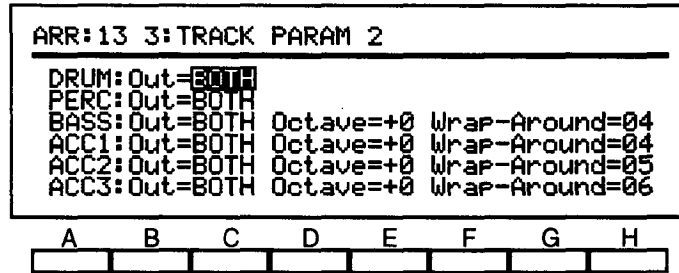
- ☛ Press the 5 key in the lower row of PROGRAM keys to select program **Dr5 Brush Kit**.
- ☛ Press the ▼ key two times to move the arrow to the BASS track.
- ☛ Select program **A51 Jazz Bass** by pressing the DOWN key once.
- ☛ Press the ▼ key once to move the arrow to the ACC1 track.
- ☛ Press the A bank key followed by the upper-row 7 key and lower-row 6 key to select program **A76 Doo Voice**.
- ☛ Press the ▼ key once to move the arrow to the ACC2 track.
- ☛ Press the A bank key followed by the upper-row 2 key and lower-row 5 key to select program **A25 Marimba**.
- ☛ Press the ▼ key once to move the arrow to the ACC3 track.
- ☛ Press the A bank key followed by the upper-row 1 key and lower-row 1 key to select program **A11 Piano**.

(If you select the piano program while the power chord program is sustaining a note, you won't hear the power chord change to the piano until track ACC3 plays new notes.)

### Adjusting octaves

Let's lower the ACC3 track one octave.

- ☛ Press the PAGE+ key to go to Page 3.



This page allows you to set the track status for each backing track, as well as the octave and wrap-around points for the bass and accompaniment tracks. (For more information on the Track Status (Out) parameter, see Chapter 11.)

- Press the ▼ key five times to select the ACC3 track (or press the ▲ key once).
- Press cursor key D or E to select the Octave parameter for the ACC3 track.
- Press the DOWN key once to enter a value of -1.

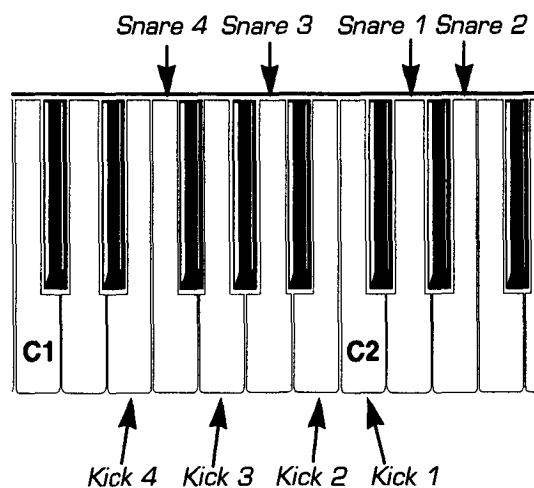
(You won't hear the octave change until track ACC3 plays new notes.)

**Selecting a kick and snare**

When producing a song, a great deal of time is spent getting the right drum sounds, particularly the kick and snare. This is because these sounds have a strong effect on the character of a song.

The *i2/i3* not only lets you select a basic drum program, but also allows you to choose which kick and snare the arrangement will play.

As we discussed in Chapter 6, drum programs use drum kits as their sound source. Each drum kit has four kick drum sounds and four snare drum sounds assigned to the keyboard. Kick 1 is assigned to C2, Kick 2 to B1, Kick 3 to G1, and Kick 4 to E1. Snare 1 is assigned to D2, Snare 2 to E2, Snare 3 to F2, and Snare 4 to G2. The actual sound produced by each of these keys will vary depending on the drum program you select on Page 2.



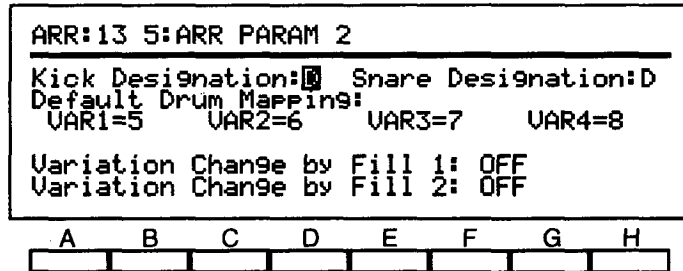
(If you are using the *i3*, you may not have known about some of these sounds because the *i3*'s keyboard only goes as low as C2. To play the other sounds in Program mode—or when recording in Edit Style, Backing Sequence, or Song mode—press the OCTAVE DOWN key on the front panel.

The lowest key on the keyboard will become C1, thereby giving you access to these sounds.)

Using the Kick Designation and Snare Designation parameters, you can select any of the four kicks and snares to play the arrangement, regardless of which drum sounds are used in the original style data.

Let's see how this works.

- Press the PAGE+ key two times to go to Page 5.



In addition to the Kick and Snare Designation parameters, this page lets you set the default drum mapping and control which variations will be automatically selected after a fill. We will cover these parameters later in this chapter.

The values for the Kick Designation and Snare Designation parameters are A, B, C, and D.

Setting	What you will hear
A	Kick 1 (C2), Snare 1 (D2)
B	Kick 2 (B1), Snare 2 (E2)
C	Kick 3 (G1), Snare 3 (A1)
D	Kick 4 (E1), Snare 4 (F1)

This table assumes that the original style data was recorded using Kick 1 and Snare 1. The correspondence will shift if the original style data uses the other kick and snare sounds.

For example, if the original style data was recorded using Kick 2 and Snare 2, you would hear Kick 2 and Snare 2 when these parameters are set to A, Kick 3 and Snare 3 when set to B, Kick 4 and Snare 4 when set to C, and Kick 1 and Snare 1 when set to D. See Appendix C in the Reference Guide for more information.

All of the preset styles in the *i2/i3* ROM were recorded using Kick 1 and Snare 1. We recommend you do the same for recording your own styles. This way, you will know that a setting of A will always select Kick 1 and Snare 1, B will always select Kick 2 and Snare 2, and so on.

Now, back to the tutorial.

As you can see, the *i2/i3* is using Kick 4 and Snare 4 to play this arrangement. Snare 4 in the Brush Kit is a fingersnap sound. Let's change this to a brush slap sound.

- If you stopped the *i2/i3*, press the START/STOP key to start it again.
- Press cursor key E, F, G, or H to select the Snare Designation parameter.

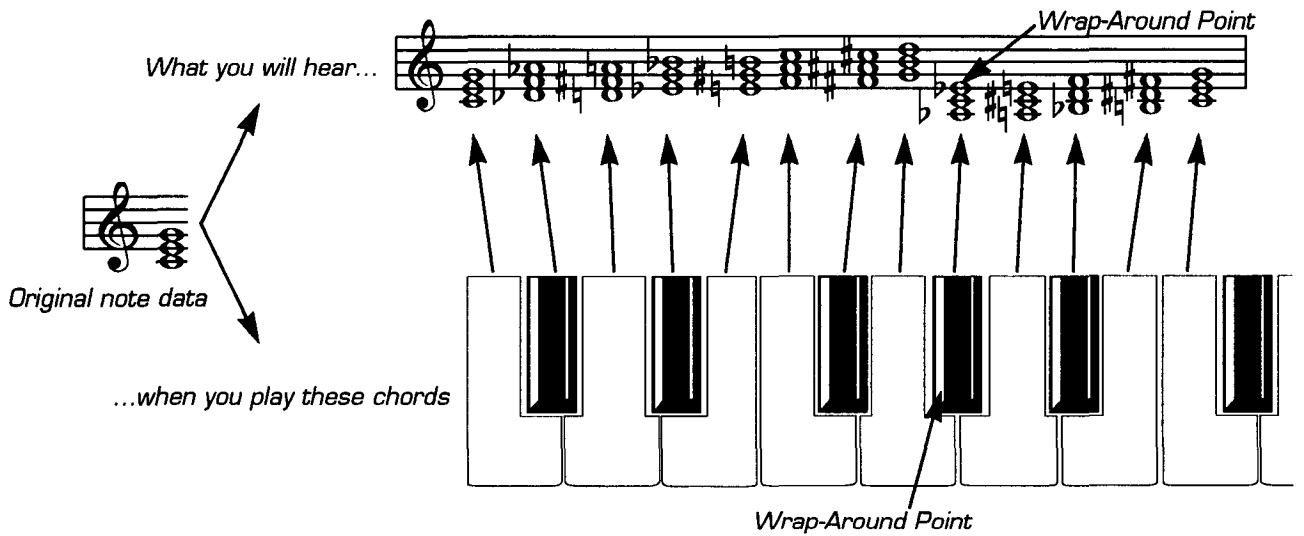
- Press the DOWN key to select a value of C.

You should hear the fingersnap sound change to a brush slap snare sound. Try setting the Kick Designation parameter to A for a sharper kick sound.

### 8.3 About wrap-around points

As we discussed in Chapter 2, the *i2/i3* music processor transposes a style's note data to match the chords you play. As you move up the keyboard, the note data is transposed higher and higher.

Of course, this upward transposition has to stop somewhere—otherwise the resulting music will sound ridiculously high. To prevent this from happening, each style has transposition limits set for the bass and accompaniment tracks. When you reach these *wrap-around points*, as they are known, the backing tracks will jump down an octave.



Let's take a look at how this works.

- Press the PAGE- key two times to go back to Page 3.
- Press the ▲ key three times to move the cursor to the third line of the display.
- Press cursor key F, G, or H to select the bass track's Wrap-Around parameter.

If you set this parameter to STY, the *i2/i3* will use the style's default wrap-around point. The other values, which range from 1 to 12, let you set your own wrap-around point. Depending on what key the style was recorded in, these values will correspond to different notes.

For example, if the style was recorded in the key of C, and you set this parameter to 1, the track will drop an octave when you play a chord whose root is C-sharp. In the illustration above, the Wrap-Around parameter is set to 8. If the style was recorded in the key of E, and this parameter is set to 1, the track will drop an octave when you play a chord whose root is F.

All of the preset styles in the *i2/i3* ROM were recorded in the key of C. We suggest you do the same for recording your own styles. This will make it easier to set the wrap-around points, as you will always know the style's key. (You can, of course, record the styles in any key, and transpose them to the key of C afterwards.)

Let's listen to the effect of the Wrap-Around setting on the bass track.

- If the *i2/i3* is not playing, press the START/STOP key to start it.
- Lower all the OUTPUT MIXER sliders except the one labelled BASS, to isolate the bass track.

As you can see on the display, the bass track's Wrap-Around point is set to 4. This means that the bass track will drop an octave when you play a chord whose root is E.

- Play the lowest D on the keyboard.
- At the start of the next measure, play D-sharp, followed by E in the measure after that.

When you play the E, you will hear the bass part drop an octave.

It is a good idea to set each track's wrap-around point to a different value. If you don't, all the tracks will drop an octave at the same time. Although this is a somewhat unmusical effect, let's listen to how it sounds.

- Using the VALUE controls, enter a value of 12 for the bass track.
- Press the ▼ key once to move the cursor down one line.
- Using the VALUE controls, enter a value of 12.
- Repeat the last two steps for the ACC2 and ACC3 tracks.
- Raise all the OUTPUT MIXER sliders to their maximum position.
- At the start of each measure, play the next highest note.

When you reach B, you will notice that all the tracks are playing fairly high in their range.

- Play the next note, C.

All the tracks will drop an octave. This is very noticeable if you switch back and forth between B and C.

In addition to setting different values for each track's wrap-around point, you may want to optimize these values for playing in a particular key. For example, you may want some tracks to drop an octave when you play the dominant chord (G7 in the key of C, for example). If the Wrap-Around parameters are not set right, the tracks will move up instead of down.

By setting the Wrap-Around parameter, you are also setting the basic playing range of a track.

Let's use the vocal sound on the ACC1 track to demonstrate this.

- If you stopped the *i2/i3*, press the START/STOP key to start it again.
- Press the PAGE- key twice to select Page 1.
- Play a B in the chord scanning range of the keyboard.

Although all the tracks sound very high, the marimba (ACC2) sounds acceptable in this range. However, the vocal timbre (ACC1) sounds somewhat unnatural.

- Press cursor keys A, B, C, E, and F to mute all the backing tracks except ACC1.

It helps to isolate each track when adjusting the Wrap-Around settings.

- Press the PAGE+ key twice to return to Page 3.

- ☛ Press the ▲ key twice to move the cursor up two lines.
- ☛ Using the VALUE controls, enter a value of 7 for ACC1's Wrap-Around parameter.

This means that the track will drop an octave when you play a chord whose root is G. You will notice that the track has already dropped an octave.

- ☛ Play an F-sharp in the chord scanning range of the keyboard.

You can hear that this is an acceptable high-range limit.

- ☛ Play a G in the chord scanning range of the keyboard.

You can hear that this is an acceptable low-range limit.

Of course, when adjusting this parameter for other tracks, you will need to set different values depending on what programs are being used. There is no set formula for using this parameter; as always, let your ears be your guide—choose the values that *sound* best.

- ☛ Press the START/STOP key to stop the *i2/i3*.

## 8.4 Selecting the default drum mapping

As you know from Chapter 1, you can use the eight lower-row PROGRAM keys in combination with the DRUM MAPS key to select one of the eight drum maps. This is fine for changing the drum map on the spur of the moment, but can become somewhat impractical when you need to make frequent changes.

For example, let's say you want Variation 1 to use drum map 3 (sidestick and hi-hat) for the verses in a song, and Variation 2 to use drum map 6 (snare and ride cymbal) for the choruses. Having to manually select these drum maps each time you reach a verse or chorus can be very inconvenient.

You can set a default drum map for each of the four variations. Let's use arrangement 62 2,000 More to create the setup described above.

- ☛ Press the PAGE- key twice to return to Page 1.
- ☛ Press the 6 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 2 key in the lower row.
- ☛ Press the VARIATION 1 key.
- ☛ Play the C at the bottom of the keyboard.
- ☛ Press the START/STOP key to start the *i2/i3*.
- ☛ Press the PAGE+ key four times.
- ☛ Press the ▼ key once to select the Default Drum Mapping parameter for Variation 1.

As you can see and hear, Variation 1 is currently using drum map 5 (snare and hi-hat).

- ☛ Using the VALUE controls, enter a value of 3.

You will hear the drums change accordingly. Now we will set the default for Variation 2 to drum map 6 (snare and ride cymbal).

- ☛ Press cursor key C or D to highlight the value for Variation 2.
- ☛ Using the VALUE controls, enter a value of 6.

The sound has not changed because you are still listening to Variation 1.

- ☛ Press the VARIATION 2 key.

The variation will change, and you will hear the drums change accordingly.

- ☛ Press the VARIATION 1 key.

Note that if you want to change the drum map manually, you must be on Page 1 of Arrangement Play mode. Once you manually select a drum map, the default drum maps set on Page 5 will be ignored. If you would like to return to using these default drum maps, hold the DRUM MAPS key and press any one of the eight number keys to the right while on Page 1.

## 8.5 Changing variations with fills

The Variation Change parameters let you specify which variation the arrangement will switch to after it plays the fills.

Let's set these parameters so that the *i2/i3* will switch to Variation 2 after playing Fill 1, and to Variation 1 after playing Fill 2.

- ☛ Press the ▼ key once to select the Variation Change by Fill 1 parameter.
- ☛ Press the UP key twice to enter a value of →2.
- ☛ Press the ▼ key to select the Variation Change by Fill 2 parameter.
- ☛ Press the UP key once to enter a value of →1.

