



# PA-80

Professional Arranger

## Getting Started Guide

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<b>KORG</b>	<b>PA-80</b>	<b>Professional Arranger</b>
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Feature	Benefit
<b>Triton Synthesis (HI) Engine</b> 62 Voice / 32 Mbyte ROM 89 Digital Effects, use up to Four at any time	Above and beyond all other features, this keyboard offers the best sound and effect technology Korg has to offer.
<b>Over 640 Sounds, 32 Drum Kits</b> Including Stereo Piano and new Solo Melody Voices	Sounds are instantly available from Program Locations and 128 User Locations. GM Level 2 Compatible. All fully Editable
<b>Intelligent Ensemble Modes</b>	Trills, Repeats, Brass Sections, and a dozen other Ensemble modes add harmonies and other melodic effects to single note lines.
<b>Digital Drawbar Organ Mode</b>	On-Screen Drawbars with Percussion and Key click options; all user definable – route through the Rotary Effect for stunningly realistic organ sounds
<b>61 Key Velocity &amp; Aftertouch Keyboard</b> plus Joystick, slider and four assignable pads	Features an expressive and dynamic playing surface to capture every nuance of your performance. (Plus assignable foot pedal and footswitch jacks)
<b>Huge Interactive Backlit Display</b>	Provides comprehensive information of all performance and editing applications; and is large enough to be useful live.
<b>Four Speaker Sound System</b> with Tuned Port Bass Reflex design	Bass Ports, speaker design and the Auto Loudness feature deliver rich distortion free sound in a compact package.
<b>256 Program Styles</b> plus 48 User Styles Compatible with Korg iS / i Series Styles	Each Style contains up to eight Accompaniment Parts and four Real-Time Voices. Four Variations, two Intros, two Endings, two Fills, a Break, plus four STS (Single Touch Setting) enhance and expand each style.
<b>80 Performance Settings</b> Create your own custom PA-80 set-ups, and recall them at the touch of a button	New Sounds can be edited and assigned to any Part; effects can be changed and re-routed. Drum Kits as well as Snare / Kick assignments are also editable.
<b>Multi-Channel Backing Sequencer</b>	Instantly lay down eight backing parts and up to four real time tracks simultaneously.
<b>Easy Editing of Backing Sequencer</b>	Insert or change chords, chord types, and bass notes. Also insert style and performance changes, add fills and breaks, even add tempo changes.
<b>Unique XDS DUAL Sequencer</b> with Independent Transport Controls	Load one sequencer from disk while playing back the other sequencer. DJ style cross fader allows smooth and immediate transitions from song to song in real time.
<b>16 Track "linear" Sequencer</b> Play and Edit SMF Sequences created on other products. Record in traditional "tape-less studio" Mode.	The SONG MODE supports a traditional 16 track MIDI sequencer with measure edit features such as copy, insert, transpose, delete, etc... Use this feature to record from external drum machines and sources, bypassing the BACKING features.

Feature	Benefit
<b>Jukebox Mode</b>	Create a Jukebox file and the PA-80 will play through all the songs in your set list!
<b>SMF Compatible with Full Lyrics</b> VIF1 (optional) for Video Lyric output (karaoke style)	Save and Read Standard MIDI Files from the on-board 3.5" floppy drive. Standard MIDI File lyrics appear in the display window. Optional VIF1 Board provides video output of lyrics.
<b>Groove Quantize Feature</b>	Clean up your Song to swing with the beat.
<b>Dedicated Vocal/Guitar Audio Inputs</b> VHG1 (optional) adds two more Effects and up to Four Part Vocal Harmony	Audio inputs (with external Trim pots) are assignable through the internal mixer and digital effects. Live, use the PA-80 as your mixer and / or sound system!
<b>Four Assignable Audio Outputs</b>	In addition to the Stereo Outputs, two extra mono outputs allow flexible options both for recording and for live performance.
<b>SSD – Solid State Disk</b>	New memory technology allows for easy updates of the operating systems as well as sounds, styles, etc...
<b>Optional Internal Hard Drive</b> Play Songs directly from the HD – No load time!	Replace dozens of floppy disks! Save Songs and Performances, load Sounds and Styles. Access Song files directly with no uploading delays.

## Getting Ready to Explore the PA-80

This section of the guide deals with your first look at the PA-80. It is important to learn how to navigate through the features and functions of the PA-80. First, you'll learn to select different PROGRAMS and STYLES, and how to playback the DEMO songs. After you become familiar with a few key features, you'll move on to the demo exercises.

*You're going to need a blank Floppy Disk if you really want to do these exercises all the way through.*

## Learning to Navigate the PA-80 Controls

The PA-80 is controlled via three main areas: The MODE buttons, the SELECTOR buttons, and the DISPLAY.

