

# The *iS40* Guide

**KORG**

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## **Product Overview**

The iS40 is a complete music production system for today's musician. In the home studio, on a "gig", for commercial and demo productions, from beginner to professional, the iS40 interactive music workstation gets the job done - easily!

### ***It's a Korg Synthesizer***

With 14 Mbyte of PCM memory and 384 sounds onboard, as well as 2 independent effect processors with 47 selectable effects available, the iS40 stands on its own as a very sophisticated programmable synthesizer and performance keyboard.

### ***It's an Accompaniment Keyboard***

With 144 Styles and 192 Arrangements, the iS40 has the largest library of the best interactive Styles and Arrangements in an i-series instrument to date! The expanded RAM area allows for loading of many new Styles and Arrangements, with the built-in DOS-compatible disk drive!

- Read Standard MIDI files direct from disk, a new JukeBox play function, and editing of Standard MIDI files means more song features than ever before!
- Individual Accompaniment volume slider lets you create a better balance between Style and real time parts!
- Large, easy to read display!
- Brand new, Real-World Styles that work superbly with any kind of music, plus the ability to load new styles and arrangements!
- More Chord recognition options and Ensemble types!

Put these features together with the incredibly easy-to-use Backing Sequencer and you've got a great performance-based accompaniment instrument!

### ***It's a Songwriting Tool for All Musicians***

The iS40 has a complete 40,000 note, 16-track sequencer with real and step-entry recording and plenty of editing tools. But it really becomes fast and musical when you use the Backing Sequencer. This is a quick songwriting tool that uses the auto-accompaniment features to put a song together, complete with drums, percussion, bass, piano, etc., *FAST!* Insert/delete drum fills, change the chord from a Cm to a G7 and the bass and harmony parts instantly change to reflect your choice, and more! There's no easier way to get started writing music without "programming" parts!

## iS40 Features and Benefits

Feature	Benefit
<p><b>61-key keyboard</b> with velocity sensitivity and aftertouch sensitivity</p>	<p>The addition of aftertouch makes the iS40 more expressive and professional allowing you to control a sound's vibrato or other effects directly from the keyboard. Aftertouch is also important for computer users who will be using the iS40 as their main input keyboard.</p>
<p><b>384 onboard sounds</b> 320 ROM Programs {including full GM soundset} 64 RAM Programs 16 drumkits</p>	<p>This selection of sounds goes way beyond just a GM "engine", and includes plenty of locations for your own sound creations.</p>
<p><b>Simple sound editing</b></p>	<p>The iS40 allows the you to easily tweak and even create new sounds from scratch.</p>
<p><b>14 MB of PCM ROM</b> includes new 2MB piano.</p>	<p>This wide range of samples covers way more than the full GM soundset, and also includes an expressive stereo panned piano. Many of these samples are {the same as} used in professional Korg keyboards like the Trinity, M1, O1/W, N-Series and SGproX.</p>
<p><b>2 independent stereo digital multi effects processors with dynamic control</b></p>	<p>Each processor offers 47 different effects types with real-time modulation control.</p> <p>The iS40 offers up to 4 effects at the same time with a number of routing configurations, perfect for mixing the group of instruments used within each Arrangement or sequence.</p>
<p><b>144 Styles</b> {128 ROM/16 RAM}</p> <p>Each Style includes 4 Variations, 2 Fills, 2 Intros, and 2 Endings</p>	<p>Styles are the musical basis for auto-accompaniment - they contain the recorded performances for each part.</p> <p>This is the largest number of Styles ever offered in a Korg i-Series instrument, and all are newly-created by experts in the field. They are amazingly musical and never sound "canned" or mechanical!</p>

Feature	Benefit
<b>192 Arrangements</b> {128 ROM/64 RAM}	Arrangements assign specific sounds and effects to each part in a Style.  Again, this is the largest number ever offered in a Korg i-Series instrument, and all are newly-created by professional musicians.
<b>Backing Sequencer</b> 10 Backing Sequences 40,000 events 1 Keyboard Track 1 Chord Track 1 Control Track 8 Real-time Tracks Full editing SMF export	The Backing Sequence mode is a powerful tool for quickly realizing your musical ideas.  By recording a Backing Sequence you can get an idea down quickly without having to build drum, bass and chordal parts from scratch. And then changing a chord, or adding/deleting a drum fill is as easy as changing a single event, with all the parts immediately changing to reflect your new idea!
<b>Full 16-track Sequencer</b> 10 Sequences 40,000 events Full editing SMF import/export	If you prefer traditional sequencing the iS40 has all the features you need.  You can also load in Standard MIDI Files and use the sequencer to make edits to the tracks and then re-save the file, customizing it to suit your needs.
<b>Plays SMF's directly from disk</b>	During live performance this is a must-have feature - never have to wait between songs again!
<b>JukeBox play from disk</b>	Allows you to select the order that SMF's will play from disk for custom setlists.
<b>Built-in PC Interface</b>	This allows you to connect the iS40 up directly to your Mac or PC without the need for a MIDI interface.
<b>2 Audio Inputs</b>	This allows you to plug a microphone or CD player through the iS40's excellent speaker system for ease-of-use on gigs.
<b>Powerful 4-speaker system with bass reflex box</b>	This speaker system gives the iS40 high-quality sound reproduction with amazing low-end response!

- A redesigned front panel, where countless design hours spent have resulted in a logic and “friendliness” that were sure you'll appreciate!
- A powerful new 4-way speaker system with incredible low-end!
- The most natural-sounding and totally musical accompaniment patterns ever, thanks to Korg's world-wide network of Style and Arrangement developers!

Once you've worked with the iS40, and experienced these new improvements, you'll see and appreciate the fact that this product is truly different and innovative!

## **Arrangements and Styles**

This is the main operative mode in the i-series. As soon as you power-up the iS40, it is in Arrangement mode. There are 192 arrangements available, and you'll find them organized into 3 banks of 64 arrangements each. Banks A and B are preset arrangements, and the arrangements in the USER bank are freely modifiable. The USER bank can be used to load new data from disk. As well, A, B and USER Arrangements can be edited and stored in the USER bank.

Each arrangement combines up to 2 programs (sounds) on the keyboard with a Style. **A Style is the musical sequence data ( drum/percussion/bass/ multiple chording and background patterns) that provides a particular genre of music**, e.g. rock, pop, ethnic, etc. Each style contains 4 variations, 2 intros, 2 endings and 2 fill-ins. These styles can detect which chord is being played on the keyboard, and then trigger patterns that adapt to that particular chord.

**A Style “lives” in an Arrangement, which when selected, provides “orchestration” for six tracks: drums, percussion, bass and accompaniment tracks 1-3. These are referred to as the Backing Tracks. In addition, there are {Upper} Upper 1, Upper 2 and Lower assignments for live keyboard playing on top of the Backing Tracks.** All of the tracks in an arrangement can be edited for sound selection, volume, panning, muting, etc., and then stored in the USER bank, and on disk as custom arrangements. New styles and arrangements can also be loaded from disk. A Style can even be changed inside an Arrangement , e.g. the “Polka band plays Motown!”

\* Note that Arrangement banks A and B are grouped by musical style, as referenced (screened) on the upper - left of the front panel.

## **The Backing Sequencer**

When you select Backing Sequence mode, you can record or play back a song created from Arrangements, and even add 8 extra tracks! The main tracks of a backing sequence are: the Keyboard track, Control track, and Chord track. The Keyboard track records whatever is played freely on the keyboard, or can be left empty for live playing. The Control track records your button selections on the front panel (e.g. Fill 1, Bass Inversion, etc.), and the Chord track records the sequence of chords you play. All of this data can be freely edited. The 8 extra tracks allow you to record additional parts to the Backing Sequence.