Make sure Variation 1 is playing.

- ☛ At the start of the next measure, press the FILL 1 key.

After the one measure fill, the arrangement will automatically switch to Variation 2.

- ☛ After a few measures, press the FILL 2 key.

The arrangement will automatically switch to Variation 1, after the fill. For more details on the values you can set for these parameters, see page 14 in the Reference Guide.

## 8.6 Setting the keyboard assign mode

As we mentioned in Chapter 1 and 2, each arrangement has two keyboard timbres which you can play live, over the backing tracks. These can be used for playing melodies, solos, live drum parts, etc. The configuration of these keyboard timbres is controlled by the KEYBOARD ASSIGN keys on the front panel.

Let's use arrangement 56 Groovin' to examine the different keyboard assignment settings.

- ☛ If the *i2/i3* is still playing, press the START/STOP key to stop it.
- ☛ Press the PAGE- key four times to return to Page 1.
- ☛ Press the 5 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 6 key in the lower row, to select arrangement 56 Groovin'.

**Single**

When the SINGLE key is lit, (as is the case with this arrangement), only one keyboard timbre will be used. KBD2 will not appear on the display.

The program you select for KBD1 will play across the entire keyboard. You can mute the sound of either keyboard half by using the LOWER and UPPER mute buttons, located next to the backing track mute buttons on the display.

The point at which the lower keyboard ends and the upper keyboard begins is known as the *split point*. This value represents the lowest note of the upper keyboard. See "Setting the split point" below for more information.

**Layer**

When the LAYER key is lit, both keyboard timbres will play across the entire keyboard. If you use the LOWER or UPPER mute buttons, both keyboard timbres will be muted for the keyboard section specified.

- Press the LAYER key on the front panel.

When you do this, KBD2 will appear below KBD1 on the display, and you will hear both sounds when you play the keyboard.

**Split**

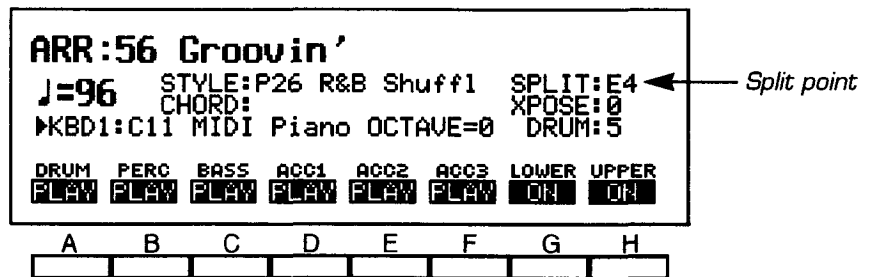
When the SPLIT key is lit, each keyboard timbre is assigned to separate keyboard halves. Use the LOWER and UPPER mute buttons to mute the keyboard timbres individually.

- Press the SPLIT key on the front panel.

Now, the program assigned to KBD2 will sound when you play the lower half of the keyboard. Likewise, KBD1 will sound when you play the upper half of the keyboard.

**Setting the split point**

For this arrangement, the split point is set to E4, as indicated on the display.



Let's change this to G3.

- Press and hold the front panel SPLIT key. While holding it, play G3 (the G below middle C) on the keyboard.
- Release the SPLIT key.

Now when you play the keyboard, you will hear that KBD1 starts at G3.

When you use the upper or lower chord scanning modes, the split point also determines the lower or upper limit of the keyboard's chord scanning range. When you use full chord scanning, the split point has no effect on the range of keys used to enter chords.



You can use the SINGLE, LAYER, or SPLIT key to change the split point using the method described above.

**Manual drums**

This keyboard assign mode allows you to play live drum parts over the backing tracks. The i2/i3 will not scan the keyboard for chords when you use this keyboard assign mode, so you do not have to worry about accidentally changing the chord when playing the keyboard.

- Press the M.DRUMS key on the front panel.

KBD2 will disappear, and KBD1 will select a drum program which you can change using the PROGRAM keys, or specify beforehand by setting the Manual Drum parameter on Page 4.

Both keyboard halves will play, regardless of the LOWER and UPPER mute button settings.

Note that when the M.DRUMS key is lit, it is not possible to change drum maps using the lower row of PROGRAM keys, as these keys are used to select a manual drums program, instead.

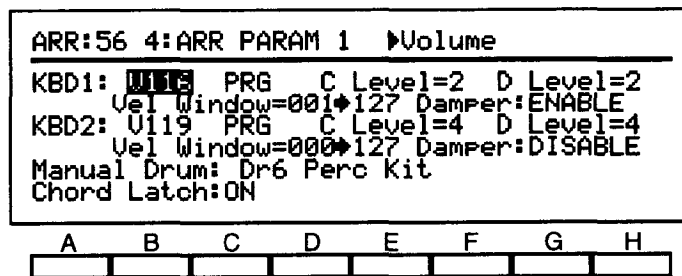
**8.7 Setting the keyboard timbre parameters**

Let's add an organ sound to this arrangement that plays only when you strike the keys hard.

- Press the LAYER key on the front panel.
- Press the ▼ key to move the arrow cursor from KBD1 to KBD2.
- Using the PROGRAM keys, select program C23 HamNCheese.

When you play the keyboard, you will hear the organ layered with the piano sound.

- Press the PAGE+ key three times to select Page 4.



The parameters on this page let you set individual volume, panpot, and effect send levels for the two keyboard timbres.

The Vel Window parameters let you set the minimum and maximum velocities at which each keyboard timbre will play. The Damper parameter lets you determine whether a keyboard timbre will respond to sustain pedal messages.

The Manual Drum parameter allows you to select one of the eight drum programs to be called up automatically when you switch the keyboard assign mode to manual drums. The Chord Latch function is used to disable chord scanning when the damper pedal is pressed.

Now, back to the tutorial.

- Press the ▼ key two times to highlight KBD2's volume setting.

- Using the VALUE controls, enter a value of 90.
- Press the ▼ key once more to highlight the Bottom setting of KBD2's velocity window.
- Using the VALUE controls, set this to 102.

Now, you will hear the organ sound only when you play the keyboard at high velocities. You may need to adjust this setting to suit your playing style.

## 8.8 Miscellaneous functions

### ***Setting the keyboard timbre octaves***

Each keyboard timbre can be transposed up to two octaves up or down. This is useful for adjusting the pitch range of a keyboard timbre.

For example, if a baritone sax program is assigned to KBD1, the arrangement's split point is set to C4, and the lower half of the keyboard is muted, the baritone sax will only play in the range of C4 to C7. This is an unusually high range for a baritone sax, and will sound somewhat unnatural.

By using the OCTAVE keys on the front panel, you can lower the program one or two octaves.

Use the ▲ and ▼ keys to select which keyboard timbre the OCTAVE keys will affect.

### ***Setting the initial style element***

Each arrangement memorizes the style element it will use when you first select it. To set this, press the appropriate style element key, then press the REC/WRITE key.

## 8.9 Pulling it together

Use the *i2/i3* volume, panpot, and effect send level parameters together with the effects processors to give your arrangements a professional, produced sound.

As you experiment with the settings available in this mode, you will find that arrangements give you quite a lot of power for controlling and customizing the *i2/i3*'s styles.



## 9 EDITING STYLES

The *i2/i3* styles provide all the music you hear when playing an arrangement. It is possible to modify these styles to your liking, or even create your own styles from scratch.

In this chapter, we will discuss some basic techniques for modifying existing styles, and explain some important concepts that will get you started on the road to creating your own styles.

### 9.1 Reassigning the chord variations

As you know, each variation, intro, ending, and fill is actually made up of a smaller unit called a chord variation. In Chapter 1, we saw how different chord variations are selected depending on the chords you play. Let's use arrangement 32 *The King* to illustrate this again.

- Press the ARR PLAY key (make sure you are on Page 1).
- Press the 3 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 2 key in the lower row, to select the arrangement.
- Press the VARIATION 4 key.
- Play the C at the bottom of the keyboard to enter a C major chord.
- Press the START/STOP key.

Notice the rockabilly bass part played by the current chord variation.

- Play a C7 chord (C, E, G, B-flat, or just C and B-flat) at the bottom of the keyboard.

The chord variation has now switched to one with a walking bass.

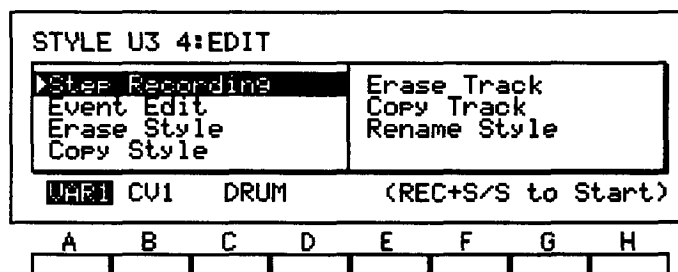
- Press the START/STOP key to stop the *i2/i3*.

Let's say you want the *i2/i3* to play the walking bass chord variation for major chords as well as 7th chords. You can do so by changing the chord variation table assignments.

#### **Copying preset styles**

In order to make changes to a preset style, we must first copy it into one of the user style locations. Let's use style U3 for this purpose.

- Press the EDIT STYLE key.
- Use the CURSOR POSITION keys to highlight the STYLE parameter above cursor keys A and B.
- Press the UP key twice to select style U3.
- Press the PAGE+ key three times to get to Page 4.



- Press the ▼ key three times to highlight the Copy Style function.

The source style parameter should already be highlighted above cursor key A.

- Use the VALUE controls to select style **P34 Mid Shuffl.**
- Press cursor key B to select the source style element.
- Use the VALUE controls to select **ALL.**

The destination style element above cursor key C will automatically change to this value, as well.

- Press cursor key H to copy the style.

Note that you have just replaced any data previously stored in style U3 with that from style P34. If you replaced one of the Korg-provided user styles, you can re-load it from disk at a later time.

- Press the PAGE- key three times to return to Page 1.

You can see the name of the style in the top line of the display.

### Modifying the chord variation table assignments

- Press the PAGE+ key two times to go to Page 3.

STYLE U3 3:CHORD VARIATION TABLES							
- VARIATION 1							
Major:1		sus2:1		mM7:1		dim:3	
6:1	M7sus4:1		m:2	m7b5:3		dimM7:3	
M7:1		m6:1		7:4		aug:3	
M7b5:3		m7:2		7b5:3		aug7:3	
sus4:1				7sus4:2		augM7:3	
A	B	C	D	E	F	G	H

This is the CHORD VARIATION TABLES page. The i2/i3 can recognize 20 different chord types, each of which is displayed here. The number to the right of each chord type is the chord variation that will play in response to that chord.

Each style element has its own set of chord parameters. Currently, those for Variation 1 are displayed. Let's change this to Variation 4.

- Use the VALUE controls to select **VARIATION 4.**

As you can see at the top of the first column, major chords are set to play chord variation 1. If you look in the third column, you will see that 7th chords are set to play chord variation 2.

Let's set major chords to play chord variation 2, as well. This way, you will hear the walking bass when you play major chords.

- Press the ▼ key once to highlight the value for major chords.
- Press the UP key once to change this value to 2.

Now let's go back to the arrangement to listen to this change.

- Press the ARR PLAY key.
- Press the VARIATION 4 key.
- Play the C at the bottom of the keyboard to enter a C major chord.
- Press the START/STOP key.

You will hear the rockabilly bass part because the arrangement is still set to use style P34. Let's change this to style U3.

- ☛ First, press the TEMPO LOCK key if it is not lit already.
- ☛ While the arrangement is playing, press the STYLE key (it will light).
- ☛ Press the 7 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 3 key in the lower row, to select style U3.

Notice the walking bass part.

- ☛ Play a C7 chord at the bottom of the keyboard.

The bass part does not change.

- ☛ Press the START/STOP key to stop the *i2/i3*.
- ☛ Press the REC/WRITE key to write the changes to the arrangement.
- ☛ Press cursor key E or F to confirm this operation.

You can reload the original arrangement from disk, at a later time.

## 9.2 Recording new parts

Now let's have the piano track play high-pitched triplets when you play 7th chords.

### *Copying chord variations*

We could modify chord variation 2—the one assigned to 7th chords—directly, but it is used by many other chord types as well. Instead, let's make a copy of chord variation 2, and modify the copy.

- ☛ Press the EDIT STYLE key.
- ☛ Press the PAGE+ key once to get to Page 4.
- ☛ Press the ▼ key two times to highlight the Copy Track function.

The source style element parameter should already be highlighted above cursor key A.

- ☛ Use the VALUE controls to select VAR4.
- ☛ Press cursor key B to highlight the source chord variation parameter.
- ☛ Use the VALUE controls to set this to CV2.
- ☛ Press cursor key C to highlight the source track parameter.
- ☛ Use the VALUE controls to set this to ALL.

The destination track parameter, above cursor key G, will automatically change to this value as well.

- ☛ Press cursor key F to highlight the destination chord variation parameter.
- ☛ Use the VALUE controls to set this to CV6.
- ☛ Press cursor key H to copy chord variation 2 to chord variation 6.

### *Recording the track*

Edit Style mode uses the loop recording method. This is identical to pattern recording except that you can listen to more than one track at a time (and data is recorded directly into the track). (For more information on pattern recording, see page 76 in this manual.)

Because loop recording *adds* the notes you play to those already in the track, let's start by erasing the piano track.

- Press the ▲ key once to select the Erase Track function.
- Press cursor key C to highlight the track to be erased.
- Use the VALUE controls to set this to ACC1.
- Press cursor key H to erase the track.

Now let's record the track.

- Press the PAGE- key three times to return to Page 1.

If you look on the display, you will see that the *i2/i3* has already selected chord variation 6 and the ACC1 track for you.

When you play the keyboard, you will hear the piano sound.

- Press the START/STOP key and practice playing E-G-B-flat (as a chord) at the top of the keyboard, in eighth-note triplets.

If the current tempo setting of 155 is too fast, use the CURSOR POSITION keys and VALUE controls to change it to a slower tempo such as 130.

- Press the START/STOP key to stop the *i2/i3*.
- Press the REC/WRITE key, followed by the START/STOP key to start recording.

After a two measure lead-in, the *i2/i3* will start recording.

- Play the triplets for eight measures, embellishing when appropriate. (If you make a mistake, press the START/STOP key, followed by the COMPARE key to undo what you have just recorded. Repeat the above steps.)
- When you have finished, press the START/STOP key to stop the *i2/i3*.

Now we must set 7th chords to play chord variation 6.

- Press the PAGE+ key two times to select Page 3.
- Use the CURSOR POSITION keys to highlight the chord variation for 7th chords (third column from left, third line down).
- Change this to a value of 6.

Now, the chord variation you just recorded will be selected when you play 7th chords in Arrangement Play mode. Let's go back to the arrangement to listen to this change.

- Press the ARR PLAY key.
- Play the C at the bottom of the keyboard to enter a C major chord.
- Press the START/STOP key.

Notice the piano part.

- Play a C7 chord at the bottom of the keyboard.

The piano should start playing the part you recorded.

- Try playing some other major chords and 7th chords.
- When you are finished press the START/STOP key to stop the *i2/i3*.

### 9.3 Adjusting the style parameters

In addition to basic program, volume, panpot, and tempo settings, each style has Wrap-Around Point and Note Retrigger settings for the bass and accompaniment tracks. Each of the accompaniment tracks also has a Tension setting. Let's copy style P37 6/8 Oldies to user style 2, to illustrate these parameters.

- ☛ Press the EDIT STYLE key.
- ☛ Press the PAGE- key two times to go to Page 1.
- ☛ Use the CURSOR POSITION keys to highlight the STYLE parameter above cursor keys A and B.
- ☛ Press the DOWN key once to select style U2.
- ☛ Press the PAGE+ key three times to select Page 4.
- ☛ Press the ▲ key once to select the Copy Style function.

