Tutorial: Recording a song

In this tutorial, we'll record a song by using the steps described below. Bear in mind, though, that this is just one approach to sequencing a song. This example includes:

- Assigning programs to channels
- Recording a drum loop
- "Unlooping" the drum track and adding the remaining instruments
- Mixing the song

Assign Programs to Channels

Start by deciding what instruments you want to use in the song. Suppose you want to record a bass / drums / organ rhythm track with a lead instrument on top. You've decided to use:

- Jazz Kit (Program No. 52)
- Mix Bass (Program No. 80)
- Gospel Organ (Program No. 97)
- Brt Saxy Lead (Program No. 46)

Set up your K2vx so that each of these instruments is on a separate MIDI channel. Since Song mode automatically assigns each channel to a separate sequencer track (1-16, consecutively), you'll then be all set when you start laying down tracks, and won't have to go scrolling through the program list. Don't worry about changing your mind later, though, since you can always make changes after you've recorded your initial tracks.

It will be most logical to assign Jazz Kit to one of the drum channels, such as channel 1. If you want to put the drums on a channel that isn't a drum channel, though, you'll have to change the drum channel on the Master page (see page 11-1). For the sake of simplicity, however, we'll put the drums on channel 1 and assign Mix Bass, Gospel Organ, and Brt Saxy Lead to channels 2, 3, and 4.

Follow these steps to assign the programs to separate channels:

1. **Press the Song mode button to enter Song mode. The screen will look something like this:**

Record track is set to track 1

```
SongMode:MAIN  Events:186K    STOPPED
CurSong:1 NewSong            TemPo:120
RecTrk :1     Vol:127 Pan:64  Mode :Merge
Program:1 Acoustic Piano      Locat:  1:1

Track  :R - - - - - - - - - - - - - - - -
Channel:1 2 3 4 5 6 7 8 9 10111213141516
Record  Play  Stop  Erase  MISC  MIXER
```

Notice that the sequencer is ready for you to record a new song, and the record track (RecTrk) is set to track 1. If "1 NewSong" doesn't appear in the CurSong field, press the MISC soft button, then press the New soft button on the MISC page. You will be returned to the MAIN page, and CurSong will say "1 NewSong."

2. **Use the down arrow button to move the cursor to the Program field.**

   When this field is highlighted, type "52" then press the ENTER button. You've now assigned "Jazz Kit" to channel 1.

```
SongMode:MAIN  Events:186K    STOPPED
CurSong:1 NewSong             Tempo:120
RecTrk :1    Vol:127 Pan:64   Mode :Merge
Program:52 Jazz Kit           Locat:  1:1

Track  :R - - - - - - - - - - - - - - -
Channel:1 2 3 4 5 6 7 8 9 10111213141516
Record  Play  Stop  Erase  MISC  MIXER
```

NOTE: If "52 Jazz Kit" appears in parentheses, it means that the current channel is not a drum channel. You can either go to the Master page to change the drum channel, or assign the drums to a current drum channel in Song mode.

3. **Now use the up arrow button to highlight the RecTrk field.**

   Change RecTrk to "2". You can use either the alpha wheel or the keypad.

4. **Return to the Program field, and set it to "80 Mix Bass".**

```
SongMode:MAIN  Events:186K    STOPPED
CurSong:1 NewSong             Tempo:120
RecTrk :2    Vol:127 Pan:64   Mode :Merge
Program:80 Mix Bass           Locat:  1:1

Track  :- R - - - - - - - - - - - - - -
Channel:1 2 3 4 5 6 7 8 9 10111213141516
Record  Play  Stop  Erase  MISC  MIXER
```

   Notice that the "R" on the Track line, which stands for "Record", has moved to track 2. Also notice how each of the sixteen tracks has a default channel associated with it. You could change this if you wanted to, but most people find it easiest to associate track 1 with channel 1, track 2 with channel 2, etc.

5. **Repeat the above two steps to assign "97 Gospel Organ" to channel 3 and "46 Brt Saxy Lead" to channel 4.**

   You've now chosen the programs for your first sequence. It's important to realize, though, that you have not recorded them yet. They will be there when you need them, but they have not yet been included in a song. Also, don't forget that you can change the program assignments any time before or after you record the song.

Record a Drum Loop

Our song will be based around a four measure drum loop that we'll record now. Then, a little later on, we'll "unloop" the drum track and really start jamming.