## **Programs and Effects**

There are 384 Programs in the iS40's internal memory, organized into six banks of 64 programs each (A,B,C,D,E,F-USER), plus a DRUM bank which contains 16 drum programs. Any of the programs or drum kits can be edited and stored in the available USER banks.

The iS40 contains two independent effect processors, with 47 different types of effects selectable for each. These effects can be used in Program, Arrangement, Backing Sequence, and Song Play / Edit modes. The effects themselves use dynamic modulation, so that you can control their intensity in real-time and via foot switch and pedal. This is great for changing Rotary Speaker speed with pedals, After Touch, etc. Each of the backing tracks and programs, as well as the drum sounds have individual Pan and Send levels to the effect groups, and various effect routing setups are available to process the signal flow of the sounds into the effects.

## **Song Play Mode**

This mode allows for playback of Standard MIDI Files (SMF) direct from disk! In addition, you can change programs, volume, pan, effects and effect send levels, and tempo and transpose settings.

## **Song Edit Mode**

In Song Edit mode, you can load a Standard MIDI file, then edit and re-save it as a Standard MIDI file. Both formats 1(16 separate tracks) and 0 (1 multi-channel track) are supported, and the iS40 converts format 1 files to format 0, which is accessed faster in Song Play mode. Song Edit mode also gives you 16 tracks to record a new song, with all

the functions you would expect to find in a sophisticated sequencer! You can then save your sequences in Standard MIDI file format.

## **Disk/Global Mode**

In Disk mode, you can save and load data via the internal DOS-compatible drive. When you press the DISK/GLOBAL button, the display will indicate the pages within this mode, and you can press the PAGE+/- buttons to move through the pages. The Global pages access tuning, MIDI and HOST port parameters, pedal and external controller (EC5) settings, Lower Memory, Velocity curves, as well as Chord Recognition, Auto Scan, Scales, and MIDI dump procedures. Joystick settings for pitch control of Upper1 and 2 sounds, WRITE GLOBAL, and Calibration procedures are also part of the Global mode pages.

## **Display Pages**

Each of the parameters and functions of the various modes are grouped into pages and sub-pages in the display. The current page number is always in the right-hand side of the display. Use the PAGE+/- buttons to scroll through pages, and the CURSOR <> and ENTER/YES buttons to go to any associated sub pages.

### **Pro-User Tip:**

You can direct-select specific pages by holding down a MODE button, followed by pressing one of the Arrangement or Program number buttons. For instance, pressing the ARRANGEMENT button, then pressing ARRANGEMENT NUMBER button 8 will take you to page 8 of Arrangement Play mode. Pressing PROGRAM NUMBER 1 will take you to page 9 of Arrangement Play mode. You can also re-configure these direct access pages so that the same type of page is accessed from the same button. (see manual page 19)

## **Listening to the Demo Songs**

There are 16 ROM demos in the iS40. Here's how to access them:

1. Press the ARR.PLAY and B.SEQ (DEMO) buttons together. The "Demo" page will appear in the display.

**To listen to all the demo songs:**

1. Press START/STOP. The demos will playback one after the other.
2. Press START/STOP to stop the demos.

### **To listen to a single demo song:**

1. Select the desired demo song by pressing the ARRANGEMENT NUMBER or PROGRAM NUMBER buttons.
2. Press START/STOP to stop the demo song.
3. Press EXIT/NO or one of the MODE buttons to exit from Demo mode. (see manual page 20 for a listing of the individual demo songs)

## **About the Accessory Disk**

The disk that comes with the iS40 contains all of the Factory preset data, as well as additional files, including demonstration Backing Sequence and Standard MIDI file data.

iS40's ability to play songs direct from disk, as well as playing the Backing Sequence demo. Make sure to backup a copy of the Accessory Disk to a computer, and/or make a disk copy of the Factory data for backup. (See manual page 21 for information on how to load / play demo data from the Accessory Disk)

### **About the JukeBox function:**

The JukeBox function allows you to create a list of songs to be played back with just one command. Various songs on disk can be accessed for playback in any order you wish. (more on this later in the tutorial)

## **Loading the Factory Data**

1. Power-OFF, then Power-ON the iS40.
2. Press the DISK/GLOBAL button. "LOAD" will be flashing in the display.
3. Press the ENTER/YES button. "ALL" will be flashing in the display.
4. Press the ENTER/YES button again. "ALL" will again appear and flash in the display.
5. Press the ENTER/YES button again. "FACTORY" will flash in the display.

6. Press the ENTER/YES button again to load all the Factory data from disk. When all data has been loaded, the display will prompt "Completed". Press any other MODE button to exit from DISK/GLOBAL mode.

## **Working With Arrangements**

1. Press ARR.PLAY to enter Arrangement Play mode. The LED will light.
2. Press ARRANGEMENT BANK [A], then press ARRANGEMENT NUMBER [2] twice to select Arrangement A22 Windy Beat.

Notice the front panel LED indicators for a moment. VARIATION 1 LED is flashing, and INTRO 1 LED is lit.

3. Press the SYNCHRO START button - it will flash.
4. Play a chord in the lower range of the keyboard.

INTRO 1 will now play. When it has played through its pattern, it will automatically go to VARIATION 1, as originally programmed for this arrangement.

5. Play a melody in the right hand as VARIATION 1 plays, to follow the original chord you played in the lower range of the keyboard.
6. As the arrangement plays, press VARIATION 2.
7. Press FILL 1, then press VARIATION 3. Now you're getting it!
8. Press FILL 2, then press VARIATION 4.
9. Finally, press INTRO/ENDING 1. Don't play the keyboard at this time. INTRO/ENDING 1 has been pre-programmed with melody and chords - to end the song for you. Note that if you had pressed INTRO/ENDING 2, the ending would have been more "open" to your melody and chord input, allowing you to be in more control of how the song ended. This holds true as well, for INTRO 2.
10. Press START/STOP again, and the last Variation you accessed will begin to play, then press INTRO/ENDING 2 to hear the difference in endings.

### **ProUser Tip**

INTRO/ENDINGS can also be used as Fill-ins, if you press an INTRO/ENDING button, and then press a Variation or Fill button before the ending actually occurs.

## **The SYNCHRO buttons:**

On the iS40, the SYNCHRO START and SYNCHRO STOP buttons function in two ways: The SYNCHRO START button allows you to begin playing an arrangement when you trigger a chord in the chord scanning area. When you activate the SYNCHRO STOP button, the arrangement will only play when you are triggering chords, and will stop when you take your hand off the keyboard.

### **ProUser Tip**

In Arrangement Play mode, page 5: “Ensemble/Variation change”, you can determine which variation will be played after you press one of the FILL buttons!

## **The FADE IN / OUT button:**

1. Make sure the current arrangement is stopped, and that the SYNCHRO START and STOP buttons are OFF (unlit).
2. Play a chord in the chord scanning area of the keyboard.
3. Press the FADE IN/OUT button. The arrangement will start, with the volume levels of all tracks gradually increasing to full.
4. When the arrangement volume is at full, press FADE IN/OUT again. The arrangement will gradually fade from full volume to zero. the accompaniment will stop, and the volumes will then default to full.