The source style parameter should already be highlighted above cursor key A.

- ☛ Use the VALUE controls to select style P37 6/8 Oldies.

The source and destination style elements above cursor keys B and C should already be set to ALL.

- ☛ Press cursor key H to copy the style.

Note that you have just replaced any data previously stored in style U2 with that from style P37. If you replaced one of the Korg-provided user styles, you can re-load it from disk at a later time.

- ☛ Press the PAGE- key twice to go to Page 2.

STYLE U2 2: STYLE PARAMETERS							
Wrap-Around Point:							
BASS=	10	ACC1=11	ACC2=04	ACC3=09			
Note Retrigger:							
BASS=ON	ACC1=ON	ACC2=ON	ACC3=ON				
Tension:							
	ACC1=OFF	ACC2=OFF	ACC3=ON				
A	B	C	D	E	F	G	H

This is the STYLE PARAMETERS page. Here, you can set the Wrap-Around Point, Note Retrigger, and Tension parameters for the bass and accompaniment tracks. Since we have already discussed wrap-around points in the previous chapter, there is no need to explain them here.

#### About note retriggering

If the bass and accompaniment tracks held their programmed notes through every chord change, the result would be the sort of dissonance you get when you play clashing chords on a keyboard while holding down its damper pedal.

There are two ways for these tracks to avoid this problem: they can either stop altogether—producing a sudden silence—or re-articulate their notes at pitches that match the new chords.

The Note Retrigger parameters allow you to choose between these two alternatives for each track. When a track's Note Retrigger parameter is set to



**OFF**, it will end any notes it is sustaining whenever you play a chord, then remain silent until the track data tells it to play a new note. If you set this parameter to **ON**, the track will end any notes and play new notes that match the chord you play.

If you look at the display, you will see that this parameter is set to **ON** for all the tracks. Let's use arrangement 67 **When A Man** to hear the effect of these settings.

- ☛ Press the **ARR PLAY** key.
- ☛ Press the **STYLE** key (its light will go out).
- ☛ Press the 6 key in the upper row of **ARRANGEMENT/STYLE** keys, followed by the 7 key in the lower row, to select arrangement 67 **When A Man**.
- ☛ Press the **VARIATION 1** key.
- ☛ Press the **TEMPO LOCK** key if it is not lit already.
- ☛ Play the **C** at the bottom of the keyboard.
- ☛ Press the **START/STOP** key.
- ☛ While the arrangement is playing, press the **STYLE** key (it will light).
- ☛ Press the 7 key in the upper row of **ARRANGEMENT/STYLE** keys, followed by the 2 key in the lower row, to select style **U2**.
- ☛ Press the **REC/WRITE** key to write the changes to the arrangement.
- ☛ Press cursor key **E** or **F** to confirm this operation.

You can reload the original arrangement from disk, at a later time.

- ☛ As the arrangement continues, play different chords rapidly in succession (at least faster than quarter notes).

Each time you play a new chord, you will hear the bass, piano, organ, and guitar tracks trigger new notes to match that chord.

- ☛ Press the **START/STOP** key to stop the **i2/i3**.
- ☛ Press the **EDIT STYLE** key.
- ☛ Press the ▼ key once to select the **BASS** track's **Note Retrigger** parameter.
- ☛ Set this to **OFF**.
- ☛ Do the same for the **ACC1** track.
- ☛ Press the **ARR PLAY** key.
- ☛ Play the **C** at the bottom of the keyboard.
- ☛ Press the **START/STOP** key.
- ☛ As the arrangement continues, play different chords rapidly in succession.

Now when you play new chords, you will hear that the bass and piano tracks do not update their notes. However, the organ and guitar tracks still trigger new notes to match the changing chords.

- ☛ Press the **START/STOP** key to stop the **i2/i3**.

It is best to set this to **ON** for the **BASS** track and tracks that contain sustained notes.

**About the tension parameter**

Tracks that have this parameter set to ON will add the tensions you play to their output.

- ☛ Press the VARIATION 2 key.
- ☛ Play C–E–G–B as a chord at the bottom of the keyboard.
- ☛ Press the START/STOP key.
- ☛ At the start of the next measure, play C–E–G–B–D.

You will hear that the organ track has added a D to the notes it is playing.

- ☛ Press the START/STOP key to stop the *i2/i3*.
- ☛ Press the EDIT STYLE key.
- ☛ Press the ▼ key once to select the ACC1 track's Tension parameter.
- ☛ Set this to ON.
- ☛ Press the ARR PLAY key.
- ☛ Press the VARIATION 2 key.
- ☛ Press cursor keys A, B, C, E, and F to mute all but the piano track.
- ☛ Play C–E–G–B at the bottom of the keyboard.
- ☛ Press the START/STOP key.
- ☛ At the start of the next measure, play C–E–G–B–D.

Notice that a D is now played together with each B.

- ☛ Press the START/STOP key to stop the *i2/i3*.

**9.4 Introduction to recording styles**

When recording your own styles, there is basically one rule to follow: play everything based on a major 7th chord. Tracks recorded this way contain all the note information the *i2/i3* music processor needs to fit the note data to any chord.

Let's create a very simple style to see how this works.

- ☛ Press the EDIT STYLE key.
- ☛ Press the PAGE– key once to go to Page 1.
- ☛ Press the UP key twice to select style U4.

This should be an empty style. Make sure this is so by pressing the START/STOP key. Nothing should happen. If there is data in this style, use the Erase Style function on Page 4 to erase this style before proceeding.

We will record two variations, the first of which will contain only major chords. The second variation will contain major 7th chords.

- ☛ Select VAR1 above cursor key C (second line from bottom).
- ☛ Select CV1 above cursor key D.
- ☛ Change the length of this chord variation to 2 above cursor key E.

Since we will be recording in the key of C, we do not need to change the Key setting above cursor key F. However, when recording styles in other keys, be sure to set this parameter accordingly.

- ☛ Press the ▼ key once to select the bottom line of the display.
- ☛ Press cursor key F to select the Metronome parameter.
- ☛ Set this to ON.
- ☛ Make sure the ACC1 track is selected (above cursor key A) for recording.

When you play the keyboard, you should hear a piano.

- ☛ Press the REC/WRITE key, followed by the START/STOP key to start recording.

After a two measure lead-in, the *i2/i3* will start recording.

- ☛ Play the chord C–E–G–C in the middle of the keyboard, as quarter notes for two measures.

After two measures, the style will loop around to measure one.

- ☛ Press the START/STOP key to stop recording.

(If you make a mistake, press the COMPARE key to undo what you have just recorded. Then, repeat the steps above.)

- ☛ Now select VAR2 above cursor key C (second line from bottom).
- ☛ Change the length of this chord variation to 2 above cursor key E.
- ☛ Press the REC/WRITE key, followed by the START/STOP key to start recording.

After a two measure lead-in, the *i2/i3* will start recording.

- ☛ Play the chord C–E–G–B in the middle of the keyboard, as quarter notes for two measures.

After two measures, the style will loop around to measure one.

- ☛ Press the START/STOP key to stop recording.

Now let's listen to the difference in how the music processor treats these two sets of note data.

- ☛ Press the ARR PLAY key.
- ☛ Press the TEMPO LOCK key to turn this function off (the light will go out).
- ☛ Make sure the STYLE key is lit.
- ☛ Press the 7 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 4 key in the lower row, to select style U4.
- ☛ Play the C at the bottom of the keyboard.
- ☛ Press the START/STOP key.
- ☛ As the arrangement continues, play a C major 7 chord (C–E–G–B) in the lower half of the keyboard.

Notice that the piano part does not change to a major 7th (even though the *i2/i3* has correctly recognized this chord, indicated in the display as CM7).

- ☛ Play a C7 chord (C–E–G–B-flat) followed by a C6 chord (C–E–G–A).

Notice again that the piano part does not change to match these chords.

- ☛ Play the C at the bottom of the keyboard.
- ☛ Press the VARIATION 2 key.

- When the arrangement changes to Variation 2, play the chords from the steps above.

Notice that the piano part changes to fit each chord.

Now you can see why it is important to record parts based on major 7th chords. If you want only some of the notes to follow the chords, play those notes as B's and other notes as C's (in the key of C).

If you set a chord variation's key parameter to one of the minor keys, play the part based on a minor 7th chord.

In either case, you may find it easier to play the part based on major (or minor) chords, and use Edit Style mode's Shift Note function to adjust those notes which you want to follow the chords.

## 9.5 A few last words about recording styles

### *Drum track hints*

- When recording the drums, use Kick 1 and Snare 1 exclusively. You can select the other kick and snare sounds in an arrangement by using the Kick Designation and Snare Designation parameters.
- Don't record drum parts with the sidestick. Record them using the snare instead. You can use drum map 3 or 4 to change these snares to sidesticks. If the sidestick is used in the drum track, it will change to the snare when using drum map 3 or 4.
- Likewise, don't record drum parts with the ride cymbals. Use the hi-hats instead. You can use drum map 4 or 6 to change these hi-hats to rides. If the ride cymbal is used in the drum track, it will change to the hi-hat when using drum map 4 or 6.
- Record hi-hat parts primarily using the closed hi-hat sound. You can use drum map 7 to change these to open hi-hats.

You may find it helpful to record the track using the Kick 2-4, Snare 2-4, sidestick, ride cymbal, and open hi-hat sounds, and then use the Shift Note function to shift the note numbers to the appropriate keys for the recommended drum sounds, mentioned above.

- Use the accent hi-hat (F#1) only for accents. When using drum map 8, the open hi-hat and accent hi-hat become Crash 1 and Crash 2. If you use the accent hi-hat for 16th-note parts, for example, it will sound a bit overwhelming when you switch to drum map 8.

### *You're on your own*

As you can see, creating your own styles can be a very involved process, but is well worth the time you put into it. There is not enough room here to cover every aspect of creating styles, but you now have enough information to get you started. Experiment and enjoy!



# 10 BACKING SEQUENCES

As we discussed in Chapter 2, a backing sequence lets you record all aspects of an arrangement performance including what arrangement is being used, what style is being used, and the tempo.

In addition, there are three *arrangement tracks* which record the keyboard timbres, the front panel keys, and the chords you play in the chord scanning range of the keyboard. For even more flexibility, there are eight *extra tracks* which can be used to record other musical parts, or to send information such as volume and program changes to the six backing tracks.

## 10.1 Basic instructions

From what you have learned in Chapters 1, 7, and 8, you should now have all the basic knowledge you need to record backing sequences. You will find that recording in this mode is as easy as playing an arrangement. And, many of the backing sequence editing functions are similar to those in Song mode.

Here is a brief outline of how to record a backing sequence:

- Press the BACKING SEQ key to go to Backing Sequence mode.
- Use the ARRANGEMENT/STYLE keys to select the arrangement you want to use.
- Press the STYLE key and use the ARRANGEMENT/STYLE keys to select the style you would like to use, if it is different than that set for the arrangement.
- Select the style element with which you would like to start recording.
- If you want to select different programs for KBD1 or KBD2, use the keyboard timbre setting (bottom line, above cursor key E) to specify which keyboard timbre you wish to change.
- Adjust the tempo if necessary (you must first move the cursor to this parameter to adjust it).
- Select whether you want to record the arrangement tracks or an extra track (above cursor key C).
- Press the REC/WRITE key to prepare the *i2/i3* for recording.
- If you are recording arrangement tracks, you can individually disable recording for the Keyboard, Control, or Chord tracks, if you like (above cursor keys F, G, and H).
- If you are recording an extra track, select the recording mode (above cursor key E).
- Press the START/STOP key to start recording.
- If you are recording arrangement tracks, play as you would in Arrangement Play mode.
- If you are recording an extra track, play as you would in song mode.

## 10.2 Step recording

Usually, you will use the method outlined above to record backing sequences in real time. This is the easiest way because the technique is the same as playing arrangements.

For this tutorial, however, we will create the following song using the Step Recording function.

Chord track C G F

Control track Variation 1

Fill 2 Style Element: OFF

Let's start by erasing any backing sequences that might be in the *i2/i3* memory. Be sure to save to disk any backing sequences or songs that you want to keep, as the following step will clear the memory for both of these modes.

- ☛ Turn the *i2/i3* power off and then on again.

The backing sequence memory will be cleared.

- ☛ Press the BACKING SEQ key.

Let's use arrangement 42 SongWriter for this tutorial.

- ☛ Press the 4 key in the upper row of ARRANGEMENT/STYLE keys, followed by the 2 key in the lower row, to select arrangement **42 SongWriter**.

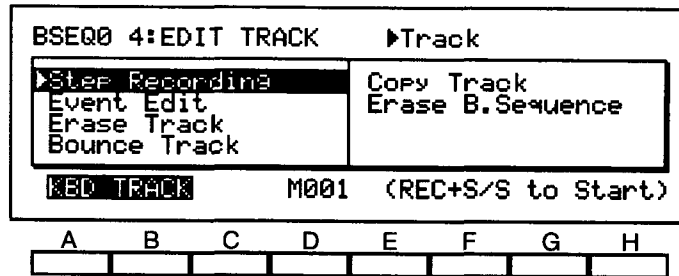
Now let's set Variation 1 as the initial style element.

- ☛ Press the VARIATION 1 key.
- ☛ Press the REC /WRITE key two times to write this change into the backing sequence.

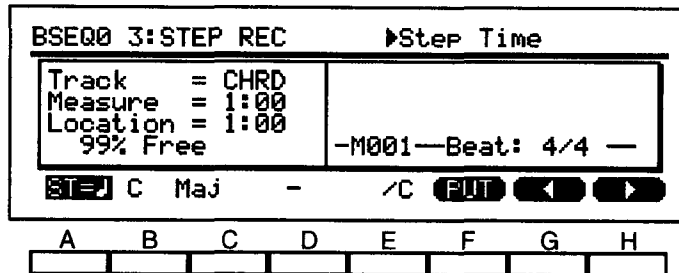
### Step recording chords

A quick and easy way to enter chords is with the Step Recording function. If you were to enter chords in real time, you would have to play the song in time, from beginning to end. Step Recording allows you to enter chords without having to play to a beat, and is therefore often faster than entering chords in real time.

- ☛ Press the PAGE+ key three times to select Page 4.



- Press the UP key twice to select **CHORD TRACK** above cursor key A.
- Press the REC/WRITE key followed by the START/STOP key to enter the Step Recording function.



You can see that this is very similar to the Step Recording function in Song mode.

- Press the UP key twice to set the step time to whole notes.
- Play a C major chord on the lower half of the keyboard.

If you look at the display, above cursor keys B through E, you will see the chord you played.

- Press cursor key F to put the chord into the track.

Note that you must press cursor key F to enter each chord.

If you look at the Measure indicator on the left side of the display, you will see that the *i2/i3* has automatically advanced to the next measure, because you set the step time to whole notes. If you specified the step time to be quarter notes, for example, the *i2/i3* would advance the location by that amount, instead.

- Play a G major chord on the lower half of the keyboard.
- Press cursor key F to put the chord into the track.

You can also set the parameters above cursor keys B, C, D, and E directly. This is helpful if you do not know how to play a particular chord.

- Continue entering chords for the rest of the song on page 132.

When you reach measure 4 and measure 8, you can either press cursor key F a second time, or press cursor key H to manually advance the *i2/i3* to the next step.

Before entering the chords for measure 15, be sure to change the step time to half notes for the first chord, and to quarter notes for the second and third chords. Set it back to whole notes for measure 16.

- Press the START/STOP key to exit the Step Recording function.