The length of the drum loop is determined by the current *endpoint*, so we'll start by recording 4 measures of silence to set the endpoint.

1. **Set RecTrk to "1" then press the Record soft button. The Song Status indicator (top right hand corner of the display) flashes "REC READY".**

2. **Press the Play soft button. The Song Status indicator now reads "RECORDING".**

   The K2vx's built-in metronome will begin clicking, and the Song mode LED will also flash at the current tempo.

   Notice the "Locat" parameter on the right side of the display, which shows the current measure and beat number. When you begin recording, the K2vx will provide you with a four beat count-off, during which time Locat's measure and beat number will be preceded by a minus sign.

   Since we are recording four measures of silence, press the Stop soft button as soon as Locat reads "4:4".

NOTE: *The sequencer will truncate to the nearest downbeat, so as long as you press Stop before Locat reads "5:2" (but after it reads 4:4) you'll be alright. Don't worry about this too much, though, since in the next step we'll show you how to check (and change, if necessary) the endpoint.*

   When you press Stop, you'll be asked to confirm and name this song. Even though we've just recorded four measures of silence, when you save it and give it a name it's officially a song.

   For the purposes of this example, we'll assume that you pressed Stop a few beats too late. You'll see how easy it is to correct this sort of thing in the Event Editor.

3. **On the Song mode MAIN page, make sure that the cursor is highlighting any field other than the Program field, then press the EDIT button.**

   If the Program field is highlighted when you press EDIT, you'll enter the Program Editor, which is not what you want to do right now. The EditSong: COMMON page appears:

4. **Now press the EVENT soft button to bring up the Event Editor, which will look something like this:**

```
EditSong:EVENT   (Ch 1)          <>Track:1

   1:1      1:1.000 CTRL BANK   0
   1:1      1:1.000 PCHG   52
   1:1      1:1.000 CTRL VOL  127
   1:1      1:1.000 CTRL PAN   64
 Cut   Copy  Paste  View  AllOn  Done
```

As you can probably decipher, the Event Editor gives you access to an editable list of all note, controller, and other MIDI events that Song mode uses to describe your sequence. While you're looking at the Event Editor, notice the data that the sequencer keeps track of, even when no notes are played.

5. **Use the Alpha wheel to scroll to the bottom of the event display.**

The last event listed is your endpoint, which should be the first beat of the measure following the last measure you want to record. For our four measures of silence, then, the endpoint should be 5:1. The display below, however, shows that five measures have been recorded:

```
EditSong:EVENT   (Ch 1)          <>Track:1
   1:1      1:1.000 CTRL VOL  127
   1:1      1:1.000 CTRL PAN   64
   6:1      6:1.000 END


 Cut   Copy  Paste  View  AllOn  Done
```

Fortunately, it's quite easy to change the endpoint from "6:1" to "5:1" to remove the extra measure that's been accidentally recorded. (If your endpoint is at 5:1, you won't need to change it now. If, however, your endpoint is less than or greater than 5:1, you should proceed with the next step.)

6. **Check the endpoint, and change it if necessary.**

To change the endpoint from 6:1 (or any other incorrect value) to 5:1, press the right arrow button to position the cursor in the Bar:Beat:Tick column ("6:1.000" in the above example). Type "51000" then press the ENTER button. The endpoint is changed, and the song is now four measures long.

7. **Press EXIT to return to the SongMode:MAIN page.**

If you've made changes in the Event Editor, confirm them now.

8. **Make sure that record mode and play mode are set to "Loop."**

From the SongMode:MAIN page, press the MISC button. Set the RecMode parameter on the SongMode:MISC page to "Loop".

The PlayMode parameter should already be set to "Loop". If it isn't, turn the alpha wheel until "Loop" is highlighted.

9. Turn on Input Quantization.

While you're on the MISC page, take a look at the quantize parameters (Quant, Grid, and Swing) in the middle column of the page. Quantization is a very useful feature, especially for the rhythmically challenged. When you quantize a track, the sequencer moves the elements of that track closer to a grid based on the time signature of the tune. You can use quantization to subtly tighten up a rhythm track or to create a precise, unwavering mechanical rhythm.

For our drum loop, we'll try the total quantize experience, so position the cursor over the Quant parameter, then turn the alpha wheel until the value is set to "100%". Move the cursor down to the Grid parameter. The default value "1/8" indicates that quantization will move the notes you play to the closest eighth note. Try double-pressing the increment/decrement buttons below the alpha wheel to move through a range of useful grid values. Note that some of the values have "tr" or "t" appended to them. These are grid settings that allow you to maintain a triplet feel. We'll use a setting of "1/16", however, so set this value, then press EXIT to return to the SongMode:MAIN page.