## **Working with the Tempo**

When the arrangement is stopped, you can use the DIAL or the TEMPO/VALUE buttons to change the tempo of the current arrangement. On the iS40, you can also “tap” the tempo you want with the TAP TEMPO button. The time between taps is calculated and the resulting tempo is changed and shown in the Display. As the arrangement plays, you can use TAP TEMPO, the DIAL or the TEMPO/VALUE button to change tempo.

## **The TEMPO LOCK button:**

The TEMPO LOCK button, when lit, will hold the current setting of tempo, even if you change Arrangements. This is great for keeping the same groove going while you

change to different Arrangements for each section of a song, or for a medley that keeps the people dancing!

When this button is off, the tempo which was originally written for each arrangement will be recalled as new arrangements are selected.

### **The SINGLE TOUCH button:**

Keep in mind that any given arrangement includes Keyboard programs for Upper 1/2 and Lower ranges. These programs can be layered or split, and used for live playing over the backing tracks of an arrangement. In the iS40, there are 15 Keyboard Sets available as well (more on that later). The SINGLE TOUCH button allows you to distinguish which Keyboard sounds will be used when going from one arrangement to another. Most of the time, this button is activated, so that when you change arrangements, the Keyboard sounds will change as well - to go along with how they were programmed for every arrangement. But on occasion you may want to retain the same Keyboard sounds as originally selected, even if you change arrangements. If so, simply press the SINGLE TOUCH button to turn OFF it's LED. The Keyboard sounds will always stay the same from arrangement to arrangement, but the backing tracks will change with each new arrangement you select.

## **The VOLUME section**

Below the Display, you'll find a set of buttons which determine the volume and muting status of each of the tracks in an arrangement. (Note that in Song Play mode, these buttons become Track/MIDI channel buttons 1-16, and that in Program mode, these buttons function as Performance Edit buttons)

When you are working with an arrangement, pressing any of these buttons will cause the Display to indicate the selected Program. If you look in the Display, you'll also see the volume level indicators for each track left-to-right, in the lower part of the Display.

### **Let's get an idea of how this works:**

1. Press the ARR.PLAY button.
2. Press ARRANGEMENT BANK [A], then press ARRANGEMENT NUMBERS [56] "Hip Hop".
3. Play a chord in the lower range of the keyboard then press START/STOP to start the arrangement.
4. In the VOLUME section, press the DRUMS button. The Display will indicate the drum program that is being used in this arrangement.
5. Press and hold the lower button, below the DRUMS button. Notice that the volume of the drum program is decreasing.
6. Press and hold the DRUMS button to increase the volume. Watch the Display and release the button when the Display indicates a volume level of "126".

### **Muting the tracks:**

1. Let Arrangement 56 continue to play - change to another Variation if you are getting bored...or change arrangements to something else if you like...
2. Press both the upper and lower DRUMS buttons to MUTE the drum track. Press them both again to UN-MUTE the track.

### **The ACC1-3 MUTE button:**

To the right of the VOLUME section, there is a button labeled ACC1-3 MUTE. When playing an arrangement, you can press this button to mute the accompaniment tracks. In Backing Sequence mode, this button selects extra tracks.

## Getting the original arrangement settings back:

Just re-select the arrangement again, and the original settings for all tracks will be recalled.

### **ProUser Tip**

If you create a mix that you like, you can quickly WRITE it to a USER bank location by pressing the REC/WRITE button. The display will prompt with a USER bank location. Use the DIAL or TEMPO/VALUE buttons to view and select the desired USER bank arrangement number, then press ENTER/YES to write the new arrangement. Press EXIT/NO to exit the WRITE operation.

## Changing the Keyboard tracks in an Arrangement:

Perhaps you like everything about an arrangement, but want to easily-change the Keyboard sounds. Let's give it a try:

1. Select Arrangement [B32] "Big Band".
2. Play notes in the upper range to hear the assigned Keyboard sound. The Display indicates that it is "UP1: E24 Jimmy Org".
3. Press PROGRAM NUMBER buttons [21]. The display will indicate that you have selected "E21 Tone Wheel" as the Upper Keyboard sound. Play the keyboard to hear the new sound.
4. Start the Arrangement. Then, as it plays, select PROGRAM BANK [A], followed by pressing PROGRAM NUMBER [43] "Jazz Guitar".

## Changing Backing Tracks in an arrangement:

1. Select Arrangement "A31 Pop 6/8".
2. Play a chord on the lower part of the keyboard and start the Arrangement, then press the DRUMS button in the VOLUME section. The Display indicates the assigned drum program for that track.
3. Press PROGRAM NUMBER buttons [17] to select "Dr17 Dance Kit". Listen to the arrangement - the drum track is now using Dr17 as the drum kit.
4. Press the BASS button in the VOLUME section.

5. Press PROGRAM NUMBER buttons [51] to change the bass track to an acoustic bass sound.
6. Re-select Arrangement A31 again, to recall the original setup.

\* Remember that you can write edited arrangements to the USER bank, and retain the original arrangement in the A and B banks.

## **More on the Keyboard tracks- splits, layers etc.**

So far, you've learned quite a bit, but we've only just begun...sounds like a song, don't it? (wonder what arrangement would work for that?...never mind...) OK, back to work...Look to the right of the DIAL and you'll notice a set of buttons labeled KEYBOARD ASSIGN. Here is a very important part of the i-series interactive functions, and understanding how it works is important. Notice the LOWER, UPPER2, and UPPER1 buttons...

1. Select Arrangement "B66 Half time". Notice that in the KEYBOARD ASSIGN section, the UPPER1 LED is lit. In the Display, the UP1 program is indicated.
2. Play in the upper range of the keyboard to hear the "Dist Lead" sound.
3. Press the UPPER2 button, then press the UPPER1 button to turn its LED off. You'll hear a Clavinet sound. Pressing both buttons will layer the programs!
4. In the VOLUME section, press the LOW/UPP2 button. The Display will indicate "UP2: A18 Clavinet" as the UPPER2 sound. Note that because you have selected the LOW/UPP2 button, you can now change sounds using the PROGRAM BANK AND NUMBER buttons, and also change volumes or mute the UPPER2 track.
5. Press the LOWER button in the KEYBOARD ASSIGN section. Notice that the UPPER2 button automatically turns OFF. This is how you choose between Layering two sounds or Splitting two sounds.

## **Splitting the Keyboard:**

1. Re-select Arrangement "B66 Half Time". Again note that the UPPER1 button is lit. Also note that the SPLIT button is lit in the KEYBOARD MODE section, located above the PROGRAM section.
2. Press the LOWER button in the KEYBOARD ASSIGN section.
3. Without starting the arrangement, simply play notes in the lower and upper ranges of the keyboard.

4. Press and Hold the SPLIT POINT button, located to the left of the display in the MODE section. Look in the Display as you do this, and in the upper-right area, you'll see "SPLIT" and "C4" below it. This is the current split point for Arrangement B66.
5. While Holding the SPLIT POINT button, press any key on the keyboard, and the Display will indicate the new selected split point. Release the SPLIT POINT button and play the keyboard to hear the new split.
6. Re-select Arrangement B66 again, to recall the original setup.
7. Start the arrangement by pressing START/STOP.
8. Press the LOWER button in the KEYBOARD ASSIGN section, and then play chords in the lower range. You'll hear the "Lite Voices" program assigned to the lower split point. Play in the upper range to hear the "Dist Lead" sound.