**Step recording the control track**

Now let's use Step Recording to enter the control track information.

- ☛ Press the DOWN key once to select CTRL TRACK above cursor key A.
- Since we already selected Variation 1 as the default style element, the first event we will record occurs in measure 15.
- ☛ Press cursor key D to select the starting measure parameter.
- ☛ Use the VALUE controls to enter 15.
- ☛ Press the REC/WRITE key followed by the START/STOP key to enter the Step Recording function.
- ☛ Press cursor key B and select STY.ELEMENT.
- ☛ Next, press cursor key D and select FIL2.
- ☛ Press cursor key F to put the event in the track.
- ☛ Press cursor key H to advance to the next step.

The *i2/i3* will not automatically advance to the next step because, unlike chord events, it is possible to put more than one control event at the same location.

Now we will insert an event to create the break that occurs in measure 16. (In Arrangement Play mode, you create a break by pressing the SYNCHRO START/STOP key while the *i2/i3* is playing. In Backing Sequence mode, this is achieved by inserting a style element setting of OFF.)

- ☛ Press cursor key A to highlight the Step Time parameter.
- ☛ Press the DOWN key three times to set the step time to eighth notes.
- ☛ Press cursor key H once to advance the location to 1:48.
- ☛ Next, press cursor key D and select OFF.
- ☛ Press cursor key F to put the event in the track.

Setting the style element to OFF is useful for creating a break in the music. All the instruments will stop playing, and then start playing together at the next style element. You can also use this event if you want to record your own section of music—an intro, for example—using the extra tracks only.

- ☛ Press cursor key H once to advance the location to 2:00.
- ☛ Press cursor key A to highlight the Step Time parameter.
- ☛ Press the UP key once to set the step time to quarter notes.
- ☛ Press cursor key H three times to advance the location to the next measure.
- ☛ Next, press cursor key D and select VAR1.
- ☛ Press cursor key F to put the event in the track.
- ☛ Press the START/STOP key to exit the Step Recording function.
- ☛ Press the PAGE- key three times to return to Page 1.
- ☛ Press the START/STOP key to listen to the backing sequence.

When it reaches the first beat of measure 16, the *i2/i3* will stop all notes and resume playing at measure 17 (the point at which the song repeats in the music on page 132).

The following is a table showing the available event types for the control track, and their associated values.

<b>Event Type</b>	<b>Values</b>
Arrangement	11-88
Style	P11-P68, U1-U4, C1-C4
Style Element	OFF, VAR1-VAR4, INT1, INT2, END1, END2, FIL1, FIL2
Keyboard Assign	SINGLE, LAYER, SPLIT, DRUMS
Chord Scanning	OFF, LOWER, UPPER, FULL
Chord Hold	OFF, ON
Bass Inversion	OFF, ON
Transpose	-11...-1, 00, +1...+11
DRUM Mute	PLAY, MUTE
PERC Mute	
BASS Mute	
ACC1 Mute	
ACC2 Mute	
ACC3 Mute	
Drum Map	1-8
KBD1 Program	A11-A88, B11-B88, C11-C88, D11-D88, Dr1-Dr8
KBD2 Program	
KBD1 Octave	-2, -1, 0, +1, +2
KBD2 Octave	

### 10.3 Using the extra tracks to control the backing tracks

There may be times when you would like to change a section of music that is played by the *i2/i3*. You could modify the original data in the style, however, this would result in the style always playing the new notes. Instead, you can record the part into one of the extra tracks.

Let's record a simpler bass part for measure 15.

We can control the bass track from one of the extra tracks by setting the MIDI channels of the two tracks to the same number.

- Press the PAGE+ key two times to select Page 3.

BSEQ0 3:E.TRK PARAM 2 ▶Channel							
ETR1	ETR2	ETR3	ETR4	ETR5	ETR6	ETR7	ETR8
12	03	04	05	06	07	08	09
127	127	127	127	127	127	127	127
001	001	001	001	001	001	001	001
G9	G9	G9	G9	G9	G9	G9	G9
C-1	C-1	C-1	C-1	C-1	C-1	C-1	C-1

A	B	C	D	E	F	G	H

The MIDI channel for Extra Track 1 should already be highlighted.

- Set this to a value of 12.

This is the default MIDI channel for the bass track. (You can change the MIDI channel for the backing tracks on Page 1 of Global mode.)

- Press the PAGE- key two times to return to Page 1.
- Use the CURSOR POSITION keys to highlight the A.TRACKS setting.
- Use the VALUE controls to change this to the E.TRACK1 setting.
- Press the ▲ key three times to highlight Extra Track 1's program setting.
- Press the DOWN key once to select OFF.

When you play the keyboard, you will hear program C53 Funk Bass, the program assigned to the arrangement's bass track.

Now let's insert a BASS MUTE event into the control track to mute the original bass track for the measure we want to change. Because the control track already contains data, we must use the Event Edit function to do this. (We can't use Step Recording because it will overwrite any existing data.)

- Press the PAGE+ key three times to go to Page 4.
- Press the ▼ key once to select the Event Edit function.
- Press the DOWN key two times to select CTRL TRACK.
- Press the REC/WRITE key followed by the START/STOP key to enter the Event Edit function.
- Using the VALUE controls, select measure 15.

BSEQ0 4:EVENT EDIT ▶Measure						
M015	=====	BAR Beat: 4/4				
M015	1:00	STY.ELEMENT :FIL2				
M016	=====	BAR Beat: 4/4				
M016	1:48	STY.ELEMENT :OFF				
M017	=====	BAR Beat: 4/4				
M017	1:00	STY.ELEMENT :VAR1				INS

A	B	C	D	E	F	G	H

- Press the ▼ key twice to move the cursor just past the STY.ELEMENT :FIL2 event.

This way, the i2/i3 will insert a new event just after the STY.ELEMENT :FIL2 event, but before the current cursor position.

- Press cursor key G to insert an event.
- Press cursor key C to highlight the event type.

- Using the VALUE controls, set this to **BASS MUTE**.
- Press cursor key E to highlight this event's value.
- Using the VALUE controls, set this to **MUTE**.
- Press the ▼ key two times.
- Press cursor key G to insert an event.
- Press cursor key C to highlight the event type.
- Using the VALUE controls, set this to **BASS MUTE**.

The value should already be set to **PLAY**.

- Press the **START/STOP** key to exit the Event Edit function.

(To record mute events in real time, you must use the optional EC5 External Controller footswitch.)

- Press the **PAGE-** key three times to go to Page 1.
- Press the **START/STOP** key to listen to the backing sequence.

When you reach measure 15, you will hear the space we created in the bass track.

Now, let's record our bass part (C-C-E-E-F-F-F#-G as eighth notes) on Extra Track 1.

- Use the **CURSOR POSITION** keys to highlight the measure field (second line from bottom, above cursor key B).
- Set this to **15**.
- Use the **CURSOR POSITION** keys to highlight the **A.TRACKS** setting.
- Use the **VALUE** controls to change this to the **E.TRACK1** setting.
- Press the **REC/WRITE** key followed by the **START/STOP** key to start recording.
- After the two measure lead-in, play the notes below.



(Remember, the small "8" below the clef indicates that the part should be played an octave lower than it is written—the first note should be the lowest C on the keyboard.)

It is not necessary to play the C on the downbeat of the next measure, because the bass track takes over at this point.

- Press the **START/STOP** key to stop recording.

If you made a mistake while recording, press the **COMPARE** key, reselect measure 15, and start again.

- Press the **RESET** key to reset the backing sequence to measure 1.
- Press the **START/STOP** key to listen to what you have recorded.

The music below illustrates the interplay between the bass track and Extra Track 1, in measures 14 through 16. Even though the bass part switches from track to track, it will sound seamless.

The diagram illustrates the interaction between four tracks during a musical sequence:

- Chord track:** Shows a sequence of chords: G7sus4, C, Csus4, Csus2, and C (No Chord).
- BASS track:** Shows a bass line. A section labeled "Fill 2" is indicated by a dashed line.
- Control track:** Shows control events: "Bass Mute: MUTE" occurs at the start of the "Fill 2" section, and "PLAY" occurs at the end of the "Fill 2" section.
- Extra Track 1:** Shows a bass line that is muted (indicated by a flat line) during the "Fill 2" section.

By using this technique, you can replace any section of music without altering the original style data. Because the extra tracks don't go through the music processor's Note Transposition Tables, you don't have to worry about how the notes will be affected—play the part exactly as you want it to sound.

You can also use the extra tracks to send various control information to the backing tracks, such as program changes, volume, expression, panning, pitch bend, and modulation for further control of the music.

When you finish recording a backing sequence, always remember to save it to disk, as it will be erased from memory when you turn the *i2/i3* power off.

Congratulations! You have made it through all the tutorials in this manual. The next chapter covers some basic applications of MIDI and the *i2/i3*.

# 11 MIDI APPLICATIONS

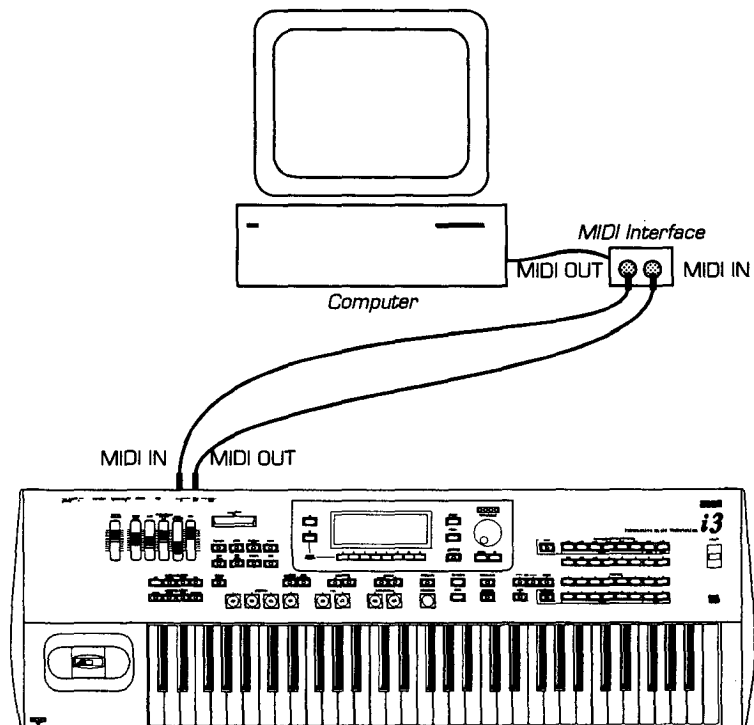
MIDI (Musical Instrument Digital Interface) is the standard interface used to link electronic musical instruments together. In the beginning, people used MIDI mainly to play two (or more) synthesizers from one keyboard. Since then, an extremely broad range of applications has emerged, from using a computer for multitrack sequencing and instrument parameter editing, to MIDI control of effects processors, mixers, and lighting systems.

This chapter deals with possible applications of MIDI and the *i2/i3*. For those interested in the details of MIDI, there are many well-written books available on the subject.

## 11.1 Using the *i2/i3* with an external sequencer

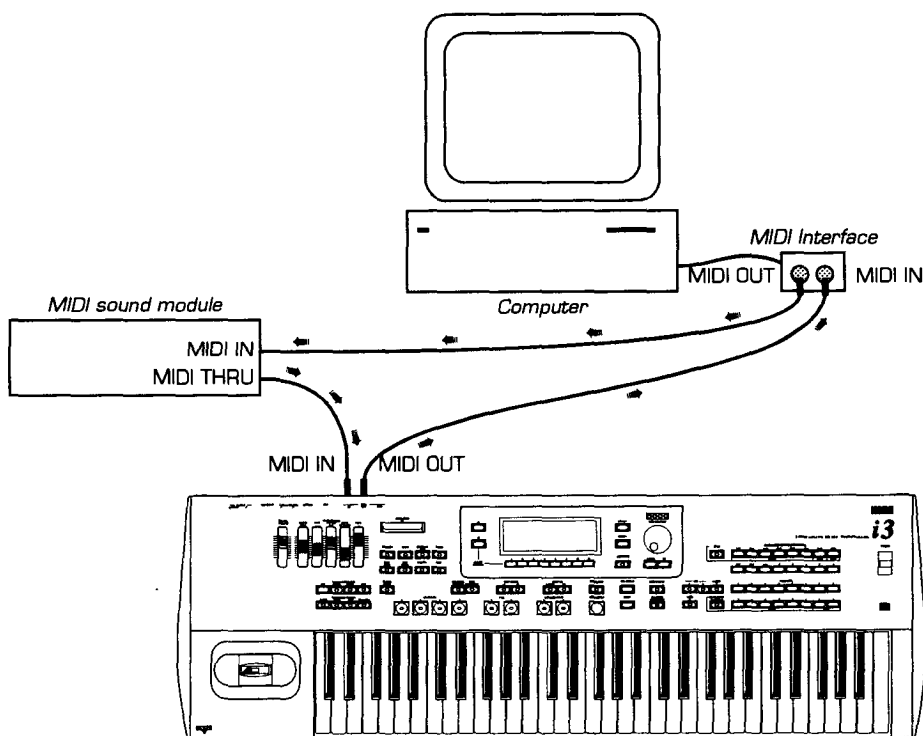
As you know, the *i2/i3* has its own 16-track sequencer. However, you may want to use a computer software sequencer instead. Usually, these sequencers offer more advanced editing capabilities, as sequencing is their only function.

If you will be using the *i2/i3* keyboard to enter note data into the computer sequencer, make the following connections:



In this setup, data from the *i2/i3* keyboard is sent from the *i2/i3* MIDI OUT jack, and is received by the MIDI IN jack of the computer's MIDI interface. When playing back sequences, MIDI data from the computer is sent via the MIDI interface's MIDI OUT jack, and is received by the *i2/i3* MIDI IN jack.

If you want to use additional keyboards or sound modules:



In this setup, data from the *i2/i3* keyboard is sent from the *i2/i3* MIDI OUT jack, and is received by the MIDI IN jack of the computer's MIDI interface. When playing back sequences, MIDI data from the computer is sent via the MIDI interface's MIDI OUT jack, and is received by the sound module's MIDI IN jack. This data is then passed on from the sound module's MIDI THRU jack to the *i2/i3* MIDI IN jack.

(If the sound module has no MIDI THRU jack, connect the MIDI interface's MIDI OUT jack to the *i2/i3* MIDI IN jack, and the *i2/i3* MIDI THRU jack to the sound module's MIDI IN jack.)

Use Song mode for setting up the *i2/i3* MIDI channel configuration. You can specify initial program, volume, panpot, and effect send values in the song itself, or you can send these messages from the computer via MIDI.

When sending program change messages, use a MIDI bank change message of 0 to select *i2/i3* banks A and B, 1 to select *i2/i3* banks C and D, and 2 to select the *i2/i3* DRUM PROG bank.

MIDI bank number	MIDI program number	<i>i2/i3</i> program numbers
0	0-63	A11-A88
	64-127	B11-B88
1	0-63	C11-C88
	64-127	D11-D88
2	0-7	Dr1-Dr8

As you know, the *i2/i3* numbering system is somewhat different than the 0–127 (or 1–128) system employed by MIDI. Use this chart to find corresponding MIDI and *i2/i3* program numbers. The bank (A or C, B or D) will be determined by the value of the MIDI bank change message sent prior to the program change.