NOTE: *The K2vx's sequencer also provides a full range of advanced quantization features that you can apply to previously recorded tracks. To learn about these, check out the Quantize and Reference Quantize functions on the EditSong:TRACK page.*

10. Make sure you are in Merge Mode.

On the SongMode:MAIN page, check the Mode parameter, and make sure it is set to "Merge" rather than "Erase". Being in Merge Mode means that while you are recording this track you will be able to overdub more sounds with each successive loop.

11. Begin recording drums.

Press the Record soft button, observe the "REC READY" indicator on the top line, then press the Play soft button when you're ready to begin. Remember to wait for the four beat count off before you start to play.

Since you are in Merge Mode, you don't need to do everything at once. A common approach to making drum loops is to record a different instrument each time the loop comes around. For example, on the first loop you could record snare hits on the back beats (1:2, 1:4, 2:2, 2:4, etc.). Then you could add kick drum to the snare when the loop comes around again; you'll be able to hear the previously recorded part, as well as the new part. On the third pass you might record ride cymbal, followed by hi-hat or other percussive accents. Keep it simple at first, because you can always save the part while it's

basic (but correct), then make additions later. To keep track of where you are, watch the flashing Song mode LED or the Locat parameter on the SongMode:MAIN page.

12. **Press the Stop soft button when you've finished recording the drums.**

    Confirm that you want to keep the changes to your song by pressing the Yes soft button followed by the Replace soft button.

Record a Bass Line

When you are satisfied with your drum loop, you can begin using it as the foundation for a song. What we'll do here is set Record Mode to "unloop" while leaving Play mode set to loop. This means that the drum loop will keep playing while we record new material of any length. The endpoint of the song will change to reflect the length of the newly recorded material.

1. **Press the MISC soft button to bring up the SongMode:MISC page.**

2. **Set the RecMode parameter to "Unloop". Leave the PlayMode parameter set to "Loop".**

   Depending on the type of song you are recording, you may also want to turn quantization off before you record your bass part.

```
SongMode:MISC  Events:186K    STOPPED
RecMode :UnLoop Quant:100%  CountOff:1
PlayMode:Loop   Grid :1/16  Click   :Rec
KeyWait :Off    Swing:0%    ClickCh :16
Locate  :  1:1  Sync :Both  ClickPrg:198
AutoIn  :  1:1  Clock:Int   ClickKey:C 4
AutoOut :  1:1  Tempo:Auto  ClickVel:90
Record  Play  Stop  New  In/Out MAIN
```

3. **Press the MAIN soft button to return to the SongMode:MAIN page.**

4. **Set the record track (RecTrk) to track 2.**

This track already has material recorded on it.

```
SongMode:MAIN  Events:186K    STOPPED
CurSong:200*NewSong          Tempo:120
RecTrk :2    Vol:127 Pan:64  Mode :Merge
Program:80 Mix Bass          Locat:  1:1
Track  :P R - - - - - - - - - - - - - -
Channel:1 2 3 4 5 6 7 8 9 10111213141516
Record  Play  Stop  Erase  MISC  MIXER
```

Track status indicators: track 1 is set to "Play", track 2 is set to "Record". Tracks 3 through 16 are empty.

Since you previously assigned "Mix Bass" to channel 2, it should appear in the Program field when you set track 2 as the record track. Note, too, that the track status indicator for

track 1 changes to "P" (for "Play") when you select track 2 for recording. The small square above the track status indicator tells us that material is contained on that track.

5. **Press the Record soft button to enter "REC READY" mode.**

6. **Press the Play soft button, then begin laying down a bass track.**

   Remember that by default there is a four beat count off, during which time the Locat value will be preceded by a minus sign (-). No material is recorded during the count off, though anything you play during the countoff will be quantized to the first note of the song. As you are recording the bass track, your drum loop will keep playing. Play for as long as you want; the sequencer will lengthen the song as needed.

7. **Press the Stop soft button when you are done recording the bass.**

   You will be given the usual save options. To keep what you've just recorded, press the Yes soft button followed by the Replace soft button.

   Since you unlooped the drum track when you recorded the bass, you've changed the endpoint of the song to be wherever you stopped the bass track. You can check the endpoint (and change it, too, if you want) using the Event Editor, as described earlier.