**Or:**

### **Changing the Split Point:**

1. Select Arrangement "A75 By on". Again note that the UPPER1 button is lit. Also note that the SPLIT button is lit in the KEYBOARD MODE section, located above the PROGRAM section.
2. Without starting the arrangement, simply play notes in the lower and upper ranges of the keyboard.
3. Press and Hold the SPLIT POINT button, located to the left of the display in the MODE section. Look in the Display as you do this, and in the upper-right area, you'll see "SPLIT" and "C4" below it. This is the current split point for Arrangement A75.
4. While Holding the SPLIT POINT button, press any key on the keyboard, and the Display will indicate the new selected split point. Release the SPLIT POINT button and play the keyboard to hear the new split.

## **The KEYBOARD MODE section:**

The KEYBOARD MODE section is used to choose the way the Upper 1,2 and Lower tracks are placed on the keyboard, and these settings are written as part of an arrangement. Also, in this section you can play manual drum sounds on the keyboard by pressing the M.DRUMS button.

1. Select Arrangement “B53 Gospel”. Note by the KEYBOARD MODE settings that this arrangement is a SPLIT.
2. Press the FULL UPPER button in the KEYBOARD MODE section.
3. Don’t START the arrangement - simply play notes across the entire range of the keyboard to hear the FULL UPPER sound.

## **To Layer sounds...**

4. Now press the UPPER2 button in the KEYBOARD ASSIGN section - to the left of the KEYBOARD MODE section. Play the keyboard to hear the LAYERED sound.
5. Press the UPPER1 button in the KEYBOARD ASSIGN section to turn it OFF, then play the keyboard. You’ll hear just the organ - the UPPER2 sound - across the entire range of the keyboard.
6. Press the M.DRUMS button in the KEYBOARD MODE section. Play the keyboard to hear drum sounds across the keyboard - the Display indicates the drum program / kit that is accessed, and you can use the PROGRAM NUMBER select buttons to change drum programs.

## **Transposing in Arrangement mode:**

All tracks in an arrangement, except for Drum and Percussion tracks, can be transposed by individual octaves. The overall transposition of the arrangement in semitones is also available. Both the semitone and octave transpose buttons are located to the right of the REC/WRITE button.

## **To transpose tracks in an arrangement...**

1. Select Arrangement “B46 Still Life”. Note that the UPPER1 and UPPER2 buttons are lit, so the Keyboard sounds are layered.

2. Play the upper sound on the keyboard, then press the OCTAVE [+] button to transpose this sound up an octave. Note that you are only transposing the UPPER1 sound at this time. Press both the OCTAVE [+] and [-] buttons together to cancel the transposition.
3. Press the LOW/UPP2 button in the VOLUME section. The Display indicates "UP2: A43 Jazz Guitar".
4. Press the OCTAVE [-] button, and as you play, notice that only the guitar sound is being transposed. Press both OCTAVE buttons together to cancel the transposition.
5. Play a chord in the lower range of the keyboard then press START/STOP.
6. Press the BASS button in the VOLUME section.
7. Press the OCTAVE [+] button to raise the bass sound an octave. Press the OCTAVE [+] again to raise the bass sound another octave, and note the setting changes in the Display. Now press both OCTAVE buttons to cancel the transposition.

So you see, in order to change octaves on desired tracks, you must first select the track in the VOLUME section. This is what determines which sounds get transposed.

### **To transpose in semitones...**

1. Start Arrangement B46 again.
2. Press the TRANSPOSE [#] button and listen to the arrangement. Transpose will not occur until the first beat of the following measure. The Display indicates the current transposition key.
3. Press both TRANSPOSE buttons to cancel the transposition.

## **Chord Scanning and Recognition**

Whenever an arrangement or backing sequence is selected, this section of the iS40 specifies which area of the keyboard will be used to detect the chords you play. Almost all of the arrangements have been written using LOWER CHORD SCANNING, so the changes you make are only affected below the split point of C4, and the live parts you play above that split point will have no effect on the chord scanning area. You are free to change this mode whenever you like, from LOWER to UPPER or FULL.

FULL scanning allows you to play the entire keyboard range at will, and the chord changes you make will be detected and played by the backing tracks. In normal operation, chords will not change unless you play three or more notes together as a

chord. However, this can be changed on page 11 of Global mode. For more information on chord scanning and recognition, consult the owner's manual.

The number of notes you have to play for the backing tracks to detect a chord depends on the settings in the Chord Recognition mode (page 11 of Global mode). The default setting is FINGERED2, which means that three or more notes have to be played to trigger chord scanning. This can be changed to even include the "easy" fingered method as adopted by Yamaha for the more novice player. See the manual pg. 131 for more information.

## Warp-Speed Tour of an Arrangement

Now that you're getting to be an "expert" on the iS40, let's work with Chord Scanning, backing tracks, styles, etc., at an accelerated pace, and completely change the way an arrangement can work:

1. Select Arrangement "A52 Underground".
  2. SYNCHRO START the arrangement.
  3. Mute the accompaniment tracks with the ACC1-3 MUTE button.
  4. Raise the DRUMS volume to "118".
  5. Un-mute the ACC1 track by pressing both buttons.
  6. Un-mute the ACC2 track as well.
  7. Press FILL1, then press VARIATION 4.
  8. Mute the BASS track.
  9. Press the LOWER button in the CHORD SCANNING section to turn it OFF.
  10. Press the UPPER button in the CHORD SCANNING section to turn it ON. Then play chords in the upper section of the keyboard to activate scanning.
- \* Keep that arrangement playin'! You're a Dancin' Fool !!!!!!!!!!!!!!!!!!!!!!!**
11. Press the LOWER button in the KEYBOARD ASSIGN section.
  12. Play notes in the lower range of the keyboard, to hear the lower split sound.
  13. Press the LOW/UPP2 button in the VOLUME section. Check the Display to verify that you are on "LOW: E64 Dark Pad".
  14. Using the PROGRAM BANK and NUMBER buttons, select Program "C57 Dance Bass".
  15. Transpose this Program down 2 octaves, then play a bass line in the lower range of the keyboard.
  16. Press FILL2, then press VARIATION 2, and keep playin that PHAT bass line!

## **Warp speed tour (cont.)**

17. If you are a player - go for it! Change chords in the right hand while playing a live bass line in the left hand! If you're not, don't worry about it, just have FUN!
18. Press the INTRO/ENDING2 button, and stop dancin' around...it looks ridiculous!

**...hence the word “interactive”, right?**

### **ProUser Tip**

1. Load ALL the Factory data into memory.
2. Study the A, B and USER Banks of Arrangements, and make a list of 8-16 favorites. Pick the ones you like best in a variety in styles.
3. Select each of your favorites, and as you do, write them to new locations in the USER bank. Put them in order of music genre, i.e. U11-12 Latino, U13-14 Dance, etc.
4. Save ALL to a new file on disk (Give it a name that you'll easily recognize as your Favorite's file...try something creative like “Joe's Favs File”).

Now that you've created your custom user bank of arrangements.

\*Remember, you can always get the original User bank data back - it's on the Accessory Disk that ships with the iS40.

## **Keyboard Sets**

On the iS40 there are 15 Keyboard sets available. These allow you to recall a setup of control panel memories, simply by selecting a desired Keyboard set! Splits or layers of specific programs, effects, octaves, scanning, keyboard assign and keyboard mode - all of these settings can be stored as Keyboard sets. Then, when playing an arrangement or just playing sounds, you can instantly choose the sets you need.