Bank/ Program	MIDI Program	Bank/ Program	MIDI Program	Bank/ Program	MIDI Program	Bank/ Program	MIDI Program
A,C 11	0	A,C 51	32	B,D 11	64	B,D 51	96
A,C 12	1	A,C 52	33	B,D 12	65	B,D 52	97
A,C 13	2	A,C 53	34	B,D 13	66	B,D 53	98
A,C 14	3	A,C 54	35	B,D 14	67	B,D 54	99
A,C 15	4	A,C 55	36	B,D 15	68	B,D 55	100
A,C 16	5	A,C 56	37	B,D 16	69	B,D 56	101
A,C 17	6	A,C 57	38	B,D 17	70	B,D 57	102
A,C 18	7	A,C 58	39	B,D 18	71	B,D 58	103
A,C 21	8	A,C 61	40	B,D 21	72	B,D 61	104
A,C 22	9	A,C 62	41	B,D 22	73	B,D 62	105
A,C 23	10	A,C 63	42	B,D 23	74	B,D 63	106
A,C 24	11	A,C 64	43	B,D 24	75	B,D 64	107
A,C 25	12	A,C 65	44	B,D 25	76	B,D 65	108
A,C 26	13	A,C 66	45	B,D 26	77	B,D 66	109
A,C 27	14	A,C 67	46	B,D 27	78	B,D 67	110
A,C 28	15	A,C 68	47	B,D 28	79	B,D 68	111
A,C 31	16	A,C 71	48	B,D 31	80	B,D 71	112
A,C 32	17	A,C 72	49	B,D 32	81	B,D 72	113
A,C 33	18	A,C 73	50	B,D 33	82	B,D 73	114
A,C 34	19	A,C 74	51	B,D 34	83	B,D 74	115
A,C 35	20	A,C 75	52	B,D 35	84	B,D 75	116
A,C 36	21	A,C 76	53	B,D 36	85	B,D 76	117
A,C 37	22	A,C 77	54	B,D 37	86	B,D 77	118
A,C 38	23	A,C 78	55	B,D 38	87	B,D 78	119
A,C 41	24	A,C 81	56	B,D 41	88	B,D 81	120
A,C 42	25	A,C 82	57	B,D 42	89	B,D 82	121
A,C 43	26	A,C 83	58	B,D 43	90	B,D 83	122
A,C 44	27	A,C 84	59	B,D 44	91	B,D 84	123
A,C 45	28	A,C 85	60	B,D 45	92	B,D 85	124
A,C 46	29	A,C 86	61	B,D 46	93	B,D 86	125
A,C 47	30	A,C 87	62	B,D 47	94	B,D 87	126
A,C 48	31	A,C 88	63	B,D 48	95	B,D 88	127



When using the setup above, it is recommended to set the *i2/i3* Local Control parameter to OFF. (This parameter can be found in Global mode.) Set the computer sequencer to echo the data it receives from the MIDI IN jack, back to the MIDI OUT jack. The parameter that controls this function has a different name depending on the software you use. Some common names are echo back, patch thru, echo on, etc.

By turning Local Control off, you break the connection between the *i2/i3* keyboard and its tone generator. This way, the *i2/i3* acts as a separate MIDI keyboard and independent tone generator. The sequencer's echoing function allows you to play the *i2/i3* tone generator, as well as the MIDI sound module's tone generator, from the *i2/i3* keyboard. If the sequencer's echoing function is turned on, and the *i2/i3* Local Control parameter is *also* set to ON, two notes will be played by the *i2/i3* tone generator for every one note sent out from its keyboard.

## 11.2 Using the *i2/i3* to control other MIDI instruments

You can use other MIDI instruments to play the *i2/i3* arrangements, backing sequences and songs. Just make sure to match the MIDI channels to the correct tracks. Also, use the Track Status parameter of each mode to determine whether the *i2/i3* will play its own sounds in addition to those of the other MIDI device.

You can find the Track Status parameter on Page 3 of Arrangement Play mode, Page 2 of Backing Sequence mode, and Pages 2 and 3 of Song mode. (In the case of backing sequences, this parameter can only be set for the extra tracks. Settings for the backing tracks are made in the individual arrangements.)

When this parameter is set to OFF, the corresponding track will not play at all. When set to INT, only internal *i2/i3* sounds will be played. When set to EXT, signals will be sent to external MIDI instruments only. When set to BOTH, both internal *i2/i3* and external MIDI instrument sounds will play.

Be aware that playback results will vary depending on the MIDI instruments used. For example, the *i2/i3* drum mapping feature may not produce the sounds you expect if the external MIDI instrument does not have the same drum kit layout.

## 11.3 What is General MIDI?

*General MIDI*, or GM, is an addition to the MIDI specification that makes it easier to play sequences on a wide variety of MIDI instruments, without much preparation.

Before the existence of General MIDI, there were no rules governing what kinds of sounds a MIDI instrument should include, or what order they should be placed in memory. Trying to play back sequence data using a different MIDI instrument could produce unpredictable results. For example, the hi-hat part could be played by a snare drum, the bass drum by a crash cymbal, and the piano part by a synth brass patch.

To make it sound right, you would have to look for programs that match those of the original instrument, make a list of each program number, and then edit the sequence data so that these new programs would be called up at appropriate volume levels.

General MIDI makes it possible for sequences written for GM-compatible instruments to sound relatively the same no matter what General MIDI in-

strument is used for playback. The piano track will play a piano sound, the drum parts will be played by the correct drum sounds, and the overall mix will be correct. Plus, there is no tedious editing, sound searching, or level matching required.

GM specifies a list of programs which includes all major musical instrument groups, assigned to specific program numbers. Also specified are the relative volume levels for each program, as well as guidelines for envelope settings (attack, release, etc.) and velocity response (touch sensitivity). In addition, a drum kit map is included which specifies the layout of drum sounds across the keyboard.

This opens up many new possibilities for MIDI applications. Sequences that conform to the GM specification can be traded on computer bulletin board systems, ready to play without any major preparations. Computer software and video game programmers can write music for GM instruments to accompany their software with high-quality sound and sound effects. Third party sequence vendors can offer pre-recorded music, in sequence form, for use in multimedia presentations. And the list goes on...

#### ***Playing GM sequence data***

Use the *i2/i3* Song mode to play GM sequence data from an external sequencer. Be sure to send a "GM Mode ON" message to the *i2/i3* before playing back the sequence data. This message will reset all MIDI controllers (such as pitch bend and modulation) for all channels. It will also set MIDI channel 10 to be the designated drum channel, with the reception of program changes disabled for that channel.

You can also load GM sequences saved in the Standard MIDI File format directly into the *i2/i3*.

### **11.4 About Standard MIDI Files**

The Standard MIDI File format was created to allow sequence data to be transferred between computers and keyboards that support this format.

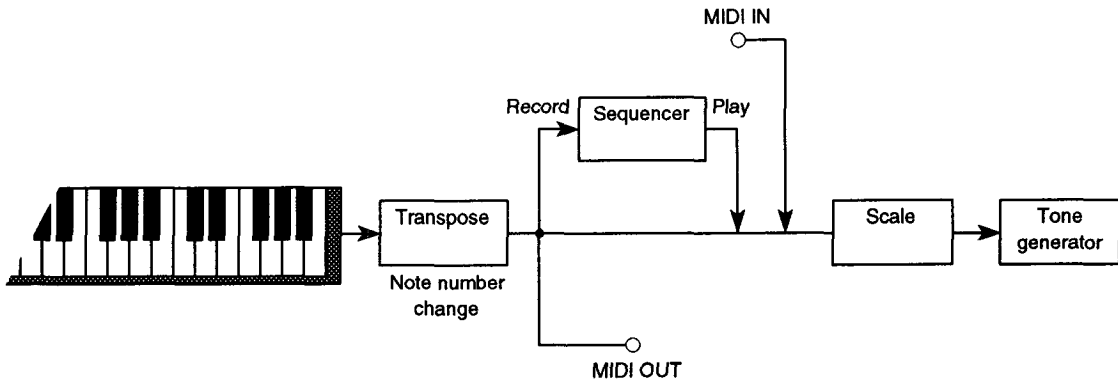
Standard MIDI files come in three formats. The *i2/i3* conforms to formats 0 and 1. In format 0, data of all tracks is merged onto one track and saved to floppy disk. In format 1, data is saved on individual tracks. Format 1 is more common.

Standard MIDI files do not necessarily conform to the GM standard, however, they provide a useful way of transferring song data between GM compatible music systems.

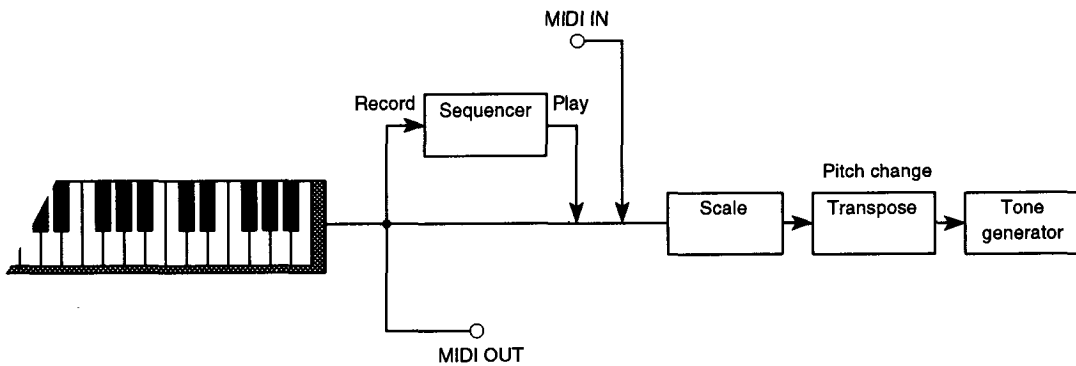
Use the Load Std MIDI File function in Disk mode to load a standard MIDI file into the *i2/i3* Song mode. Use the Save Std MIDI File function to convert and save a Song mode song into one of the two formats mentioned above.

### **11.5 About the Xpose Pos parameter**

The Xpose Pos, or Transpose Position parameter, determines where in the *i2/i3* signal flow transposition will occur. The setting you choose will affect MIDI note messages sent out from the *i2/i3*.



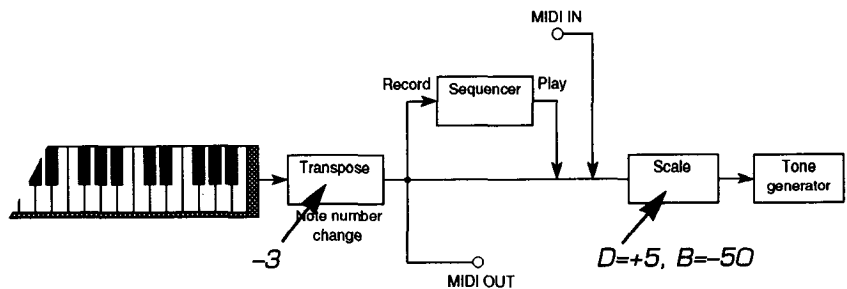
The illustration above represents the POST-KBD setting, and is the default setting for this parameter. As you can see, transposition occurs before the signal is sent to the MIDI OUT jack. Using the TRANSPOSE keys on the front panel will result in transposed MIDI note messages being sent out. However, note messages received at the MIDI IN jack will not be affected.



The illustration above represents the PRE-OSC setting. As you can see, the signal is sent to the MIDI OUT jack before transposition occurs. However, signals received from the MIDI IN jack will be affected by the setting of the TRANSPOSE keys.

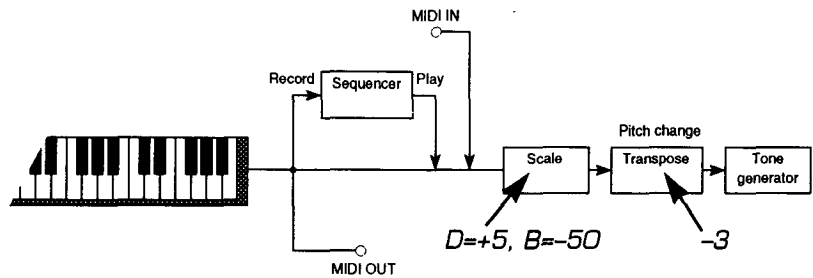
**How the Xpose Pos parameter affects MIDI and the Scale function**

For this example, the Transpose parameter is set to -3, and the Scale function is set to transpose D's by +5 cents and B's by -50 cents.



With the Xpose Pos parameter set to POST-KBD: If a D is played on the keyboard, it will first be transposed by an amount of -3 (three semitones). This means that the D will become a B. The note will then pass through the Scale function as B, and its pitch will be lowered 50 cents. You will hear a B, -50 cents.

As for MIDI: If you play a D on the keyboard, it will be transposed by a factor of  $-3$ , and sent to the MIDI OUT jack as a B. If a D is received via the MIDI IN jack, it will go through the scale function and then pass on to the tone generator as a D,  $+5$  cents.



With the Xpose Pos parameter set to PRE-OSC: If a D is played on the keyboard, it will first pass through the scale function as a D. According to the scale settings, the D will be pitch-adjusted  $+5$  cents. The D is then transposed by an amount of  $-3$  (three semitones). The D will become a B. You will hear a B,  $+5$  cents.

As for MIDI: If you play a D on the keyboard, it will pass un-transposed through the MIDI OUT jack as a D. If a D is received via the MIDI IN jack, it will go through the scale function ( $+5$ ) and then be transposed by an amount of  $-3$ . You will hear a B,  $+5$  cents.



---

## Specifications and Options

System:	AI <sup>2</sup> Synthesis (full digital processing)
Tone generator:	32 voices, 32 oscillators (single mode); 16 voices, 32 oscillators (double mode)
Keyboard:	Velocity and aftertouch sensitive. <i>i2</i> : 76 notes, <i>i3</i> : 61 notes
Waveform memory:	<i>i2</i> : 8 megabyte PCM ROM, <i>i3</i> : 6 megabyte PCM ROM
Effects:	2 stereo digital multi-effect systems, 47 effects
Programs:	128 GM programs + 1 GM drum program stored in ROM; 64 programs + 5 drum programs stored in ROM; 64 user programs + 2 user drum programs stored in RAM
Styles:	48 styles stored in ROM; 4 styles stored in RAM; 4 styles stored in optional ROM cards
Arrangements:	64 stored in RAM
Backing Sequences:	10 stored in RAM
Songs:	10 songs, 16 tracks, 16 timbres (Dynamic Voice Allocation)
Sequencer event capacity:	Backing sequences and songs: 40,000; user styles: 15,000
Control inputs:	Damper pedal, assignable pedal/switch 1 and 2, EC5
Outputs:	Left/mono, right, headphones
MIDI:	IN, OUT, THRU
Floppy disk drive:	3.5 inch 2DD
Card slot:	Style data
Display:	Large backlit 240 x 64 graphics LCD display
Power supply:	AC local voltage
Power consumption:	11W
Standard accessories:	AC cord, preload program disk IFD-00P, music stand
Dimensions:	<i>i2</i> : 1,283 (W) x 348 (D) x 122 (H) mm (50.5" x 13.7" x 4.8") <i>i3</i> : 1,076 (W) x 348 (D) x 122 (H) mm (42.4" x 13.7" x 4.8")
Weight:	<i>i2</i> : 17.3kg (38.1 lbs.), <i>i3</i> : 14.7kg (32.4 lbs.)
Optional accessories:	Style card library STY-xx, EC5 External Controller, DS-1 Damper Pedal, PS-1 Pedal Switch, PS-2 Pedal Switch, EXP-2 Expression Pedal, MIDI cable

*Specifications are subject to change without notice.*

Please take a moment to photocopy this page, answer the questions below, and mail it to the Korg distributor in your country. The information you provide us with will help us to improve our products in the future.