1. The top five left hand buttons on the PA-80 are the MODE select buttons. Changing modes changes the functionality of the PA-80. It is important to be sure you are in the correct mode for a particular task, or you may be unable to complete a that task.
2. There are actually two sets of BANK SELECTOR buttons. The STYLE BANK buttons to the left hand side of the unit, and the PROGRAM/PERFORMANCE BANK buttons to the right. Two additional buttons, labeled **PERFORM.** and **PROGRAM** define which function the SELECTOR buttons are, in fact, selecting.
3. There are eight pairs of EDIT KEYS surrounding the DISPLAY; four pairs to the left hand side and four pairs to the right. These keys are used for selecting items currently in the DISPLAY. Below the DISPLAY are four additional buttons. Above the right hand column are the PAGE – and PAGE + buttons. Above the right hand column are the RECORD and MENU buttons.

Understanding these groups of buttons and keys will allow you to easily master the PA-80!

## Selecting and Listening to the DEMO Songs

There are 16 DEMO songs in the PA-80. Enter the DEMO mode and the PA-80 will continually play through all the DEMO songs in order. You can also select each DEMO song individually

1. Press the STYLE PLAY and SONG PLAY mode buttons together. The PA-80 is now in the DEMO mode, and Song 1 is playing.
2. To skip to a different DEMO, use the EDIT KEYS surrounding the DISPLAY to highlight the song you wish to hear. Use the PAGE + button to access songs 9-16.
3. Selecting a song automatically causes that song to begin playing. You do not need to stop one song to switch to the next one
4. To stop a DEMO, use the big, red, START/STOP button.
5. To exit the DEMO mode, press one of the five MODE select

## Selecting and Listening to PROGRAMS (sounds)

There are over 600 PROGRAMS, or sounds, resident in the PA-80. Each one is crafted from the same sound engine (Hyper Integrated) as KORG's popular TRITON synthesizer. The PROGRAMS (sounds) are grouped together in BANKs; Woodwind, Guitar, Piano, etc...

1. Select the PROGRAM MODE to the left side of the PA-80.
2. Select any of the PROGRAM BANKs. A list of available PROGRAMS will appear in the display. Use the PAGE+ and PAGE- buttons to scroll through all the different PROGRAMS in that bank. (A bank may contain over 8 pages, so there are plenty to choose from!)
3. Highlight the name of the PROGRAM you want to hear by using the EDIT KEYS adjacent to that PROGRAM's name.
4. After you have selected the sound you want, press the PROGRAM mode button.

## Editing and Saving Programs (sounds)

Sounds can be edited and saved into any of the 128 USER PROGRAM locations. You can also create new sounds. These new or altered programs can then be plugged into STYLEs (more on this later).

### Editing:

1. Press the MENU button. A list of parameter groups will appear in the display.
2. Using the PAGE + and PAGE - buttons, scroll through all 21 pages of Program Parameters.
3. Many of the pages contain more parameters than can be displayed at one time. If the parameter list exceeds the display, an or will appear in the display. Use the UPPER1/ACC2 edit key to move up thru the list. The LOWER1/ACC5 edit keys move down thru the list.
4. To select an individual parameter, highlight it by pressing the edit key adjacent to the parameter name, on the left hand side of the display.
5. Either the VALUE WHEEL or the DOWN/ - and UP/+ buttons can be used to set a new value.

If you have edited any parameters, you will want to save your new program. You cannot “replace” one of the original sounds. Instead, you will save the new sound to one of the 128 USER PROGRAM locations.

### **Saving:**

1. Press the WRITE DISK IN USE button. The screen will change to the WRITE TO: display.
2. To name the new sound, select the DRUM PERC/DRUM edit key. The Cursor will begin flashing over the first letter of the name. Use the VALUE WHEEL to change the letter. Use the DOWN/- and UP/+ buttons to move the cursor.
3. After you have named the sound, select a location by pressing the BASS/PERC edit key. The PA-80 features two USER banks, each one has 64 locations.
4. Dial up a location using the value wheel.
5. Press the ENTER/YES button, and when prompted, press ENTER/YES again. Your new sound is now saved.

## **Drawbar Organ Mode**

The PA-80 introduces our new Drawbar Organ mode. While still in the PROGRAM Mode, select the **DIGITAL DRAWBAR** bank. A picture of the current setting of the organ drawbars appears in the DISPLAY. Use the EDIT KEYS to highlight the drawbar you wish to adjust, and use the VALUE WHEEL to adjust that particular drawbar’s level (volume). The PAGE + key will allow to adjust the other Drawbar Organ mode features, such as Percussion, Key Click, etc...

*Sounds created with the Drawbar Organ cannot be saved as PROGRAMS. However; if the Drawbar Organ is selected as a sound in a STYLE or a PERFORMANCE, the settings may be altered and saved as part of a PERFORMANCE*

## **Selecting and Listening to STYLES**

A STYLE is the heart of the PA-80 performance. In addition to a drum and percussion groove, a STYLE includes a BASS line and up to four other accompaniment instruments playing their parts. The STYLES are grouped together in BANKS; Ballad, Rock, Jazz, etc...