## Selecting Keyboard Sets:

1. Repeatedly press the BANK button in the KEYBOARD SET section, until you see the A-bank LED light.
2. Now press KEYBOARD SET NUMBER button 1. Play the keyboard to hear the selected set.

## Storing a new Keyboard Set:

1. Select Arrangement "A13 L.A. R&B".
2. Press the LOWER button in the KEYBOARD ASSIGN section.
3. Press the LOW/UPP2 button in the VOLUME section.
4. In the PROGRAM section, press BANK F, followed by NUMBER 8, then 1, to select Program "F81 AmbassFret". Play in the lower range of the keyboard to hear the selected program.
5. Press the OCTAVE [-] button once, to transpose the bass down an octave.
6. Press the PAGE+ button twice, to move to PAGE3. On this page you can adjust pan and effect send levels for the selected track.
7. Press the CURSOR> button to move and set both the C and D effect send levels to a value of "0", so that the bass track has no effect processing.
8. Play in both ranges of the keyboard - you've created a Piano/Bass split. Adjust the volumes of the LOWER and UPPER tracks by pressing the appropriate buttons in the VOLUME section.

## Now to write the new Keyboard set:

9. Press and Hold the REC/WRITE button.
10. In the KEYBOARD SET section, repeatedly press the BANK button and watch the Display, until you see Bank "B". Press KEYBOARD SET NUMBER "5" to select BANK "B5".
11. Release the REC/WRITE button, then press the ENTER/YES button twice, to WRITE your new Keyboard Set into memory.
12. Now re-select Arrangement "A13 L.A. R&B". Note that the original track assignments are recalled, but when playing this arrangement, or any other

arrangement, you can quickly select Keyboard Set B5 and access the Piano/Bass split as the live keyboard track!

### **ProUser Tip:**

You can also write the selected Keyboard set as the new keyboard tracks in a desired arrangement, so that the set is automatically selected when you pick an arrangement. Simply select the arrangement, then the keyboard set, then press the REC/WRITE button and write the new arrangement into a USER bank location.

## **Working With The Backing Sequencer**

How about recording and playing back an arrangement, complete with chord, control, and keyboard data? That's what the Backing Sequencer is all about! Not only that, but once you've done it, you can add a few extra tracks, save your Backing Sequence as a Standard MIDI file and attach it to the email you send daily to your friends.

The Accessory Disk that is included with the iS40 contains a Backing Sequence Demo. When you turn off the iS40, you will lose any Backing Sequence data, so it's important that you backup ALL your data!

### **The Backing Sequencer Demo**

Before you learn how to record your own Backing Sequence, let's take a quick "tour" of the Backing Sequence Demo - make sure you've loaded it into memory before we start...

1. Press the B.SEQ button. "BSQ0: B. Seq. Demo" will appear in the Display.

2. Press START/STOP. The demo will start. Listen, and watch the Display and front panel as it plays - note the chord and control changes. The demo is only 28 measures in length - very effective as an initial "look" at the Backing Sequencer.

### **Record your own Backing Sequence...**

1. Press the CURSOR> button once. "BSQ0" will flash in the Display.
2. Press the UP/+ button, or rotate the DIAL until "BSQ1" flashes in the Display, indicating that you've selected a new Backing Sequence.
3. Select Arrangement "A11 8 Beat" with the buttons in the ARRANGEMENT section.
4. Press the INTRO/ENDING1 button.
5. Press REC/WRITE.
6. Press START/STOP. You'll hear a two measure pre-count before recording begins.
7. Play a chord in the lower range of the keyboard during the pre-count - the Display will indicate the chord you played.

### **As recording continues...**

- Play a melody in the in the upper range of the keyboard.
- Press either FILL button, followed by one of the VARIATION buttons.

Remember - the keyboard, control and chord tracks are all being recorded in the Backing Sequencer.

8. Press INTRO/ENDING1 and let the Backing Sequence end.

### **That's it ! You've done it!**

9. Press START/STOP to listen to your new Backing Sequence!

What's that? You don't like what you've done? Not a problem - just hit the RESET button and begin recording again - you'll overwrite everything in the current Backing Sequence.

## Let's review the Backing Sequencer:

### 1. Play the Factory Backing Sequence Demo.

Notice the Display and front panel changes that are occurring!

### 2. Record a new Backing Sequence.

- Cursor and select "BSQ1", then select the type of arrangement you like.
- Select an Intro and...
- Record the Backing Sequence, including keyboard, control and chord data.
- Playback the new Backing Sequence.
- Now record a new Backing Sequence!

**\*Don't forget that your sequence will be erased when you turn off the unit. You might want to save your Backing Sequences to disk before shutting off the iS40!**

### The Backing Sequencer (cont.)

In the previous exercise, you learned how to record a Backing Sequence in a quick and easy way - by recording the keyboard, control, and chord tracks all at once. This is a great way to check out the iS40, but just so you know, there are other ways to record Backing Sequences, and many more features like quantizing and event editing of recorded data - even Step Recording! For more information on the Backing Sequencer, consult the owner's manual.

## Working with Standard MIDI Files

The Accessory Disk that ships with the iS40 contains 16 SMF's plus a silly little SMF called "ISLANDS", which is thankfully only eight bars long. The 16 SMF files (titled DEMO1-16) are the same sequences that are already resident in the ROM demo section of the iS40. However, you can use these files (or any other SMF files available) to demo the Song Play/ Edit features.

**To playback SMF files:**

1. Insert the Accessory Disk (FDD-1004) or any SMF disk into the disk drive.
2. Press the SONG PLAY button in the MODE section and press START/STOP. The iS40 will play through all the SMF's on the disk.

To play a particular song from the disk, use the TEMPO/VALUE buttons to select the SMF you want and press START/STOP. You can even do this while an SMF is playing.

\* Note that these files are in Format 0 SMF, so they will playback immediately. If you need to load a Format 1 SMF, the file will load first, and then play. If there is a backing sequence or another song in memory previous to loading, the Display will prompt "OK to erase B.Seq & Song Edit". Press ENTER/YES to erase the data in internal memory and load/playback the Format 1 SMF.

**Working with the JukeBox Function:**

With the JukeBox function, you can create a custom play list of songs contained on disk. The songs will playback in the order you desire.

1. Insert the disk, then press the UP/+ button or DIAL to select the first song.
2. Press the ENTER/YES button to insert the song in the list.
3. Choose the second song with the UP/+ button or DIAL, then press ENTER/YES to insert the song in the list.
4. Continue as above to finish creating the play list.
5. Press START/STOP to playback and stop the songs using the JukeBox function.
6. Press EXIT/NO to exit JukeBox mode.

**Editing Standard MIDI files - Song Edit mode:**

The iS40 will automatically convert a Format 0 SMF file to Format 1, so that you can freely edit any of the tracks available. Once the song has been edited, you can save it as a SMF in either Format 0 or 1.

For more information on editing SMF files, consult the manual pg. 33.

## **Program Mode**

There are 384 onboard sounds in the iS40. They are located in the PROGRAM section, and are organized into six banks (A-F) plus a drum bank. Banks A-E include 320 ROM programs (A&B are GM). Bank F/USER contains 64 RAM programs. Pressing Bank button F repeatedly toggles between the F and DRUM bank. There are 16 Drumkits in the DRUM bank.

The iS40 is a fully programmable synthesizer, so in addition to its interactive features, Programs and Drumkits can be played and edited by entering PROGRAM mode.

1. Press the PROGRAM mode button, to the left of the Display.
2. Press PROGRAM BANK button A, then press PROGRAM NUMBERS 1 two times, to select Program "A11 Piano 1".