Record the Remaining Instruments in Your Song

Now that you've defined your song with the bass and drum tracks, you can put the organ and Brt Saxy Lead (or whatever instruments you've chosen) into your song.

1. **Set the record track (RecTrk) on the SongMode:MAIN page to track 3.**

   Notice the small squares above the track status indicators for tracks 1 and 2, reminding you that you've now got material on two tracks.

```
SongMode:MAIN  Events:186K   STOPPED
CurSong:200*NewSong          Tempo:120
RecTrk :3    Vol:127 Pan:64  Mode :Merge
Program:9r Gospel Organ      Locat:  1:1
         □ □
Track  :P P R - - - - - - - - - - - - -
Channel:1 2 3 4 5 6 7 8 9 10111213141516
Record  Play  Stop  Erase  MISC  MIXER
```

2. **Press the MISC soft button to bring up the SongMode:MISC page.**

3. **Set RecMode to "FixLen".**

   Since you've defined the length of your song with the bass track, setting RecMode to "FixLen" means that the song will just play through once each time you record a new part.

4. **Record the organ in the same way that you recorded the bass track in the previous section.**

   Notice that you can do this from the MISC page, without returning to the MAIN page.

5. **Continue recording instruments until you have played all the parts of your song.**

Mix Your Song

The SongMode:MIX page lets you change the panning and volume levels for the tracks in your song. Needless to say, this is one of the most important steps in the completion of your song production, and potentially one of the most creative. This example will keep things simple by showing you how to change the volume level of one of your instruments. We'll also take a quick look at the track mute feature.

1. **Press the MIXER soft button to bring up the SongMode:MIX page.**

   The icons that represent pan position knobs and volume level faders resemble the controls on a traditional mixing board. Manipulating them should be quite intuitive. Simply position the cursor over a pan position knob or volume level fader, then turn the alpha wheel to set the level you want.

   For example, suppose you want to turn down the organ on track 3:

2. **Use the arrow keys to position the cursor over track 3's volume level fader on the SongMode:MIX page.**

   Although the tracks aren't numbered on the SongMode:MIX page, they are laid out logically: left-to-right, from 1 through 16 consecutively. Track 3, then, is the third track from the left.

3. **Use the alpha wheel to turn down the volume of the track by changing the position of the volume slider.**

4. **Press the Keep soft button and confirm the change.**

   Now when you play back the song, track 3's volume will start playing at the newly set level.

   You can also record real-time volume and pan changes from the MIX page or enter numeric values for these parameters on the MAIN page.

Using the Mode Buttons to Mute a Track

Finally, we'll take a quick look at the track mute feature, which lets you use the K2vx's mode buttons to mute individual tracks. This can be invaluable during mixdown.

You may have noticed a horizontal line underneath the sliders for tracks 1 through 8 on the SongMode:MIX page. As the illustration below shows, this is the "Quick Mute Track Bank Indicator", showing which bank of eight tracks will respond to the eight track mute buttons on the front panel of the K2vx. If you're looking for the track mute buttons on the front panel of your K2vx, they're the eight mode buttons (Program, Setup, etc.); press one of these buttons

while you are on the SongMode:MIX page and playing a song, and the associated track will be muted.

Quick Mute Track Bank Indicator

Toggles track muting between tracks 1-8 and tracks 9-16.

Use the M 1-8 / M 9-16 soft button to toggle between banks of eight tracks, either 1 through 8 or 9 through 16. When you press this soft button, the horizontal bar will reposition itself below the affected tracks. The table below shows the K2vx's mode buttons, and which tracks they will mute when you are playing a song:

Mode Button	M 1-8	M 9-16
Program	1	9
Setup	2	10
Quick Access	3	11
Effects	4	12
MIDI	5	13
Master	6	14
Song	7	15
Disk	8	16

Let's listen to our song with and without drums:

1. **From the SongMode:MIX page, press the Play soft button.**

   The song, with all of its instruments, begins to play.

2. **Press the Program mode button on the front panel of the K2vx.**

   The Program mode LED will light, and track 1 (the drum track) will be muted.

3. **Press the Program mode button again to unmute the drum track.**

   Using your K2vx's front panel buttons, you can mute one or more tracks at once, or even mute eight tracks at a time.

With any luck, you've now completed your first song. You should now be ready to take on the more advanced features of K2vx Song Mode that are described in the remainder of this chapter.