1. Press the STYLE PLAY Mode button.
2. Press the big, red START / STOP button. You now hear a STYLE playing. If you hear only Drums and no Melodic information, then play a chord of at least three notes on the lower half of the keyboard. The actual chord you have entered will be displayed in the upper left hand area of the display.

*DEMO TIP! The more interesting a chord you play, the more interesting the STYLE will sound!  
7<sup>th</sup> Chords, sus4 chords, sus2 chords work extremely well.*

3. To change a STYLE, first select one of the STYLE bank buttons. The display will show a list of eight STYLES. There are sixteen STYLES in each bank. To see STYLES 9-16, press the PAGE+ key on the display.
4. To select a STYLE from this list, press the EDIT key adjacent to that STYLE name.
5. To stop a STYLE, use the big, red, START/STOP button. Or better yet, press one of the two ENDING buttons.

## STYLE variations

Each and every STYLE has four Variations, two Intros, two Endings, two Fill-Ins and a Count-In / Break. After you have found a STYLE you like, try listening to some of the Variations. As the numbers get higher, the variation adds more accompaniment elements, and the complexity of the pattern is increased as well. This wealth of variation around a single STYLE allows for increased realism in arranging a song; Songs can build, open up, and come together again without losing the basic "feel"

1. With the STYLE playing, press one of the VARIATION buttons. The red LED above this VARIATION button will light. If you select a variation between bars, the LED above the new variation will flash, showing that the selected VARIATION is "in the queue" and will begin playing at the next bar.
2. Press one of the two FILL buttons. Notice that the fills are somewhat intelligent; they begin playing immediately, but pick-up from that beat. You will hear what I mean. The COUNT IN / BREAK button can be used as a "silent" fill.
3. With the STYLE still playing, press one of the ENDING buttons. The PA-80 will provide a musical "OUTRO". ENDING 1 generally has a bit more embellishment. You can also stop the STYLE by selecting the FADE IN / OUT. The PA-80 will perform a slow fade of the volume and then stop.

*The Intros, Endings, and Fill-Ins are programmed with as much care and musicality as the STYLES and VARIATIONS themselves, and are often different based on your chord type. As an example, select the STYLE "A 1 Swing" from SOUL & FUNK bank, page one. With the STYLE playing, select FILL 2 while holding down a C major chord (C, E, G). Now switch to a C minor chord (C, E<sub>-</sub>, G), play FILL 2 and notice the different arrangement inside the fill!*

## All the Fun Ways to START a STYLE

There are no less than SIX ways to start a STYLE playing! Each

has one answers a unique musical need, allowing the PA-80 a greater degree of flexibility. Before using any of these methods to start a style, again be sure to have entered a chord in the left hand section of the keyboard.

1. The Big, Red START / STOP button. 'nuff said.
2. INTRO: Select one of the two INTRO buttons. INTRO 1 is generally fully arranged, and INTRO 2 is more of a rhythmic INTRO. Then press START / STOP. The INTRO plays and then the STYLE begins. A STYLE can begin with any INTRO, FILL, VARIATION, or BREAK
3. COUNT IN: Select the COUNT IN button and then press START / STOP. The PA-80 will click his drumsticks together to give you a four count and then begin playing the current STYLE.
4. FADE IN: Pressing the FADE IN / OUT button will start the current STYLE playing, and slowly bring the volume of the PA-80 up to its preset level.
5. SYNCHRO Start: Selecting the SYNCHRO button will start the STYLE as soon as your hands touch the keyboard.
6. TAP TEMPO: Tap the TAP TEMPO / RESET button at the speed you want the STYLE to play at. The PA-80 will begin playing at this tempo.

You can always use an INTRO when using the SYNCHRO or TAP TEMPO functions. Continue to play with the SYNCHRO and TAP TEMPO buttons with the STYLE playing and discover all the cool ways to get the PA-80 to stutter.

## Using the Single Touch Settings (STS function)

In addition to calling up all the appropriate accompaniment sounds when selecting a style, the PA-80 can also select four different sets of Real-Time sounds for you using the STS (Single Touch Setting) feature. Our STYLE programmers selected these STS sounds to compliment each individual STYLE, but you always have the ability to change sounds and create your own.

1. Use the four STS buttons below the DISPLAY to select a new set of sounds for you to play along with the STYLE.
2. To have the PA-80 automatically call up an STS when switching from STYLE to STYLE, be sure the **SINGLE TOUCH** button to the left of the DISPLAY is lit.

Certain STYLES will come up with the keyboard split. To play the same sound in both hands, press the FULL UPPER button under the KEYBOARD MODE section in the upper right area of the PA-80.