<b>Name</b>	
<b>Occupation</b>	
<b>Address</b>	
How do you feel about the sound quality of the <i>i2/i3</i> ?	
Which styles do you feel are the best? Which do you feel could be better?	
Are there any sounds or styles that you feel should be included that are not already?	
What do you feel is the best feature of the <i>i2/i3</i> ?	
Which functions do you feel are the easiest to use and understand? The hardest?	
What functions would you like to see added to the <i>i2/i3</i> ?	
Other comments:	

#### **NOTICE**

KORG products are manufactured under strict specifications and voltages required by each country. These products are warranted by the KORG distributor only in each country. Any KORG product not sold with a warranty card or carrying a serial number disqualifies the product sold from the manufacturer's/distributor's warranty and liability. This requirement is for your own protection and safety.

**KORG** KORG INC.

15 - 12, Shimotakaido 1 - chome, Suginami-ku, Tokyo, Japan.



# *i2/i3*

Interactive Music Workstation

---

## *Performance Notes*

**KORG**

ⓐ ⓑ ⓒ

---

## Disk File Management

Because the *i2/i3* uses the MS-DOS\* disk format, there are no restrictions on how to organize your disk files. If you find that you use arrangements most often, you can prepare a disk that contains only arrangement files. You can fit many of them on one disk, as they take up a relatively small amount of disk space (about 9 kilobytes).

If you create your own styles, you may want to create a "master" arrangement file which you can use with all of your style files. (Remember, there are 64 arrangements in each arrangement file, but only four styles in each style file.)

As you use the *i2/i3* more and more, you will find a strategy that works best for you.

## Compatibility With X3 Data

The Korg X3 Music Workstation features the same program and song structure as the *i2/i3*. Because their disk formats are the same, you can load programs and songs directly from an X3 disk into the *i2/i3*. Likewise, you can load programs and songs directly from an *i2/i3* disk into the X3.

The programs will be loaded into the program locations as shown below:

X3 Programs		<i>i2/i3</i> Programs
A00-A63	↔	D11-D88
A64-A65	↔	Dr7-Dr8

Program Change events in the song tracks will be converted as follows:

X3		<i>i2/i3</i>
GM1-GM64	↔	A11-A88
GM65-GM128	↔	B11-B88
B00-B63	↔	C11-C88
A00-A63	↔	D11-D88
A64-A65	↔	Dr7-Dr8

### A note to *i2* users:

The *i2* has an additional piano multisound (340:A.Piano 3) which is used in programs **A11 Piano** and **D11 i2 Piano**. Because program D11 resides in RAM, it can be accidentally erased or replaced. As a matter of fact, if you loaded the "AMERICA" files to listen to the demo backing sequences, you have already replaced the *i2 Piano* program with the **8' Piano** program from the "AMERICA.PCG" file. (Program A11 and multisound 340 both reside in ROM, and as such cannot be erased.)

We have provided the file "\_I2DBANK.PCG" on the IFD-00P factory disk for the purpose of restoring the *i2 Piano* program. With the exception of program **D11 i2 Piano**, this file contains the same programs as the "AMERICA.PCG" file. Use either the Load All Program function or the Load One Program function to restore this program.

\* MS-DOS is a registered trademark of Microsoft Corporation.  
All trademarks or registered trademarks are the property of their respective holders.

---

# Style List

(length in measures)

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
11 Open Rock	8	<sup>†</sup> 5	8	<sup>†</sup> 11	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
12 Pop Rock	8	<sup>†</sup> 7	8	3	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
13 Hard Rock	9	<sup>†</sup> 11	8	<sup>†</sup> 4	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
14 RockShuffl	8	<sup>†</sup> 6	4	3	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
15 Half Time	8	<sup>†</sup> 7	8	3	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
16 Lite Rock	8	8	9	8	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
17 60's Dance	9	<sup>†</sup> 8	2	<sup>†</sup> 8	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
18 60's Rock	5	5	4	<sup>†</sup> 6	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
21 New Jack	4	†4	4	4	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
22 Dance Pop	1	†5	4	†4	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
23 House	8	†9	8	†5	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
24 Rap	6	†9	4	5	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
25 70's Disco	8	†8	5	†9	1	2

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
26 R&B Shuffl	4	†5	4	†9	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
27 R & B	4	†10	5	6	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
28 Reggae	3	†3	2	†5	1	1

**KORG i2/i3 Performance Notes**

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
31 Big Band	12	†3	2	†5	1	1

Style	*Intro 1 Major/Minor		*Ending 1		Intro 2	Ending 2	Fill 1	Fill 2
32 Slow Swing	10	4	6	7	4	†8	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
33 Blues	4	†6	4	†6	†4	†4

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
34 Mid Shuffle	8	†5	2	†7	1	2

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
35 Pop Shuffle	4	†8	8	10	2	2

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
36 Motown	4	†4	5	4	1	1

Style	Intro 1	*Ending 1 Major/Minor		Intro 2	Ending 2	Fill 1	Fill 2
37 6/8 Oldies	2	3	2	9	†5	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
38 Country	2	†6	4	5	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
41 4/4 Ballad	5	6	6	†7	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
42 Pop Ballad	6	†6	8	†7	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
43 SlowShuffl	5	†8	4	†5	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
44 RockBallad	4	†6	4	†7	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
45 8 Beat 1	4	†6	4	†4	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
46 8 Beat 2	5	†6	4	†6	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
47 16 Beat 1	4	†6	4	6	1	1

Style	*Intro 1 Major/Minor		*Ending 1 Major/Minor		Intro 2	Ending 2	Fill 1	Fill 2
48 16 Beat 2	3	4	†5	†6	4	†6	1	1

**KORG i2/i3 Performance Notes**

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
51 Bossa Nova	10	†11	8	†8	2	2

Style	*Intro 1 Major/Minor		Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
52 Samba	5	4	†4	4	†4	1	2

Style	*Intro 1 Major/Minor		*Ending 1 Major/Minor		Intro 2	Ending 2	Fill 1	Fill 2
53 Salsa	8	4	†6	†5	4	6	1	1

Style	*Intro 1 Major/Minor		Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
54 Mambo	4	6	†4	4	†4	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
55 Fusion	9	4	12	4	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
56 Latin	8	9	4	†4	1	1

Style	Intro 1	*Ending 1 Major/Minor		Intro 2	Ending 2	Fill 1	Fill 2
57 Pop Samba	8	10	11	4	†4	1	1

Style	Intro 1	*Ending 1 Major/Minor		Intro 2	Ending 2	Fill 1	Fill 2
58 Beguine	8	†6	†7	4	5	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
61 Waltz	4	<sup>†</sup> 4	8	8	2	2

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
62 Slow Waltz	4	<sup>†</sup> 7	9	<sup>†</sup> 9	2	2

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
63 2/4 March	2	3	5	<sup>†</sup> 5	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
64 Polka	4	<sup>†</sup> 2	5	4	2	2

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
65 Cha Cha	8	9	4	4	1	2

Style	Intro 1	*Ending 1 Major/Minor		Intro 2	Ending 2	Fill 1	Fill 2
66 Tango	8	<sup>†</sup> 9	<sup>†</sup> 8	3	<sup>†</sup> 6	1	1

Style	Intro 1	Ending 1	Intro 2	Ending 2	Fill 1	Fill 2
67 Broadway	4	<sup>†</sup> 8	4	<sup>†</sup> 4	1	1

Style	*Intro 1 Major/Minor		*Ending 1 Major/Minor		Intro 2	Ending 2	Fill 1	Fill 2
68 Dixieland	3	4	4	2	2	<sup>†</sup> 2	1	2

<sup>†</sup>Ending can be used as fill

<sup>†</sup>Fill can be used as intro

\*Chord variations have different lengths



# Arrangement List

Arrangement Name	Style Name	Program	Arrangement Name	Style Name	Program
11 Mick&Keith	11 Open Rock	A47 DistGuitar	51 Boston Boy	21 New Jack	D58 PowerSynth
12 Prog. Rock	13 Hard Rock	L C87 Lead Stab D58 PowerSynth	52 Night Jams	21 New Jack	S C11 MIDI Piano C81 Euro Bass
13 Shufflin'	14 RockShuffl	C24 Perc&Rotor	53 DanceGirls	22 Dance Pop	L D78 Mono Lead D76 Leeeed
14 Top40 Rock	12 Pop Rock	D11 Piano 8'	54 VogueHouse	23 House	L C62 Analog Pad D31 Vibra Bell
15 RiffIn'	11 Open Rock	A32 Perc Organ	55 Yoll' Rap	24 Rap	L B13 Tenor Sax C76 Trumpets!
16 Rock On!	13 Hard Rock	A47 DistGuitar	56 Groovin'	26 R&B Shuffl	C11 MIDI Piano
17 Don't Stop	14 RockShuffl	C11 MIDI Piano	57 RaveItUp	U1 Rave	L B37 Rezzo 4ths D77 Busy Boy
18 AOR Rock	12 Pop Rock	D11 Piano 8'	58 MirrorBall	25 70's Disco	C78 Brass Band
21 SouthernRk	15 Half Time	A33 BX-3 Organ	61 1,000 Hits	41 4/4 Ballad	C11 MIDI Piano
22 EasyRockIn	16 Lite Rock	D11 Piano 8'	62 2,000 More	46 8 Beat 2	C15 Hard Tines
23 Love Songs	44 RockBallad	C11 MIDI Piano	63 Phil'sSong	42 Pop Ballad	C11 MIDI Piano
24 OldTimeR&R	18 60's Rock	D11 Piano 8'	64 The 1950's	37 6/8 Oldies	D11 Piano 8'
25 HalfTime	15 Half Time	A47 DistGuitar	65 Sad Songs	47 16 Beat 1	C11 MIDI Piano
26 Laid Back	16 Lite Rock	D11 Piano 8'	66 Dinkerhump	43 SlowShuffl	C11 MIDI Piano
27 Unplugged	44 RockBallad	B11 SopranoSax	67 When A Man	37 6/8 Oldies	B13 Tenor Sax
28 Beethoven	18 60's Rock	D11 Piano 8'	68 Baby, Baby	43 SlowShuffl	D52 TheStrings
31 Doctor	34 Mid Shuffle	D11 Piano 8'	71 AfterHours	32 Slow Swing	D42 FlugelHorn
32 The King	34 Mid Shuffle	B13 Tenor Sax	72 The Duke	31 Big Band	L C78 Brass Band C76 Trumpets!
33 TheFabFour	34 Mid Shuffle	C43 L&R E.Gtrs	73 The Avalon	67 Broadway	D11 Piano 8'
34 Surf City!	17 60's Dance	C21 60's Organ	74 Cookin'	31 Big Band	B12 Alto Sax
35 The Twist	17 60's Dance	B13 Tenor Sax	75 OlBlueEyes	31 Big Band	D11 Piano 8'
36 Pickin'!	38 Country	C41 Strummers	76 Moon Music	34 Mid Shuffle	S D44 Air Flute D11 Piano 8'
37 Nashville!	38 Country	C33 PedalSteel	77 SoulfulSax	48 16 Beat 2	B12 Alto Sax
38 Long Train	45 8 Beat 1	C11 MIDI Piano	78 Jammin'Sax	26 R&B Shuffl	B13 Tenor Sax
41 90's Funk	U3 Funky Jams	C78 Brass Band	81 Ipanema	51 Bossa Nova	D44 Air Flute
42 SongWriter	45 8 Beat 1	D11 Piano 8'	82 SambaDeSol	52 Samba	A24 Vibes
43 Solid Gold	35 Pop Shuffle	C78 Brass Band	83 Hot Salsa	53 Salsa	B22 Flute
44 Supremely	35 Pop Shuffle	D11 Piano 8'	84 Mambo Mama	54 Mambo	C73 PerkySaxes
45 Motown1968	36 Motown	L C42 E.Guitars C41 Strummers	85 Latin Pop	U2 Latin Pop	B22 Flute
46 Soul Bros.	27 R & B	C22 Gospel Org	86 Carnivale	57 Pop Samba	C11 MIDI Piano
47 Da Blues	33 Blues	A33 BX-3 Organ	87 StretchOut	55 Fusion	C47 StereoDist
48 Rasta Man	28 Reggae	C22 Gospel Org	88 Bourbon St	68 Dixieland	A82 Trombone

# Program List

## Bank A (General MIDI)

11 Piano	21 Celesta	31 Full Organ	41 ClassicGtr
12 BritePiano	22 Glocken	32 Perc Organ	42 A.Guitar
13 HammerPno	23 Music Box	33 BX-3 Organ	43 JazzGuitar
14 HonkeyTonk	24 Vibes	34 ChurchPipe	44 Clean Gtr
15 New Tines	25 Marimba	35 Positive	45 MuteGuitar
16 Digi Piano	26 Xylophon	36 Musette	46 Over Drive
17 Harpsicord	27 Tubular	37 Harmonica	47 DistGuitar
18 Clav	28 Santur	38 Tango	48 RockMonics
51 Jazz Bass	61 Violin	71 Marcato	81 Trumpet
52 Deep Bass	62 Viola	72 SlowString	82 Trombone 1
53 Pick Bass	63 Cello	73 Analog Pad	83 Tuba
54 Fretless	64 ContraBass	74 String Pad	84 Muted Trpt
55 SlapBass 1	65 TremoloStr	75 Choir	85 FrenchHorn
56 SlapBass 2	66 Pizzicato	76 Doo Voice	86 Brass
57 SynthBass1	67 Harp	77 Voices	87 SynBrass 1
58 SynthBass2	68 Timpani	78 Orch Hit	88 SynBrass 2

## Bank B (General MIDI)

11 SopranoSax	21 Piccolo	31 SquareWave	41 Fantasia
12 Alto Sax	22 Flute	32 Saw Wave	42 Warm Pad
13 Tenor Sax	23 Recorder	33 SynCaliope	43 Poly Pad
14 Bari Sax	24 Pan Flute	34 Syn Chiff	44 Ghost Pad
15 Sweet Oboe	25 Bottle	35 Charang	45 BowedGlas
16 EnglishHrn	26 Shakuhachi	36 AirChorus	46 Metal Pad
17 BasoonOboe	27 Whistle	37 Rezzo4ths	47 Halo Pad
18 Clarinet	28 Ocarina	38 Bass&Lead	48 Sweep
51 Ice Rain	61 Sitar	71 Metal Bell	81 Fret Noise
52 SoundTrack	62 Banjo	72 Agogo	82 NoiseChiff
53 Crystal	63 Shamisen	73 SteelDrums	83 Seashore
54 Atmosphere	64 Koto	74 Woodblock	84 Birds
55 Brightness	65 Kalimba	75 Taiko	85 Telephone
56 Goblin	66 Scotland	76 Tom	86 Helicopter
57 Echo Drop	67 Fiddle	77 Synth Tom	87 Stadium!!
58 Star Theme	68 Shanai	78 Rev Cymbal	88 GunShot

## Bank C

11 MIDI Piano	21 60's Organ	31 L&R A.Gtrs	41 Strummers
12 Pad Piano	22 Gospel Org	32 ElectricAc	42 E. Guitars
13 Fresh Air	23 HamN Cheese	33 PedalSteel	43 L&R E.Gtrs
14 Piano&Str	24 Perc&Rotor	34 Harmonics	44 Dirty Funk
15 Hard Tines	25 Akordeon 1	35 HollowBody	45 DirtyMutes
16 DigiPiano2	26 Akordeon 2	36 PickedMute	46 DistoMutes
17 Whirly	27 Hackbrett	37 Funky Gtr	47 StereoDist
18 HousePiano	28 Mando Trem	38 Clean Funk	48 PowerChord
51 WoodBass	61 StringOct	71 FluteClar	81 Euro Bass
52 DiscoBass	62 Analog Pad	72 Clarn Ens	82 House Bass
53 Funk Bass	63 i3 Strings	73 PerkySaxes	83 Rap Bass
54 PickBass 2	64 AirVoxDbI	74 Mute Ens.	84 TubaShort
55 Bass/Mute	65 Airways	75 BriteBones	85 SynBrass 3
56 Gtr/Bass	66 The Voices	76 Trumpets!!	86 Comp Thing
57 SlapBass 3	67 BellPad	77 Tromb Ens	87 Lead Stab
58 Deep Slap	68 SynPad	78 Brass Band	88 Metal Clav