### **Performance editing:**

3. Press the VDF CUTOFF button, located in the VOLUME section.
4. Press the upper VOLUME button repeatedly (the button above VDF CUTOFF), or hold it down, as you play the keyboard, to brighten the sound of the piano. Press the lower VOLUME button repeatedly, or hold it down, and as you play you'll hear the sound becoming darker. Press both upper and lower VOLUME buttons together to set the value back to "0".
5. Press the VELOCITY SENS. button, and change it's values as in the previous step. This performance edit lets you modify the playing dynamics for each program. Press both upper and lower VOLUME buttons together to set the value back to "0".
6. Press the EFFECT BALANCE button and modify the dry-wet balance with the lower and upper VOLUME buttons. Press both upper and lower VOLUME buttons together to set the value back to "0".

\* Once you have used the Performance Editor to modify a program, you can write the new program to any location in the F/USER bank, by pressing the REC/WRITE button and the ENTER/YES button.

## **Program Editing:**

All of the parameters used to create the programs and effects are easily accessible by pressing the PAGE +/- buttons, or by direct page selecting. To go to a specific edit page, hold the PROGRAM button, then press ARRANGEMENT NUMBER BUTTONS 1-8 or PROGRAM NUMBER buttons 1-8.

More detailed information on program editing is available in the owner's manual pgs. 143-169.

## **Additional Features**

This tutorial has provided you with a basic understanding of the iS40. There are some additional and important features that haven't been discussed yet:

### **MEMORY-CHORD / button:**

When this button is ON in Arrangement Play and Backing Sequencer modes, the accompaniment and bass track continue to play, even when you release the keyboard. If it is OFF, the accompaniment and bass tracks will stop when you release the keyboard, but the drum and percussion tracks will continue to play.

### **MEMORY-LOWER / button:**

This holds the Lower sound without keeping your hand on the keyboard. In Global mode, pg10, you can set this function to work in one of three ways: ACTUAL - chords reproduced exactly as played. AUTO - completes chords with missing notes, i.e. playing notes "C-E-B" will trigger a Cmajor7th chord and the C, E, B *and* G will be played. BASS - when accompaniment is stopped, the bass note will sustain as well.

### **BASS INV. button:**

In Arrangement Play and backing Sequence modes, this setting ensures that the lowest note of a chord played in inverted form will be used as the bass note. In other words, if BASS INV. is ON, and you play an F chord with a C bass, the accompaniment will play in F, with the bass player playing a C note. If BASS INV. is OFF, and you play the same chord, the accompaniment will play in F, and the bass will play the root note (F) of the chord. So the OFF setting is the simpler way to play chords without worrying about your chord voicing, and the ON setting gives you better control over chord inversions alternate bass lines.

### **ENSEMBLE button:**

In Arrangement Play and Backing Sequence modes, pressing the ENSEMBLE button harmonizes the right hand melody based on the chords played in the left hand. This only works when chord scanning is set to LOWER. There are ten available types of Ensemble settings, located on page 5 of Arrangement Play mode. For more information on the various Ensemble types, see pg. 60 in the owner's manual.

### **SUSTAIN button:**

In all available modes, pressing this button increases (sustains) the length of the notes played by a keyboard track or program.

### **RESET button:**

In Backing Sequencer, Song Play and Song Edit modes, the RESET button returns the sequence to the first measure. In Arrangement Play and Backing Sequencer mode, this button restarts the chord scanner and returns to the beginning of the measure. The RESET button can also be used as a MIDI "Panic" button for stuck notes.

### **Scale Types:**

There are ten preset scales, plus four user scales available. Programming of the user scales is done on page 15 of Disk/Global mode. In addition to the Main scale, there is a Sub scale, and you can use a foot switch, EC5 pedal, or MIDI to change between Main and Sub scales. Settings for these scales are located on pages 13 and 14 of Disk/Global mode. For more information, see pages 61 and 133 in the owner's manual.

### **EC5 Pedal:**

The optional EC5 pedal can be used to control many of the iS40 functions, including Start/Stop, Variation and Fill changes, Effect On/Off, Muting of tracks, etc. there are five switches on the pedal, and their functions can be set on page 9 of Global mode.

### **About the Owner's Manual:**

"Owner's Manuals"...those two words can send chills up the spines of just about anybody, right? Well, not in the case of the iS40! You'll be pleased to know that the

people who put the owner's manual together did an incredible job! Take a look at it...go on...get it out and read it! We think you will agree - this is one of the best-written product manuals available!

## What are the main differences between the iS40 and iS50?

iS40 (\$1695)	iS50 (\$1450)
Aftertouch	NO
14 Mbyte PCM	12 Mbyte PCM
15 Keyboard sets	NONE
2 pedal inputs	1 pedal input
EC5 pedal input	NO
2 audio inputs	NO
MIDI in, out, thru	MIDI in, out
Host port	NO
2x14 watt amp	2x8 watt amp
4 speakers	2 speakers
Joystick, Dial controls	Joystick only
Synchro-Start and Synchro-Stop keys	Synchro-Start/Stop key only

## Important Features

iS40 (\$1695)	What makes this feature important?
Aftertouch	<i>more control of sound and effects</i>
14 Mbyte PCM	<i>2 more Mbyte = a better piano sample</i>
15 Keyboard sets	<i>instant access to favorite sound sets</i>
2 pedal inputs	<i>more control - dedicated damper</i>
EC5 input	<i>foot control of front panel switches</i>
2 audio inputs	<i>external sources like tape, CD, additional instruments</i>
MIDI in, out, thru	<i>thru connector for multi-keyboard rigs</i>
Host port	<i>connect to computer w/out an external MIDI interface</i>
2x14 watt amp	<i>almost twice the power of the iS50!</i>
4 speakers	<i>more speakers = better fidelity!</i>
Joystick, Dial controls	<i>more control of sound, effects, tempo</i>
Synchro-Start and Synchro-Stop keys	<i>easier to use - dedicated switches</i>

## Arrangement and Program Listings:

### iS40/50 Arrangements

You can select the arrangements via MIDI, sending Bank Select MSB, Bank Select LSB (shown in table as BS) and Program Change (shown in table as PC) messages through the ARNG channel. The Bank Select MSB is always = 00.