## Selecting Sounds and Muting Parts

Select the STYLE PLAY mode, pick a STYLE, play a chord (of at least three notes) and press the Big, Red START/STOP button. The DISPLAY will show a list of eight parts. The four in the left hand column are the accompaniment parts. The four on the right hand column are the real time parts – the top three play on the upper half of the keyboard, the bottom one plays on the lower half of the keyboard – but only if the KEYBOARD MODE is set to SPLIT.

1. To MUTE a part, press both of the EDIT keys adjacent to that part. The little icon for that part will vanish.

*Before doing this next part, be sure the **PROGRAM** button to the far right of the PA-80 is lit.*

2. To select a new sound for one of the parts, highlight that part using the EDIT keys. Use the PROGRAM / PERFORMANCE Bank Select buttons to choose a bank. Use the PAGE + and PAGE- keys to see all the sounds inside a bank. Highlight the new sound using the edit keys, and return to the STYLE PLAY mode (press the STYLE play button).

In this Mode, all of the accompaniment voices (that are not Bass, Drums and Percussion) are grouped together as ACCOMP. 1/5. To see the individual parts of the accompaniment, press the TRK SELECT button in the lower left hand corner of the DISPLAY.

## Other Style Controls

There are two other controls that will affect how your STYLES behave. Located to the far upper right of the PA-80 panel, they are the CHORD SCANNING and KEYBOARD MODE controls. Using the UPPER and LOWER buttons under CHORD SCANNING will tell the PA-80 where to pick up the information about what chord you are currently playing on the keyboard – either above or below the SPLIT POINT. This Chord information is what drives the accompaniment parts of the STYLE. Pressing both buttons will select the entire keyboard for this function.

The KEYBOARD MODE feature is similar, in that you are once again selecting a SPLIT or FULL keyboard mode. The difference is that the KEYBOARD MODE refers to the playing of the four Real-Time parts. This is mentioned above in the section on Selecting Sounds and Muting Parts. When SPLIT is selected, up to three parts can play above the split point, and one below. To change the split point, hold down the SPLIT POINT button on the left side of the PA-80 while pressing the new split point on the keyboard.

## Editing, Creating, and Saving USER STYLES

It is also possible to edit the STYLES and re-save them to a USER STYLE location. New STYLES can be created and saved in the same manner. This process is a bit more in-depth than can be covered here. However, lets do a quick example of editing an existing style.

Let's begin with a fairly simple STYLE

1. Select SOFT BEAT from the 8/16 BEAT 1 bank; Variation 1
2. Press the RECORD button, and select CURRENT STYLE by pressing the DRUM-PERC/DRUM edit key.
3. At the bottom left of the DISPLAY, press the TRK SELECT button. You are now looking at a list of all the Accompaniment Parts.
4. Using the BASS/PERC edit key, select the PERCUSSION track.
5. Press the Big, Red START/STOP button. The PA-80 will perform a one bar countdown and then the STYLE will play. This Pattern is two bars long and will loop around. From here, you can add to the STYLE.
6. Rhythmically, play "B" in the lowest octave (Triangle Sound) a few times. You will hear the new triangle part as the pattern continues to loop.
7. Stop the STYLE by pressing the Big, Red START/STOP button.
8. Press the WRITE DISK IN USE button. There are three USER STYLE banks. Each bank contains 16 locations
9. Using the procedure described in SAVING PROGRAMS, you can re-name your new STYLE and select a USER STYLE LOCATION to save to.
10. To SAVE, press the ENTER/YES button twice
11. To **NOT** SAVE, use the MIC/ACC1 edit key to select ABORT, and press the ENTER/YES button.

Using this same procedure, you can select different tracks and edit different parts. By selecting NEW STYLE at Step 2, the PA-80 will present an empty STYLE, where you can record all the parts yourself and create an entirely new pattern.

## Using the Backing Sequencer

So, now that you know how to pick and choose all kinds of elements are you ready to put it all together? Lets do a little demo. Don't jump the gun – for now, stay in the STYLE PLAY mode. Follow along with my example; later you can try this with your own sounds and styles. We will begin by recoding the accompaniment tracks. Then we will do a few simple edits, and finally overdub some Real-time parts.

1. Begin by selecting a STYLE. In this case I am using "FIREROCK" in the ROCK Bank.
2. Select VARIATION 3 of this STYLE.
3. Select STS 1
4. Press the INTRO 1 button. The INTRO 1 button will light, and the VARIATION 3 button will begin to flash, indicating it will begin playing when the intro is done
5. Play a Chord (of at least three notes) in the Left hand side of the keyboard. I'm playing a Csus4 (C, F, G). The upper left hand side of the DISPLAY will show the chord root and name.
6. **NOW** Press the B. SEQ MODE button.
7. Press RECORD at the upper left of the display
8. Select REAL TIME RECORDING from the DISPLAY Menu
9. PAY ATTENTION – here is the tricky part, (READ THIS BEFORE YOU TRY IT!!)
  - a) First press the PLAY/STOP button for SEQUENCER 1, located beneath the display and to the left. This will start the sequencer, and you will hear a four count from the metronome before recording begins.
  - b) Before this count off ends, press the Big, Red START/STOP button to start the STYLE.
10. Wait for the INTRO to finish, and play some chord changes in the left hand.
11. Press the PLAY / STOP button to stop recording
12. Press PLAY/STOP again to hear your work!