## Bank D

11	Piano 8' (i2 Piano)	21	Drawbars	31	Vibra Bell	41	AltoBreath
12	MaxiTine	22	TheaterOrg	32	Gamelan	42	FlugelHorn
13	Tap EP	23	Hot Keys	33	SplitBell	43	Trombones!
14	Elec. Tap	24	VS Organ	34	Isabelle	44	Air Flute
15	Operators	25	HarpsiFunk	35	JewelryBox	45	Woodwinds
16	VS EP	26	Full Pipes	36	VS Bells	46	Sfz< Brass
17	Express EP	27	Last Tango	37	AfricanJam	47	Fanfare
18	BrassOrg	28	Fisa 8'	38	SolarBells	48	Pan mallet
51	Poppin'Pad	61	Shaku Bend	71	RaveBass 1	81	Space Pets
52	TheStrings	62	Nay	72	SweepBass	82	SteamCloud
53	AnaSyn	63	Kanoun	73	Dr.Bass	83	RaveVox
54	Pitzpan	64	Aoud	74	RaveBass 2	84	50's SciFi
55	PhaseSynth	65	Mizmar	75	Bass Solo	85	DJ Kit 1
56	Analogist	66	Bouzouki	76	Leeeed	86	Space Wing
57	Color Pad	67	Uood	77	Busy Boy	87	GlideSweep
58	PowerSynth	68	Sitar 2	78	MonoLead	88	Sunrise

## Bank Dr

1	GM Kit	3	Analog Kit	5	Brush Kit	7	Dance Kit
2	Power Kit	4	Jazz Kit	6	Perc Kit	8	Orch Kit

# *i2/i3* Multisound List

0	A.Piano 1	33	PipeOrg2LP	66	PowerChd V	99	SynthBass1	132	Ocarina
1	A.Piano1LP	34	PipeOrgan3	67	OverDvChrd	100	SynBass1LP	133	Oboe
2	A.Piano 2	35	PipeOrg3LP	68	Gtr Slide	101	SynthBass2	134	EnglishHrn
3	E.Piano 1	36	Musette	69	GtrSlide V	102	SynBass2LP	135	Eng.HornLP
4	E.Piano1LP	37	Musette V	70	Sitar 1	103	House Bass	136	BasoonOboe
5	E.Piano 2	38	Bandneon	71	Sitar 2	104	FM Bass	137	BsonOboeLP
6	E.Piano2LP	39	BandneonLP	72	Sitar 2 LP	105	FM Bass LP	138	Clarinet
7	Soft EP	40	Accordion	73	Santur	106	Kalimba	139	ClarinetLP
8	Soft EP LP	41	AcordionLP	74	Bouzouki	107	Music Box	140	Bari Sax
9	Hard EP	42	Harmonica	75	BouzoukiLP	108	MusicBoxLP	141	Bari.SaxLP
10	Hard EP LP	43	G.Guitar	76	Banjo	109	Log Drum	142	Tenor Sax
11	PianoPad 1	44	G.GuitarLP	77	Shamisen	110	Marimba	143	T.Sax LP
12	PianoPad 2	45	F.Guitar	78	Koto	111	Xylophone	144	Alto Sax
13	Clav	46	F.GuitarLP	79	Uood	112	Vibe	145	A.Sax LP
14	Clav LP	47	F.Guitar V	80	Harp	113	Celesta	146	SopranoSax
15	Harpicord	48	A.Gtr Harm	81	MandlinTrm	114	Glocken	147	S.Sax LP
16	HarpicodLP	49	E.Guitar 1	82	A.Bass 1	115	BrightBell	148	Tuba
17	PercOrgan1	50	E.Guitr1 V	83	A.Bass1 LP	116	B.Bell LP	149	Tuba LP
18	PercOrg1LP	51	E.Guitar 2	84	A.Bass 2	117	Metal Bell	150	Horn
19	PercOrgan2	52	E.Guitar 3	85	A.Bass2 LP	118	M.Bell LP 1	151	FlugelHorn
20	PercOrg2LP	53	MuteGuitar	86	E.Bass 1	119	Gamelan	152	Trombone 1
21	Organ 1	54	Funky Gtr	87	E.Bass1 LP	120	Pole	153	Trombone 2
22	Organ 1 LP	55	FunkyGtr V	88	E.Bass 2	121	Pole LP	154	Trumpet
23	Organ 2	56	E.Gtr Harm	89	E.Bass2 LP	122	Tubular	155	Trumpet LP
24	Organ 2 LP	57	DistGuitar	90	Pick Bass1	123	Split Drum	156	Mute TP
25	Organ 3	58	Dist GtrLP	91	PicBass1LP	124	Split Bell	157	Mute TP LP
26	Organ 4	59	DistGuitrV	92	Pick Bass2	125	Flute	158	Brass 1
27	Organ 5	60	Over Drive	93	Fretless	126	Pan Flute	159	Brass 1 LP
28	RotaryOrg1	61	OverDrv LP	94	FretlessLP	127	PanFluteLP	160	Brass 2
29	RotaryOrg2	62	OverDrv F4	95	Slap Bass1	128	Shakuhachi	161	Brass 2 LP
30	PipeOrgan1	63	MuteDstGtr	96	Slap Bass2	129	ShakhachLP	162	StringEns.
31	PipeOrg1LP	64	MtDstGtr V	97	SlpBass2LP	130	Bottle	163	StrEns. V1
32	PipeOrgan2	65	PowerChord	98	Slap Bass3	131	Recorder	164	StrEns. V2

165 StrEns. V3	201 Clicker NT	237 Splash Cym	273 Hand Clap	309 Guiro LP
166 AnaStrings	202 Crickets 1	238 Orch Crash	274 HandClapNT	310 Scratch Hi
167 PWM	203 Crickets1NT	239 Tite HH	275 Gun Shot	311 ScratchHiNT
168 Violin	204 Crickets 2	240 Tite HH NT	276 Castanet	312 Scratch Lo
169 Cello	205 Crickets2NT	241 Bell Ride	277 CastanetNT	313 ScratchLoNT
170 Cello LP	206 Magic Bell	242 Ping Ride	278 Snap	314 ScratchDbl
171 Pizzicato	207 Sporing	243 Timpani	279 Snap NT	315 ScratchDblNT
172 Voice	208 Rattle	244 Timpani LP	280 Gt Scratch	316 Mini 1a
173 Choir	209 Kava 1	245 Cabasa	281 Side Stick	317 Digital 1
174 Soft Choir	210 Kava 2	246 Cabasa NT	282 SideStikNT	318 VS 102
175 Air Vox	211 Fever 1	247 Agogo	283 TimbleSide	319 VS 48
176 Doo Voice	212 Fever 2	248 Cow Bell	284 TimblSidNT	320 VS 52
177 DooVoiceLP	213 Zappers 1	249 Low Bongo	285 Syn Rim	321 VS 58
178 Syn Vox	214 Zappers 2	250 Claves	286 Syn Rim NT	322 VS 71
179 Syn Vox LP	215 Bugs	251 Timbale	287 Open HH	323 VS 72
180 White Pad	216 Surfy	252 WoodBlock1	288 OpenSyn HH	324 VS 88
181 Ether Bell	217 SleighBell	253 WoodBlock2	289 CloseSynHH	325 VS 89
182 E.Bell LP	218 Elec Beat	254 WoodBlock3	290 Sagat	326 13 – 35
183 Mega Pad	219 Idling	255 Taiko Hit	291 Sagat NT	327 DWGSOrgan1
184 Spectrum 1	220 EthnicBeat	256 Syn Claves	292 Sagatty	328 DWGSOrgan2
185 Spectrum 2	221 Taps	257 Melo Tom	293 Sagatty NT	329 DWGS E.P.
186 Stadium	222 Tap 1	258 ProccesTom	294 JingleBell	330 Saw
187 Stadium NT	223 Tap 2	259 Syn Tom 1	295 Taiko	331 Square
188 BrushNoise	224 Tap 3	260 Syn Tom 2	296 Slap Bongo	332 Ramp
189 BruNoiseNT	225 Tap 4	261 VocalSnare	297 Open Conga	333 Pulse 25%
190 Steel Drum	226 Tap 5	262 Zap 1	298 Slap Conga	334 Pulse 8%
191 SteelDrmLP	227 Orch Hit	263 Zap 2	299 Palm Conga	335 Pulse 4%
192 BrushSwirl	228 SnareRl/Ht	264 Fret Zap 1	300 Mute Conga	336 Syn Sine
193 Belltree	229 Syn Snare	265 Fret Zap 2	301 Tabla 1	337 Sine
194 BelltreeNT	230 Rev Snare	266 Vibra Slap	302 Tabla 2	338 DJ Kit 1
195 BeltreV NT	231 PowerSnare	267 Indust	303 Maracas	339 DJ Kit 2
196 Tri Roll	232 Orch Perc	268 Thing	304 SynMaracas	340 A.Piano 3 *
197 TriRoll NT	233 Crash Cym	269 Thing NT	305 SynMarcsNT	
198 Telephon	234 CrashCymLP	270 FingerSnap	306 MuteTriang	
199 TelephonNT	235 CrashLP NT	271 FingSnapNT	307 OpenTriang	* i2 only
200 Clicker	236 China Cym	272 Tambourine	308 Guiro	

# *i2/i3* Drum Sound List

0	Fat Kick	33	BrushSwish	66	Lo Bongo	99	Scratch Lo	132	Vibe 2
1	Rock Kick	34	BrushSwirl	67	Hi Bongo	100	ScratchDbl	133	Vibe 3
2	Ambi.Kick	35	Brush Tap	68	Slap Bongo	101	Thing	134	Vibe 4
3	Crisp Kick	36	Side Stick	69	Claves	102	Mute Cuica	135	Pole
4	Punch Kick	37	Syn Rim	70	Syn Claves	103	Open Cuica	136	TubulBell1
5	Real Kick	38	VocalSnr 1	71	Open Conga	104	Vibraslap	137	TubulBell2
6	Dance Kick	39	VocalSnr 2	72	Slap Conga	105	Guiro S	138	TubulBell3
7	Gated Kick	40	Crash Cym	73	Palm Conga	106	Guiro L	139	Gt Scratch
8	ProcesKick	41	Crash LP	74	Mute Conga	107	Castanet	140	Chic 1
9	Metal Kick	42	China Cym	75	Baya 1	108	FingerSnap	141	Chic 2
10	Syn Kick 1	43	China LP	76	Baya 2	109	Timbales	142	Spectrum 1
11	Syn Kick 2	44	Splash Cym	77	Tabla 1	110	Kalimba 1	143	Spectrum 2
12	Syn Kick 3	45	Splash LP	78	Tabla 2	111	Kalimba 2	144	Stadium
13	Orch B.Drm	46	Orch Crash	79	Tabla 3	112	Marimba 1	145	BrushNoise
14	Snare 1	47	OrchCym LP	80	Maracas	113	Marimba 2	146	Gt Slide
15	Snare 2	48	Tite HH	81	Cabasa	114	Marimba 3	147	Bell Tree
16	Snare 3	49	Open HH	82	SynMaracas	115	Marimba 4	148	Tri Roll
17	Snare 4	50	Pedal HH	83	MuteTriang	116	Xylofon 1	149	JingleBell
18	PicloSnare	51	CloseSynHH	84	OpenTriang	117	Xylofon 2	150	Whistle S
19	Soft Snare	52	Open SynHH	85	Tambourine	118	Xylofon 3	151	Whistle L
20	LightSnare	53	Sagat	86	Cowbell	119	Log Drum 1	152	Timpani
21	TightSnare	54	Ride Edge	87	SynCowbell	120	Log Drum 2	153	Taiko Hi
22	Ambi.Snare	55	Ride Cup	88	R-Timbal	121	Log Drum 3	154	Taiko Lo
23	Rev Snare	56	Ride Cym 1	89	Hi Timbal	122	Log Drum 4	155	Music Box1
24	RollSnare1	57	Ride Cym 2	90	Lo Timbal	123	Log Drum 5	156	Music Box2
25	RollSnare2	58	Tom Hi	91	WoodBlock1	124	Snap	157	Clicker 1
26	Rock Snare	59	Tom Lo	92	WoodBlock2	125	BrightBell	158	Clicker 2
27	GatedSnare	60	ProcessTom	93	WoodBlock3	126	Metal Bell	159	Clicker 3
28	PowerSnare	61	SynTom1 Hi	94	Hand Claps	127	Gamelan 1	160	Crickets
29	Syn Snare1	62	SynTom1 Lo	95	Syn Claps	128	Gamelan 2	161	Orch Hit
30	Syn Snare2	63	Syn Tom 2	96	Zap 1	129	Celeste	162	Metronome1
31	Gun Shot	64	Brush Tom	97	Zap 2	130	Glocken	163	Metronome
32	Brush Slap	65	Agogo	98	Scratch Hi	131	Vibe 1		