BS	PC	#		BS	PC	#		BS	PC	#		BS	PC	#	
<b>8 Beat</b>				<b>16 Beat</b>				<b>Ballroom</b>				<b>Dance 1</b>			
000	000	A11	8 Beat	000	008	A21	16 Beat	000	016	A31	Pop 6/8	000	024	A41	Party Polka
	001	A12	Guitar Ballad		009	A22	Windy Beat		017	A32	Back to 60's		025	A42	NonstopParty
	002	A13	L.A. R&B		010	A23	Home Beat		018	A33	Rock 6/8		026	A43	Motown
	003	A14	Sweet Beat		011	A24	Color Beat		019	A34	Flipper 6/8		027	A44	Love disco
	004	A15	Analog Night		012	A25	Miami Beat		020	A35	Flipper 4/4		028	A45	Disco '70
	005	A16	8 Beat Rock		013	A26	Analogyst		021	A36	Twist		029	A46	80's Dance
	006	A17	Shuffle Shade		014	A27	Thin Funk		022	A37	Hully Gully		030	A47	House
	007	A18	Rhythm&Beat		015	A28	Easy Rock		023	A38	Beach Surfer		031	A48	Techno
<b>Dance 2</b>				<b>Latin 1</b>				<b>Latin 2</b>				<b>Latin Dance</b>			
000	032	A51	Progressive	000	040	A61	Basic Bossa	000	048	A71	Tango	000	056	A81	Mambo
	033	A52	Underground		041	A62	Bossa nueva		049	A72	Habanera		057	A82	Salsa
	034	A53	Jungle		042	A63	Miss Bossa		050	A73	Paso Doble		058	A83	Merengue
	035	A54	Garage		043	A64	Samba		051	A74	Cumbia		059	A84	Meneito
	036	A55	Euro Rap		044	A65	Sambalegre		052	A75	By on		060	A85	Macarena
	037	A56	Hip Hop		045	A66	Beguine		053	A76	Calypso		061	A86	Tikitikità
	038	A57	Dancing Tribe		046	A67	Last Rhumba		054	A77	Reggae		062	A87	Lambada
	039	A58	Down Beat		047	A68	Cha Cha Cha		055	A78	DanceReggae		063	A88	Discosamba
<b>Traditional 1</b>				<b>Traditional 2</b>				<b>Jazz</b>				<b>Jazz &amp; Funk</b>			
000	064	B11	Waltz	000	072	B21	Wiener Waltz	000	080	B31	Big Band 40's	000	088	B41	Ballad
	065	B12	Mazurka		073	B22	Slow Waltz 1		081	B32	Big Band		089	B42	MediumSwing
	066	B13	Polka		074	B23	Slow Waltz 2		082	B33	Fast Big Band		090	B43	Be Bop
	067	B14	German Waltz		075	B24	Operetta		083	B34	Latin BigBand		091	B44	Acid Jazz
	068	B15	Laendler		076	B25	Fox Trot		084	B35	Broadway		092	B45	Latin Jazz
	069	B16	German Polka		077	B26	Club Fox		085	B36	Hollywood		093	B46	Still Life
	070	B17	W. Musette		078	B27	Quick step		086	B37	Jazz Waltz		094	B47	Party Funk
	071	B18	French March		079	B28	Charleston		087	B38	5/4 Swing		095	B48	Groove
<b>Rhythm &amp; Blues</b>				<b>Rock</b>				<b>World Music 1</b>				<b>World Music 2</b>			
000	096	B51	R & B	000	104	B61	Light Rock	000	112	B71	Country	000	120	B81	9/8 Roman
	097	B52	6/8 Blues		105	B62	Pop Rock		113	B72	Country Beat		121	B82	Ciftetelli
	098	B53	Gospel		106	B63	Open Rock		114	B73	Country Ballad		122	B83	Mariachi
	099	B54	Blues Shuffle		107	B64	Heavy Rock		115	B74	Dixieland		123	B84	Raspa
	100	B55	Pop Shuffle		108	B65	Rock Ballad		116	B75	OnTheBridge		124	B85	Venezia
	101	B56	Uncle Funk		109	B66	Half Time		117	B76	Tarantella		125	B86	Minuetto
	102	B57	Get Funked		110	B67	Rock & Roll		118	B77	Sevillana		126	B87	Bolero
	103	B58	Electric Funk		111	B68	Rock Hip Hop		119	B78	Gipsy		127	B88	New Age

## Programs

You can select the programs via MIDI, sending Bank Select MSB, Bank Select LSB (shown in table as BS) and Program Change (shown in table as PC) messages, through the MIDI channel you wish to change the program to. The Bank Select MSB is always = 00.

BS	PC	#		BS	PC	#		BS	PC	#		BS	PC	#	
<b>Piano</b>				<b>Chromatic percussion</b>				<b>Organ</b>				<b>Guitar</b>			
000	000	A11	Piano 1	000	008	A21	Celesta	000	016	A31	Organ 1	000	024	A41	Nylon gtr
	001	A12	Piano 2		009	A22	Glockenspiel		017	A32	Organ 2		025	A42	Steel Gtr.
	002	A13	Piano 3		010	A23	Music Box		018	A33	Organ 3		026	A43	Jazz Gtr.
	003	A14	Honky-tonk		011	A24	Vibraphone		019	A34	ChurchOrgan		027	A44	Clean Gtr.
	004	A15	E. Piano 1		012	A25	Marimba		020	A35	Reed Organ		028	A45	Muted Gtr.
	005	A16	E. Piano 2		013	A26	Xylophone		021	A36	Musette		029	A46	Overdrive
	006	A17	Harpsichord		014	A27	Tubular Bell		022	A37	Harmonica		030	A47	Dist. Gtr.
	007	A18	Clavinet		015	A28	Santur		023	A38	Bandoneon		031	A48	GT.Harm.
<b>Bass</b>				<b>Strings</b>				<b>Esensemble</b>				<b>Brass</b>			
000	032	A51	Acoustic Bs.	000	040	A61	Violin	000	048	A71	Strings	000	056	A81	Trumpet
	033	A52	Fingered Bs.		041	A62	Viola		049	A72	Slow Strings		057	A82	Trombone
	034	A53	Picked Bs.1		042	A63	Cello		050	A73	SynStrings 1		058	A83	Tuba
	035	A54	Fretless Bs.		043	A64	Contrabass		051	A74	SynStrings 2		059	A84	MuteTrumpet
	036	A55	Slap Bass 1		044	A65	Tremolo Str.		052	A75	Choir Aahs		060	A85	French Horns
	037	A56	Slap Bass 2		045	A66	PizzicatoStr.		053	A76	Voice Oohs		061	A86	Brass
	038	A57	SynthBass 1		046	A67	Harp		054	A77	SynVox		062	A87	Syn.Brass1
	039	A58	SynthBass 2		047	A68	Timpani		055	A78	OrchestraHit		063	A88	Syn.Brass2
<b>Reed</b>				<b>Pipe</b>				<b>Synth lead</b>				<b>Synth pad</b>			
000	064	B11	Soprano Sax	000	072	B21	Piccolo	000	080	A31	SquareWave	000	088	B41	Fantasia
	065	B12	Alto Sax		073	B22	Flute		081	A32	Saw Wave		089	B42	Warm Pad
	066	B13	Tenor Sax		074	B23	Recorder		082	A33	Syn.Calliope		090	B43	PolySynth
	067	B14	Baritone Sax		075	B24	Pan Flute		083	A34	Chiffer Lead		091	B44	Space Voice
	068	B15	Oboe 1		076	B25	Bottle Blow		084	A35	Charang		092	B45	BowedGlass
	069	B16	English Horn		077	B26	Shaku 1		085	A36	Solo Vox		093	B46	Metal Pad
	070	B17	Bassoon		078	B27	Whistle 1		086	A37	5Th Wave		094	B47	Halo Pad
	071	B18	Clarinet		079	B28	Ocarina 1		087	A38	Bass & Lead		095	B48	Sweep Pad
<b>Synth SFX</b>				<b>Ethnic</b>				<b>Percussion</b>				<b>Effects</b>			
000	096	B51	Ice Rain	000	104	B61	Sitar	000	112	B71	Tinkle Bell	000	120	B81	Gt.FretNoise
	097	B52	Soundtrack		105	B62	Banjo		113	B72	Agogo		121	B82	Breath Noise
	098	B53	Crystal		106	B63	Shamisen		114	B73	Steel Drums		122	B83	Seashore
	099	B54	Atmosphere		107	B64	Koto		115	B74	Woodblock		123	B84	Bird
	100	B55	Brightness		108	B65	Kalimba		116	B75	Taiko		124	B85	Telephone 1
	101	B56	Goblin		109	B66	Bagpipe		117	B76	Melo. Tom		125	B86	Helicopter
	102	B57	Echo Drops		110	B67	Fiddle		118	B77	Synth Drum		126	B87	Applause
	103	B58	Star Theme		111	B68	Shanai		119	B78	ReverseCym.		127	B88	Gun Shot
<b>Piano</b>				<b>Chromatic percussion</b>				<b>Organ</b>				<b>Guitar</b>			
001	000	C11	90's Piano	001	008	C21	SynCelesta	001	016	C31	Gospel Org.	001	024	C41	L&R Ac.Gtr.
	001	C12	Rock Piano		009	C22	Sistro		017	C32	ClickOrgan		025	C42	12 Strings
	002	C13	New Piano		010	C23	Orgel		018	C33	Rotary Org.		026	C43	PedalSteel
	003	C14	M1 Piano		011	C24	SynVibes		019	C34	EuroPipe		027	C44	L&R El. Gtr.
	004	C15	Whirly		012	C25	Balaphone		020	C35	SmallPipe		028	C45	Clean Funk
	005	C16	DW-8000 EP		013	C26	Gamelan		021	C36	Fr.Musette		029	C46	DistoMutes
	006	C17	HarpsiFunk		014	C27	ChurchBell		022	C37	Akordeon		030	C47	Solo Dist.
	007	C18	Clavmation		015	C28	Celtic Plug		023	C38	Cassotto		031	C48	PowerChord
<b>Bass</b>				<b>Strings</b>				<b>Esensemble</b>				<b>Brass</b>			
001	032	C51	Upright	001	040	C61	The Strings	001	048	C71	Marcato	001	056	C81	FlugelHorn
	033	C52	Bass/ Harm.		041	C62	ChambViola		049	C72	Exp. Str.		057	C82	Dynabone
	034	C53	Picked Bs.2		042	C63	Cello Ens.		050	C73	AnalogPad		058	C83	OB. Tuba
	035	C54	Fat Fretty		043	C64	ChamDBass		051	C74	AnaStrings		059	C84	Mute Ens.
	036	C55	SuperRound		044	C65	Octave Str.		052	C75	Doolally		060	C85	Horns Ens.