## Overdubbing the Real-Time Tracks

Now that you have some information recorded in your BACKING SEQUENCER, you can play along and add your playing to the sequencer. If you are still in the RECORD MODE, press the RECORD button to exit.

1. Press the RECORD button again.
2. Select REALTIME RECORDING in the DISPLAY
3. Use the LOWER/ACC5 edit key to highlight the CH/ACC: mode
4. Using the value wheel, set the status to :PLAY. Now the backing tracks you have already recorded will not be erased when you record.
5. Press the PLAY/STOP button and the sequencer will begin playing. Play along and hit the PLAY/STOP button again when you are done.
6. Press PLAY/STOP again to hear your work!

## Editing the Backing Sequencer

From here, press the RECORD button and select CHORD/ACC STEP MODE. In the DISPLAY, the first line shows the current MEASURE, BEAT, CLOCK TICK and TEMPO. The second line shows the current STYLE. Beneath that, the third line of the DISPLAY indicates the current PERFORMANCE (if any) and the current STYLE VARIATION (SE). The bottom line displays the Chord Name, Chord Type, 9/11/13 Variations, and the Bass Note (of the chord, not of the "BASS" line). A small Left Arrowhead or Right Arrowhead icon indicates that a change is taking place at that location for that parameter. In this example, we will change the first chord and then insert a Fill.

*Changing a Chord:*

1. Use the DRUM-PERC/DRUM edit key to highlight the top row in the DISPLAY
2. Using the value wheel, dial up to M005.01.000 (measure five, beat one, clock tick zero)
3. Use the MIC/ACC1 edit key to highlight the bottom row of the DISPLAY.

*At this step, you can simply play the new chord on the keyboard or use the Value Wheel to dial up a new chord. The F1 button will allow the Root of the chord to be changed. The F2 button will allow the chord type to be changed (Maj, Min, M7, etc...). F3 will allow you to add more complex variations, i.e. 9, 11, 13; and use the F4 button to change the Bass Note of the chord.*

4. Press ENTER / YES to make the change.

*Adding a FILL-IN:*

5. Again, highlight the top row and dial up to M005.03.000
6. Use the UPPER3/ACC4 edit key to highlight the SE:VAR3 data
7. Use the value wheel to change the data to FILL 2.
8. Press ENTER / YES to make the change.

*Now, we have to change from the FILL back to the original VARIATION.*

9. Highlight the measure data and dial up to M006.01.000
10. Use the UPPER3/ACC4 edit key to highlight the SE:FILL2 data
11. Use the value wheel to change the data to VAR 3.
12. Press ENTER / YES to make the change.
13. Exit the EDIT mode by pressing the RECORD button again (the LED will go out).
14. Press BACKING SEQUENCER again. Press the PLAY/STOP button to hear your edited sequence.

## Saving your Song

Now that you have recorded your backing tracks, overdubbed some real time tracks, and added a fill or two, your sequence is now complete. Once you are satisfied with your sequence, you can save it as a song. Remember that floppy disk I mentioned at the beginning of this booklet? Well, you need it now. You will need to name your SONG before you save it. You are still in the BACKING SEQUENCE mode.

1. Place the 3.5" PC format floppy disk into the PA-80's Disk Drive.
2. Select SAVE SONG from the menu in the display.
3. The first item in the menu now is NEW\_NAME.MID
4. Press the DRUM-PERC/DRUM edit key. The "N" in NEW is now flashing. Use the VALUE WHEEL to select the first letter of the name of your song.
5. The DOWN/- and UP/+ buttons will move the cursor through the other letters of the name. Song names can be up to eight letters long. The ".MID" portion of the file name identifies it as a MIDI file, one that can be loaded and played from the sequencer.
6. When you are done naming your song, press the F2 button to select SAVE from the MENU.

## Playing Songs and Sequences

The PA-80 saves your sequence files and your song files as MIDI files. That means that you can load a saved song back in to the PA\_80 either as a SONG or as a BACKING SEQUENCE. Loading a MIDI file as a BACKING SEQUENCE will allow you to overdub and edit the file, and then re-save it.

## Playing and Editing Songs using the Backing Sequencer

Once a song is loaded into the backing sequencer, it is possible to edit the song, assign new sounds, or insert tempo changes, as we did in the Editing the Backing Sequencer section of this booklet.