# Drum Kit Layout

		1: Dance Kit		2: Orch Kit		3: GM Standard		4: Power Kit		
		Drum Sound	Ex.group	Drum Sound	Ex.group	Drum Sound	Ex.group	Drum Sound	Ex.group	
C2	27	•	•	48 Tite HH	EX1	•	•	•	•	
	28	3 Crisp Kick	Off	50 Pedal HH	EX1	1 Rock Kick	Off	2 Ambi.Kick	Off	
	29	18 PicloSnare	Off	49 Open HH	EX1	16 Snare 3	EX6	26 Rock Snare	Off	
		30	49 Open HH	EX1	54 Ride Edge	Off	49 Open HH	EX1	49 Open HH	EX1
	31	11 Syn Kick 2	Off	•	•	0 Fat Kick	Off	7 Gated Kick	Off	
	32	36 Side Stick	Off	•	•	109 Timbales	Off	109 Timbales	Off	
	33	21 TightSnare	Off	•	•	14 Snare 1	EX6	21 TightSnare	Off	
	35	34	23 Rev Snare	Off	•	•	24 RollSnare1	EX6	23 Rev Snare	Off
			2 Ambi.Kick	Off	5 Real Kick	Off	5 Real Kick	Off	7 Gated Kick	Off
	36	6 Dance Kick	Off	13 Orch B.Drm	Off	8 ProcesKick	Off	9 Metal Kick	Off	
37	36 Side Stick	Off	36 Side Stick	Off	36 Side Stick	Off	36 Side Stick	Off		
38	30 Syn Snare2	Off	25 RollSnare2	Off	26 Rock Snare	EX6	28 PowerSnare	Off		
39	94 Hand Claps	Off	107 Castanet	Off	94 Hand Claps	Off	94 Hand Claps	Off		
40	22 Ambi.Snare	Off	25 RollSnare2	Off	20 LightSnare	EX6	27 GatedSnare	Off		
41	60 ProcessTom	Off	•	•	59 Tom Lo	Off	60 ProcessTom	Off		
C3	42	48 Tite HH	EX1	•	•	48 Tite HH	EX1	48 Tite HH	EX1	
	43	60 ProcessTom	Off	•	•	59 Tom Lo	Off	60 ProcessTom	Off	
	44	50 Pedal HH	EX1	•	•	50 Pedal HH	EX1	50 Pedal HH	EX1	
	45	60 ProcessTom	Off	•	•	59 Tom Lo	Off	60 ProcessTom	Off	
	47	46	49 Open HH	EX1	•	•	49 Open HH	EX1	49 Open HH	EX1
			60 ProcessTom	Off	•	•	58 Tom Hi	Off	60 ProcessTom	Off
	48	60 ProcessTom	Off	•	•	58 Tom Hi	Off	60 ProcessTom	Off	
	49	40 Crash Cym	Off	•	•	40 Crash Cym	Off	40 Crash Cym	Off	
	50	60 ProcessTom	Off	•	•	58 Tom Hi	Off	60 ProcessTom	Off	
	51	54 Ride Edge	Off	•	•	54 Ride Edge	Off	54 Ride Edge	Off	
52	42 China Cym	Off	•	•	42 China Cym	Off	42 China Cym	Off		
C4	53	55 Ride Cup	Off	152 Timpani	Off	55 Ride Cup	Off	55 Ride Cup	Off	
	54	85 Tambourine	Off	85 Tambourine	Off	85 Tambourine	Off	85 Tambourine	Off	
	55	44 Splash Cym	Off	44 Splash Cym	Off	44 Splash Cym	Off	44 Splash Cym	Off	
	56	86 Cowbell	Off	86 Cowbell	Off	86 Cowbell	Off	86 Cowbell	Off	
	57	40 Crash Cym	Off	40 Crash Cym	Off	40 Crash Cym	Off	40 Crash Cym	Off	
	58	104 Vibraslap	Off	104 Vibraslap	Off	104 Vibraslap	Off	104 Vibraslap	Off	
	59	54 Ride Edge	Off	46 Orch Crash	Off	56 Ride Cym 1	Off	56 Ride Cym 1	Off	
	C5	60	67 Hi Bongo	Off	67 Hi Bongo	Off	67 Hi Bongo	Off	67 Hi Bongo	Off
61		66 Lo Bongo	Off	66 Lo Bongo	Off	66 Lo Bongo	Off	66 Lo Bongo	Off	
62		74 Mute Conga	Off	74 Mute Conga	Off	74 Mute Conga	Off	74 Mute Conga	Off	
63		71 Open Conga	Off	71 Open Conga	Off	71 Open Conga	Off	71 Open Conga	Off	
64		71 Open Conga	Off	71 Open Conga	Off	71 Open Conga	Off	71 Open Conga	Off	
65		89 Hi Timbal	Off	89 Hi Timbal	Off	89 Hi Timbal	Off	89 Hi Timbal	Off	
66		90 Lo Timbal	Off	90 Lo Timbal	Off	90 Lo Timbal	Off	90 Lo Timbal	Off	
67		65 Agogo	Off	65 Agogo	Off	65 Agogo	Off	65 Agogo	Off	
C6	68	65 Agogo	Off	65 Agogo	Off	65 Agogo	Off	65 Agogo	Off	
	69	81 Cabasa	Off	81 Cabasa	Off	81 Cabasa	Off	81 Cabasa	Off	
	70	80 Maracas	Off	80 Maracas	Off	80 Maracas	Off	80 Maracas	Off	
	71	150 Whistle S	EX2	150 Whistle S	EX2	150 Whistle S	EX2	150 Whistle S	EX2	
	72	151 Whistle L	EX2	151 Whistle L	EX2	151 Whistle L	EX2	151 Whistle L	EX2	
	73	105 Guiro S	EX3	105 Guiro S	EX3	105 Guiro S	EX3	105 Guiro S	EX3	
	74	106 Guiro L	EX3	106 Guiro L	EX3	106 Guiro L	EX3	106 Guiro L	EX3	
	75	69 Claves	Off	69 Claves	Off	69 Claves	Off	69 Claves	Off	
C6	76	92 WoodBlock2	Off	92 WoodBlock2	Off	92 WoodBlock2	Off	92 WoodBlock2	Off	
	77	93 WoodBlock3	Off	93 WoodBlock3	Off	93 WoodBlock3	Off	93 WoodBlock3	Off	
	78	102 Mute Cuica	EX4	102 Mute Cuica	EX4	102 Mute Cuica	EX4	102 Mute Cuica	EX4	
	79	103 Open Cuica	EX4	103 Open Cuica	EX4	103 Open Cuica	EX4	103 Open Cuica	EX4	
	80	83 MuteTriang	EX5	83 MuteTriang	EX5	83 MuteTriang	EX5	83 MuteTriang	EX5	
	81	84 OpenTriang	EX5	84 OpenTriang	EX5	84 OpenTriang	EX5	84 OpenTriang	EX5	
	82	81 Cabasa	Off	81 Cabasa	Off	81 Cabasa	Off	81 Cabasa	Off	
	83	149 JingleBell	Off	149 JingleBell	Off	149 JingleBell	Off	149 JingleBell	Off	
	84	147 Bell Tree	Off	147 Bell Tree	Off	147 Bell Tree	Off	147 Bell Tree	Off	
	85	107 Castanet	Off	107 Castanet	Off	107 Castanet	Off	107 Castanet	Off	
86	36 Side Stick	Off	36 Side Stick	Off	36 Side Stick	Off	36 Side Stick	Off		
87	154 Taiko Lo	Off	154 Taiko Lo	Off	154 Taiko Lo	Off	154 Taiko Lo	Off		

	5: Analog Kit			6: Jazz Kit		7: Brush Kit		8: Percussion Kit	
	Drum Sound	Ex.group		Drum Sound	Ex.group	Drum Sound	Ex.group	Drum Sound	Ex.group
	28	12 Syn Kick 3	Off	3 Crisp Kick	Off	3 Crisp Kick	Off	67 Hi Bongo	Off
	29	30 30 Syn Snare2	Off	17 Snare 4	EX6	108 FingerSnap	EX6	66 Lo Bongo	Off
	31	52 Open SynHH	EX1	49 Open HH	EX1	49 Open HH	EX1	85 Tambourine	Off
	32	6 Dance Kick	Off	2 Ambi.Kick	Off	2 Ambi.Kick	Off	65 Agogo	Off
	33	109 Timbales	Off	109 Timbales	Off	109 Timbales	Off	38 VocalSnr 1	Off
	34	22 Ambi.Snare	Off	25 RollSnare2	EX6	32 Brush Slap	EX6	65 Agogo	Off
	35	23 Rev Snare	Off	24 RollSnare1	EX6	24 RollSnare1	EX6	68 Slap Bongo	Off
	36	3 Crisp Kick	Off	4 Punch Kick	Off	4 Punch Kick	Off	93 WoodBlock3	Off
C2	37	10 Syn Kick 1	Off	1 Rock Kick	Off	1 Rock Kick	Off	69 Claves	Off
	38	37 Syn Rim	Off	36 Side Stick	Off	36 Side Stick	Off	92 WoodBlock2	Off
	39	29 Syn Snare1	Off	19 Soft Snare	EX6	35 Brush Tap	EX6	86 Cowbell	Off
	40	95 Syn Claps	Off	94 Hand Claps	Off	32 Brush Slap	Off	91 WoodBlock1	Off
	41	20 LightSnare	Off	15 Snare 2	EX6	33 BrushSwish	Off	107 Castanet	Off
	42	62 SynTom1 Lo	Off	59 Tom Lo	Off	64 Brush Tom	Off	76 Baya 2	Off
	43	51 CloseSynHH	EX1	48 Tite HH	EX1	48 Tite HH	EX1	81 Cabasa	Off
	44	62 SynTom1 Lo	Off	59 Tom Lo	Off	64 Brush Tom	Off	75 Baya 1	Off
	45	51 CloseSynHH	EX1	50 Pedal HH	EX1	50 Pedal HH	EX1	80 Maracas	Off
	46	62 SynTom1 Lo	Off	59 Tom Lo	Off	64 Brush Tom	Off	76 Baya 2	Off
	47	52 Open SynHH	EX1	49 Open HH	EX1	49 Open HH	EX1	81 Cabasa	Off
C3	48	62 SynTom1 Lo	Off	58 Tom Hi	Off	64 Brush Tom	Off	79 Tabla 3	EX1
	49	62 SynTom1 Lo	Off	58 Tom Hi	Off	64 Brush Tom	Off	78 Tabla 2	EX1
	50	52 Open SynHH	Off	40 Crash Cym	Off	40 Crash Cym	Off	104 Vibraslap	Off
	51	62 SynTom1 Lo	Off	58 Tom Hi	Off	64 Brush Tom	Off	77 Tabla 1	EX1
	52	54 Ride Edge	Off	57 Ride Cym 2	Off	57 Ride Cym 2	Off	83 MuteTriang	EX3
	53	42 China Cym	Off	42 China Cym	Off	42 China Cym	Off	13 Orch B.Drm	Off
	54	55 Ride Cup	Off	56 Ride Cym 1	Off	56 Ride Cym 1	Off	84 OpenTriang	EX3
	55	85 Tambourine	Off	85 Tambourine	Off	85 Tambourine	Off	105 Guiro S	EX2
	56	44 Splash Cym	Off	44 Splash Cym	Off	44 Splash Cym	Off	149 JingleBell	Off
	57	87 SynCowbell	Off	86 Cowbell	Off	86 Cowbell	Off	106 Guiro L	EX2
	58	40 Crash Cym	Off	40 Crash Cym	Off	40 Crash Cym	Off	147 Bell Tree	Off
	59	104 Vibraslap	Off	104 Vibraslap	Off	104 Vibraslap	Off	101 Thing	Off
C4	60	56 Ride Cym 1	Off	54 Ride Edge	Off	54 Ride Edge	Off	80 Maracas	Off
	61	67 Hi Bongo	Off	67 Hi Bongo	Off	67 Hi Bongo	Off	94 Hand Claps	Off
	62	66 Lo Bongo	Off	66 Lo Bongo	Off	66 Lo Bongo	Off	95 Syn Claps	Off
	63	61 SynTom1 Hi	Off	74 Mute Conga	Off	74 Mute Conga	Off	99 Scratch Lo	Off
	64	61 SynTom1 Hi	Off	71 Open Conga	Off	71 Open Conga	Off	98 Scratch Hi	Off
	65	61 SynTom1 Hi	Off	71 Open Conga	Off	71 Open Conga	Off	100 ScratchDbl	Off
	66	89 Hi Timbal	Off	89 Hi Timbal	Off	89 Hi Timbal	Off	150 Whistle S	EX4
	67	90 Lo Timbal	Off	90 Lo Timbal	Off	90 Lo Timbal	Off	151 Whistle L	EX4
	68	65 Agogo	Off	65 Agogo	Off	65 Agogo	Off	72 Slap Conga	Off
	69	65 Agogo	Off	65 Agogo	Off	65 Agogo	Off	74 Mute Conga	Off
	70	81 Cabasa	Off	81 Cabasa	Off	81 Cabasa	Off	71 Open Conga	Off
	71	82 SynMaracas	Off	80 Maracas	Off	80 Maracas	Off	71 Open Conga	Off
C5	72	150 Whistle S	EX2	150 Whistle S	EX2	150 Whistle S	EX2	102 Mute Cuica	Off
	73	151 Whistle L	EX2	151 Whistle L	EX2	151 Whistle L	EX2	103 Open Cuica	Off
	74	105 Guiro S	EX3	105 Guiro S	EX3	105 Guiro S	EX3	109 Timbales	Off
	75	106 Guiro L	EX3	106 Guiro L	EX3	106 Guiro L	EX3	88 R-Timbal	Off
	76	70 Syn Claves	Off	69 Claves	Off	69 Claves	Off	89 Hi Timbal	Off
	77	92 WoodBlock2	Off	92 WoodBlock2	Off	92 WoodBlock2	Off	90 Lo Timbal	Off
	78	93 WoodBlock3	Off	93 WoodBlock3	Off	93 WoodBlock3	Off	70 Syn Claves	Off
	79	102 Mute Cuica	EX4	102 Mute Cuica	EX4	102 Mute Cuica	EX4	87 SynCowbell	Off
	80	103 Open Cuica	EX4	103 Open Cuica	EX4	103 Open Cuica	EX4	108 FingerSnap	Off
	81	83 MuteTriang	EX5	83 MuteTriang	EX5	83 MuteTriang	EX5	153 Taiko Hi	Off
	82	84 OpenTriang	EX5	84 OpenTriang	EX5	84 OpenTriang	EX5	154 Taiko Lo	Off
	83	81 Cabasa	Off	81 Cabasa	Off	81 Cabasa	Off	97 Zap 2	Off
C6	84	149 JingleBell	Off	149 JingleBell	Off	149 JingleBell	Off	24 RollSnare1	EX5
	85	147 Bell Tree	Off	147 Bell Tree	Off	147 Bell Tree	Off	25 RollSnare2	EX5
	86	107 Castanet	Off	107 Castanet	Off	107 Castanet	Off	46 Orch Crash	EX6
	87	36 Side Stick	Off	36 Side Stick	Off	36 Side Stick	Off	46 Orch Crash	EX6
	88	154 Taiko Lo	Off	154 Taiko Lo	Off	154 Taiko Lo	Off	.	.
A7	105							161 Orch Hit	Off



---

## ディスクファイルの管理

i2/i3はMS-DOSディスクフォーマットを使用しているため、ディスクファイルを整理するときに何の制約もありません。あなたが頻繁に使用するのがアレンジメントであるならば、アレンジメントファイルだけが入ったディスクを用意することができます。ファイルは比較的小さいので(約9キロバイト)、1枚のディスクにかなりの数が入ります。

あなたのスタイルを作成したら、「マスター」のアレンジメントファイルを作成してスタイルファイルと共に使用することができます(各アレンジメントファイルには64のアレンジメントがありますが、各スタイルファイルには4つのスタイルしかありませんのでご注意ください)。

i2/i3を使いこなしていくにつれて、あなたに一番適した方法が見つかることでしょう。

\*MS-DOSは米国マイクロソフト社の登録商標です。

## X3データとの互換性

コルグX3ミュージックワークステーションはi2/i3と同じプログラム、ソング構成をしています。ディスクフォーマットが同じなので、X3のディスクからプログラムやソングを直接i2/i3にロードすることができます。同様に、i2/i3のディスクからX3にプログラムやソングを直接ロードすることも可能です。

プログラムは下記のプログラムロケーションにロードされます。

X3 Programs		i2/i3 Programs
A00-A63	↔	D11-D88
A64-A65	↔	Dr7-Dr8

ソングトラックのプログラムチェンジイベントは次のように変換されます。

X3		i2/i3
GM1-GM64	↔	A11-A88
GM65-GM128	↔	B11-B88
B00-B63	↔	C11-C88
A00-A63	↔	D11-D88
A64-A65	↔	Dr7-Dr8

## i2をお使いの方へ:

i2にはプログラムA11 PianoとD11 i2 Pianoで使われているピアノマルチサウンドが追加されています。プログラムD11はRAMにあるため、誤って消去したり書き換えてしまう可能性があります。たとえば、“AMERICA” ファイルを聞いたり、デモ・バックギンクシーケンスにするためロードすると、i2 Pianoプログラムが“AMERICA.PCG” ファイルの8' Pianoプログラムに書き換えられてしまいます(プログラムA11とマルチサウンド340は共にROMにありますので、消去はできません)。

i2 PianoプログラムをリストアするためにIFD-00Pファクトリーディスクに“\_I2DBANK.PCG” ファイルがあります。このファイルはD11 i2 Pianoプログラムを除いて“AMERICA.PCG” ファイルと同じプログラムが入っています。ロードオールプログラム機能かロードワンプログラム機能を使ってこのプログラムのリストアをしてください。

---

**KORG** KORG INC.

15 - 12, Shimotakaido 1 - chome, Suginami-ku, Tokyo, Japan.