	037	C56	DynaSlap		045	C66	OctavePizz.		053	C76	AirVoxDbl		061	C86	Brass Band
	038	C57	Dance Bass		046	C67	My dream		054	C77	Glassglide		062	C87	Syn.Brass3
<b>Reed</b>				<b>Pipe</b>				<b>Synth lead</b>				<b>Synth pad</b>			
001	000	D11	AltoBreath	001	008	D21	Synth Fife	001	016	D31	Soft Solo	001	024	D41	Thick Pad
	001	D12	Folk Sax		009	D22	BreathFlute		017	D32	Big Lead		025	D42	Soft Pad
	002	D13	SoftTenor		010	D23	Traverso		018	D33	PurePanLd.		026	D43	Farluce
	003	D14	PerkySaxes		011	D24	Kawala		019	D34	Rubby		027	D44	Heaven
	004	D15	Oboe 2		012	D25	BottleBlow		020	D35	Dist.Lead		028	D45	Glass Pad
	005	D16	Woodwinds		013	D26	Shaku 2		021	D36	Vox Lead		029	D46	Panner Pad
	006	D17	Small^Orch		014	D27	Whistle 2		022	D37	Big Fives		030	D47	Polar Pad
	007	D18	Clam. Ens.		015	D28	Ocarina 2		023	D38	Big & Raw		031	D48	Celestial
<b>Synth SFX</b>				<b>Ethnic</b>				<b>Percussion</b>				<b>Effects</b>			
001	032	D51	Caribbean	001	040	D61	Tambra	001	048	D71	WindChimes	001	056	D81	Heart Beat
	033	D52	Rave		041	D62	Bouzouki		049	D72	Cowbell		057	D82	Laughing
	034	D53	BellPad		042	D63	Oud		050	D73	Claves		058	D83	Wind
	035	D54	AmbientPad		043	D64	Kanoon		051	D74	Castanets		059	D84	Gallop
	036	D55	ElastikPad		044	D65	Ukulele		052	D75	Tsuzumi		060	D85	Telephone 2
	037	D56	Bell Choir		045	D66	Jaw Harp		053	D76	Oil Drum		061	D86	Train
	038	D57	Big Panner		046	D67	MandoTrem.		054	D77	Rev. Tom		062	D87	Stadium!!
	039	D58	Odyssey		047	D68	Hichiriki		055	D78	Rev Snare		063	D88	Explosion
<b>1</b>				<b>2</b>				<b>3</b>				<b>4</b>			
002	000	E11	Piano&Strgs	002	008	E21	Tone Wheel	002	016	E31	R&R Guitar	002	024	E41	FingerDark
	001	E12	PianoPad		009	E22	70' Organ		017	E32	Dobro		025	E42	Dyno Bass
	002	E13	Midi Piano		010	E23	Theatre Org.		018	E33	ElectricAc.		026	E43	Bass/Mute
	003	E14	Fresh Air		011	E24	Jimmy Org.		019	E34	Mr.Clean		027	E44	Stick Bass
	004	E15	Mark II bis		012	E25	DblBrass		020	E35	Hackbrett		028	E45	Deep House
	005	E16	Hard Tines		013	E26	SlowSunset		021	E36	Gtr.Strings		029	E46	Dr.Octave
	006	E17	FunkyRoads		014	E27	Ultra Rez		022	E37	StereoDist.		030	E47	Rap Bass
	007	E18	PianoVibes		015	E28	DanceReMix		023	E38	Gtr/Bass		031	E48	Zap bass
<b>5</b>				<b>6</b>				<b>7</b>				<b>8</b>			
002	032	E51	Velo Flute	002	040	E61	i3 Strings	002	048	E71	LiteVoices	002	056	E81	Jet Star
	033	E52	Flute/Muted		041	E62	N-Strings		049	E72	DigitalAir		057	E82	Space Wing
	034	E53	Trump Ens.		042	E63	Ravel Pad		050	E73	Air Vox		058	E83	Ambience
	035	E54	Lyle Stack		043	E64	Dark Pad		051	E74	Ambi.Voice		059	E84	Glide Fx
	036	E55	Folk Clar.		044	E65	Yoshi Pad		052	E75	Airways		060	E85	SteamCloud
	037	E56	SectWinds		045	E66	Swell Pad		053	E76	Stab Pad		061	E86	WhiteNoise
	038	E57	FallAngels		046	E67	Light Pizz		054	E77	Poppin'Pad		062	E87	Fragments
	039	E58	Lylesircs		047	E68	DblStrings		055	E78	MonoLead		063	E88	Brass Fall
<b>Drum 1</b>								<b>Drum 2</b>							
004	000, 002-007, 074-127		Dr11	GM Kit 1				004	040-047		Dr21	Brush Kit			
	001		Dr12	GM Kit 2					048-055		Dr22	Orchestra Kit			
	008-015		Dr13	Room Kit					064, 067-071		Dr23	Percussion Kit			
	016-023		Dr14	Power Kit					065		Dr24	Latin Perc. Kit			
	024		Dr15	Electronic Kit					066		Dr25	Arabian Kit			
	025		Dr16	Analog Kit					057-063		Dr26	SFX Kit			
	028-031		Dr17	Dance Kit					072		Dr27	(User 1)			
	032-039		Dr18	Jazz Kit					073		Dr28	(User 2)			