*NOTE: When using SMF (Standard MIDI File) songs created on keyboards other than the PA-80, you will not have the ability to select a new "STYLE", as STYLES were not used to create these songs.*

1. Select the BACKING SEQUENCER mode.
2. Highlight LOAD SONG: by pressing the BASS/PERC edit key.
3. The DISPLAY will show a list of files available on the disk. Any .MID file can be loaded into the sequencer. Use the VALUE WHEEL to bring your song to the top line of the display.
4. Press the F2 LOAD button to load the song. You now have a song in SEQ1.
5. You can listen to the song by pressing the PLAY/STOP button for SEQ1.

## Playing Songs in the SONG mode

Again, to really unleash the power of the PA-80, try getting used to using the SONG PLAY (XDS) mode of the PA-80.

1. Select the SONG mode.
2. Highlight LOAD SONG: by pressing the BASS/PERC edit key.
3. The DISPLAY will show a list of files available on the disk. Any .MID file can be loaded into the sequencer. Use the VALUE WHEEL to bring your song to the top line of the display.
4. Press the F2 LOAD button to load the song. You now have a song in SEQ1.
5. You can listen to the song by pressing the PLAY/STOP button for SEQ1.

## Playing Songs in the SONG PLAY Mode – (XDS SEQUENCER)

In addition to loading songs in the BACKING SEQUENCER and SONG modes, you can also use the unique SONG PLAY mode on the PA-80. The SONG PLAY mode allows you to access the enormously powerful XDS Dual Sequencer. The XDS Dual Sequencer will allow you to load two songs; one in each sequencer. Using the DJ style Cross Fader will allow you to seamlessly segue from one song to the next. You can even load one sequencer while the other one is playing.

It is also possible to pause one sequencer as you bring in the second sequencer, and then pick up the first song from where you left off. This is a powerful performance feature, for anything from extended dance breaks to pausing "daddy's little girl" while the best man reads the toast over a bed of music! Select the SONG PLAY mode. If there is anything in the sequencer, the PA-80 will ask do you want to DELETE SONG? Press the ENTER/YES button. In the DISPLAY, you will see that the first two rows are labeled S1: and S2: These are your two sequencer locations.

### *Loading sequencer 1*

1. Highlight S1: by pressing the DRUM-PERC/DRUM edit key.
2. Provided that there is a disk in the drive, the DISPLAY will show a list of files available on the disk. Any .MID file can be loaded into the sequencer.
3. Highlight the song you wish to load and press the F2 LOAD button to load the song. You now have a song in SEQ1.
4. You can listen to the song by pressing the PLAY/STOP button for SEQ1.

### *Loading sequencer 2*

5. Highlight S2: by pressing the BASS/PERC edit key.
6. The DISPLAY will show a list of files available on the disk. Any .MID file can be loaded into the sequencer.
7. Highlight the song you wish to load and press the F2 LOAD button to load the song. You now have a song in SEQ2.
8. You can listen to the song by pressing the PLAY/STOP button for SEQ2.

One other advantage of the SONG PLAY Mode is allows access to the GROOVE QUANTIZE feature, lining your performance up tighter to the beat, while retain the "swing" or "feel" of the song.

## Using the SONG MODE Sequencer

In addition to the Backing Sequencer, the PA-80 also features a 16-Track Real-Time MIDI sequencer. To access this sequencer, enter the SONG mode by pressing the SONG Mode button and then press RECORD. In the DISPLAY will be a list of sequencer functions: Resolution, Time Signature, Metronome, Tempo and the Record Mode, indicated by REC:

### There are four Record Modes:

1. OVERDUB is the most common mode. This Mode is used to record new parts, add new parts on top of existing tracks, etc...
2. OVWRITE (Over Write) Mode actually replaces the data on the track with new the information being played.
3. AUTPNCH (Auto – Punch) Mode allows you to preset a start measure and an end measure where the record mode will start and stop as the song is playing.
4. PEDPNCH (Pedal – Punch) allows you to manually start and stop recording from a footswitch as the song is playing. This is a great way to fix mistakes, etc...

In this mode, use the TRK SELECT button to access tracks 1-8. Press the TRK SELECT button a second time to access tracks 9-16. Use the technique described in SELECTING SOUNDS AND MUTING PARTS above to assign the sounds you like to each track.

Once you have recorded in the SONG MODE SEQUENCER, you can use the SONG EDIT functions to Quantize, Transpose, or to change the Velocity of a track or a portion of a track. The SONG EDIT functions also include copying, inserting, and deleting measures.

To access the SONG EDIT functions, turn the RECORD button off and press MENU to see the list of SONG EDIT functions. Use the PAGE – and PAGE + keys to scroll thru the different options.

## Building a (fairly complex) PERFORMANCE Set-Up

Okay, here is where it all comes together. A PERFORMANCE is your own customized set-up of STYLES, sounds, EFX and all the rest. I am going to walk you through an example that really does a lot of different things. It may seem long, but follow along. This will be easier if you just follow my example. Later, you can try this on your own. We will do this in sections.

## Customizing Drum Maps

You can select any available drum kit for this style, using the procedures described in the Selecting Sounds and Muting Parts of this booklet. Here you will be able to change some individual components inside of a kit.

1. Select the STYLE PLAY mode. Turn OFF the MEMORY button under the STYLE PLAY button.
2. Choose a STYLE. In this example we will use ANALOGYST (8/16 BEAT BANK 2, PAGE1, #4)
3. Select VARIATION 3
4. Press the big, red START / STOP button and get the rhythm playing.
5. Press MENU
6. Select STYLE CTRLS from the MENU. You are now looking at the STYLE DRUM EDIT page.
7. Highlight V3:DR.MAP:0 What this means is "VARIATION THREE, DRUM MAP #0
8. Using the VALUE WHEEL, dial up V3:DR.MAP:5. This selects a new drum map. NOTE: This is NOT the same as choosing a new kit. You are simply re-mapping certain keys to new drums.
9. Highlight KICKDES:OFF (kick drum designation) Using the VALUE WHEEL, dial up #1. This selects a new kick drum without changing kits
10. Highlight SNARDES:OFF (snare drum designation) Using the VALUE WHEEL dial up #3. Now you've selected a different snare without changing kits.

## Tweaking a Bass Part

You have now customized the drums in your style. Now let's work on the BASS. First we can choose a new sound, and then edit the parameters of that sound.

*This procedure can be repeated for every part. The list of parameters that can be Edited are Cutoff, Resonance, Attack, Decay, Release, and Vibrato – including Vibrato Depth, Speed, and Delay.*

1. Return to the STYLE PLAY mode.
2. MUTE the DRUM/PERC and ACC 1/5 parts. (Push both EDIT KEYS to MUTE each Part)
3. Turn the MEMORY feature back on and play a Csus chord on the low end of the PA-80's keyboard (C, F, G). You should hear only the Bass playing at this point.
4. Highlight the BASS, which at this point is DARKR&BBASS.

*Note: Be sure that the PROGRAM button to the right of the PA-80 is lit*

5. Select the BASS BANK using the PROGRAM BANK selector keys.
6. Choose the PICKED BASS from the menu.
7. Press the MENU button, and select TRK EDIT from the MENU on the display.
8. Now you are in the TRACK EDIT screen. The BASS icon should be highlighted, and the word RES is flashing.
9. This indicates the Resonance. Press F2 and use the VALUE WHEEL to dial up a value of 20.
10. Press F1 and use the value wheel to change the parameter to CUTOFF.
11. Press F2 and use the value wheel to dial up, or actually down, to a value of -24.
12. Groovy sounding, huh? Return to the STYLE PLAY mode.

Un-mute the DRUM/PERC and ACCOMP 1/5 parts in the display by pressing both of the EDIT KEYS associated with that part. Sounds even better.

## Changing the Sound of an Accompaniment Part

So far, we have been listening to all the accompaniment parts as one unit. Now we will open up the Accompaniment into individual parts, and change the sound of one part

1. Press the TRK SELECT button in the lower left corner of the display.
2. In the DISPLAY, you will see a list of the sound names for all the accompaniment parts.
3. Highlight part AC1 FRESH AIR. We are going to replace this sound with a bell sound

*Note: Be sure that the PROGRAM button to the right of the PA-80 is lit*

4. Select the MALLETS & BELL Bank, and go to Page 2 (Use the PAGE + button).
5. Highlight GLOCKEN and listen for the new sound in the STYLE.
6. Press the STYLE PLAY button again to return to the STYLE PLAY page
7. Turn OFF the TRK SELECT button.

## Assigning new Real-Time Sounds

Currently, the left hand column of the display is showing the Real-Time parts assigned to this STYLE. Press the F2 or STS button along the bottom of the DISPLAY. The Current sounds are CHORUS GUITAR, L&R GUITAR, AC. PIANO, for the upper half, and FULL VOX for the lower part. Notice that AC.PIANO has no little "keyboard" icon next to it. This indicates the part is muted.

1. Highlight and un-mute the AC.PIANO part by pressing both UPPER3/ACC4 Edit Keys (the little keyboard icon will re-appear).
2. Select the SYNTH 2 Bank.
3. Choose the sound OLD PORTAM from page 1.

Play some chords in the right half of the keyboard. You will hear the new Sound layered with the GUITAR sounds. Now, lets make this synth sound MONOPHONIC, so it sounds like soloing against the guitar parts.

4. Press the MENU button.
5. Select the TRACK EDIT feature and press the PAGE + button once. (TRACK: MODE page)
6. Use the Value Wheel to change the highlighted part (in this case, our OLD PORTAMENTO synth sound) to read MONO. Play a few Chords in the upper half of the keyboard and notice how the synth sound now only plays one note of the chord, while the guitar sounds continue to play all the notes of the chord.

## Working with Effects

Wow, we've done a lot. We have remapped our drum kits, edited a new bass sound, replaced an accompaniment sound, and added a mono synth to our Real-Time parts. Ready to tweak a few effects? There are four EFFECT PROCESSORS in the PA-80: A, B, C, and D. Each one can be adjusted individually, and the amount of each effect on each part can be adjusted as well. Lets listen to a few effects

1. Once again, press the MENU button
2. Select EFFECTS from the DISPLAY menu.
3. Currently, FX:A is set to number 53; REVSMTTHALL
4. Use the value wheel to listen to some new effects (Keep the STYLE playing)
5. Stop on number 67; COMP-CHORFLG. This effect patch adds Chorus and Flanging to the Accompaniment tracks.

## Mixing it all Together

We're almost done! Press MENU again and select MIXER by pressing the DRUM-PERC/DRUM edit key. You are now looking at a mixer showing the current level of all your parts. Highlight the part you wish to adjust, and use the Value Wheel to select a new level for that part.

And finally:

## Saving Your New Performance

Okay, we are done customizing our set-up. Now its time to save our work as a PERFORMANCE. By saving as a PERFORMANCE, we can instantly recall it later, and with all of our edits intact.

1. Press the WRITE DISK IN USE button.
2. Select the PERF.NAME feature by pressing the DRUM-PERC/DRUM edit key.
3. The Cursor is flashing over the first letter of the name. Use the value wheel to select a new number or letter.
4. Use the DOWN/- and UP/+ keys to move through the letters of the name, adjusting each with the value wheel.
5. Finish naming your PERFORMANCE.
6. Now select PERF.N: (PERFORMANCE number) by pressing the BASS/PERC edit key. In addition to naming our PERFORMANCE, we need to store it in a numbered location.
7. Using the Value wheel, dial up location number 10-8 (the Performance TAKE VOICES is stored there now).
8. Press ENTER/YES.
9. Are you sure? Press ENTER/YES again.

*You have successfully created a new PERFORMANCE Set-Up! Congratulations!*

## Using your New Performance

1. Return to the STYLE PLAY mode.
2. To the far right of the PA-80, select the **PERFORM.** button. To the left of this button is the STYLE CHANGE button; turn it on as well.
3. Using the PROGRAM/PERFORMANCE select buttons, choose bank 0 (the furthest to the right).
4. The performance you just created is saved at the bottom right of the DISPLAY. Select this PERFORMANCE using the LOWER/ACC5 edit key.
5. Press EXIT/- to return to the STYLE PLAY mode.
6. Press the big, red START/STOP button and play along! Now you can use this new PERFORMANCE to record a new Song or Backing Sequence; or to simply play.

## Using the Audio Inputs

The PA-80 offers two Audio Inputs on the back panel. Each input is accompanied by a “trim” pot. These knobs, located on the back panel, are used to control the amount of signal coming into the PA-80. These inputs can be sent directly to the speakers or outputs of the PA-80, or they can be used with the Internal Mixer. Routing these signals through the internal mixer will allow you to add effects and control the levels of these signals.

Before plugging into these inputs, turn the trim pots all the way to the left (as you look at the back of the PA-80).

1. Turn the MASTER VOLUME slider and the ASSIGN SLIDER controls all the way down before you begin.
2. Plug your source (guitar, mic, whatever) into one the inputs. Turn the trim pots up slowly so that the SIGNAL LED is constantly green when your source is making sound.
3. Now bring up the MASTER VOLUME to its normal level
4. The ASSIGN SLIDER control is set to control the volume of the Audio Inputs. Bring this control up slowly to blend it with the sound of the PA-80.
5. If you hear no sound, return to the STYLE PLAY mode and be sure the AUDIO IN is not muted in the DISPLAY. (A little Microphone Icon will appear if the track is not muted)

To exercise a bit more control over your external inputs select the GLOBAL Mode and press the MENU button. Using the PAGE- and PAGE+ keys, scroll to page 14: GBL: AUDIO IN CFG. The options in this page allow you to route the incoming External AUDIO IN signals in different ways. Only the first two options are available without using the optional VHG1 Vocal Harmony Guitar interface card.

1. DIRECT: This option sends the Inputs of AUDIO IN 1 and AUDIO IN 2 directly to the output of the PA-80.
2. 1 / 2 INT FX: In this mode, the external AUDIO INPUTS pass through the Internal Effects processors C and D before continuing on to the PA-80 outputs.

Again, use the PAGE+ key to move to page 15 of the GLOBAL commands. In the DISPLAY you will see four parameters for each of the external AUDIO INPUTS.

1. IN VOLUME: Controls the volume of each INPUT
2. PAN: Changes the LEFT/RIGHT position of the INPUT
3. C SEND: This parameter controls the amount of the INPUT that is being sent to the Internal Effects Processor “C”
4. D SEND: Performs the same function for Internal Effect Processor “D”

These parameters are identical and duplicated for each external AUDIO INPUT, 1 and 2.

To change any of these values, highlight the parameter using the Edit keys, and enter a new value using the VALUE wheel.