What the Hell is a Mixer Map?

Forum Discussion Thread - for comments, corrections, or questions about this article

You can access the Mixer Maps page on your SEQ by pressing MENU+GP Button #1. "Wow. Well, that's great", you say, "but what the hell is this thing?" I think that was extremely rude, and I think you have a very bad attitude. But I'll try to explain Mixer Maps anyway. Not that you deserve it, jerk.

First, read the Mixer Page section of the Midibox SEQ Manual. You'll probably still be confused, but that's a good place to start.

What Mixer Maps Are: Mixer Maps are basically a way of sending MIDI Control Change (CC) and Prog Change messages to your synths or other MIDI devices. You can use them as a live MIDI controller, sending messages as you turn the encoders. You can also configure the SEQ to send all of the values in a Mixer Map automatically - for example, when a pattern changes. You can use this to automatically reconfigure your external MIDI gear for the new pattern.

What Mixer Maps Are Not: Mixer Maps are not really related to sequencer steps or tracks. Yes, there are 16 of them, and your first thought might be that they're somehow related to steps or tracks, but they are not. Think of mixer maps as being MIDI tools, entirely independent from the SEQ's steps and tracks.

OK... That's awesome, but WHAT THE HELL ARE THEY?

You can save up to 127 Mixer Maps per Session on your SEQ.

Each Mixer Map has 16 "Mixer Channels" ("MC" for short). The Mixer Channels are displayed above the SEQ's 16 GP Buttons and Encoders. Think of these Mixer Channels like the channels on an audio mixing board. When you open a blank Mixer Map, the first four Control Pages look like this:

```
Mixer Map #  1        Unnamed           Page [ 1] MIDI Port        Def. Chn# 1
 Def. Def. Def. Def. Def. Def. Def. Def. Def. Def. Def. Def. Def. Def. Def. Def.
Mixer Map #  1        Unnamed           Page [ 2] MIDI Channel      Def. Chn# 1
 # 1  # 2  # 3  # 4  # 5  # 6  # 7  # 8  # 9  #10  #11  #12  #13  #14  #15  #16
Mixer Map #  1        Unnamed           Page [ 3] Prog.Change       Def. Chn# 1
 ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---
Mixer Map #  1        Unnamed           Page [ 4] Volume            Def. Chn# 1
 ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---
```

In firmware v.87, each Mixer Map Column has 12 control pages (more may be added in the future). You can scroll through the pages by using the data wheel. Currently, the 12 controls are:

- **MIDI Port:** Defines the SEQ MIDI Port that each MC sends its messages out on.
- **MIDI Channel:** Defines the MIDI Channel that each MC sends its messages out on.
- **Prog. Change:** Sends a MIDI Prog. Change message on that MC's selected MIDI Port/Channel
- **Volume:** Sends a volume message (MIDI CC#7) on the MC's selected MIDI Port/Channel
- **Panorama:** Sends a pan message (MIDI CC#10) on the MC's selected MIDI Port/Channel
- **Reverb:** Sends a reverb message (MIDI CC#91) on the MC's selected MIDI Port/Channel
- **Chorus:** Sends a chorus message (MIDI CC#93) on the MC's selected MIDI Port/Channel

- **ModWheel:** Sends a ModWheel message (MIDI CC#1) on the MC's selected MIDI Port/Channel
- **CC1:** Sends a message on a user-selectable CC number on the MC's selected MIDI Port/Channel
- **CC2:** Sends a message on a user-selectable CC number on the MC's selected MIDI Port/Channel
- **CC3:** Sends a message on a user-selectable CC number on the MC's selected MIDI Port/Channel
- **CC4:** Sends a message on a user-selectable CC number on the MC's selected MIDI Port/Channel

To assign the CC numbers for the CC1-4 controls, press and hold SELECT while you're in the Mixer Map page. This opens the Mixer Map Utility Page. From there, press GP Buttons 9-12 to get to the four CC Assignment pages. You can assign different CC numbers to each of the 16 Mixer Channels. And each Mixer Map can have different CC assignments.

So, to recap: Each Session on your SEQ can store up to 127 Mixer Maps. Each Mixer Map contains 16 Mixer Channels, which can each be set to send messages on specific MIDI Ports and Channels. Each Mixer Channel contains 12 controls (10 controls if you don't count the MIDI Port and Channel setting). …and the 16 Mixer Channels should be thought of as independent from the SEQ's 16 tracks and steps - they're not related.

Sending Mixer Map Messages

As you turn the encoder for one of the Mixer Channels' control pages, the SEQ will send out messages on that MC's selected MIDI Port/Channel each time the value changes. For example, if you're on the Volume page, and MC#3's MIDI Port is set to OUT1 and its MIDI Channel is set to #12, when you turn MC#3's encoder, volume messages (CC#7) will be sent out of the Port OUT1 on the SEQ on MIDI Channel 12. So, if you have a synth hooked up to OUT1, and it's listening on MIDI Channel 12, you can control its volume by turning the encoder for MC#3.

Does that make any sense at all? Hope so.

You can also send (or "dump") all of the values in the entire mixer map at once - meaning: all of the Prog. Change, Volume, Pan, Reverb, CC1-4, etc. messages for ALL of the 16 Mixer Channels will be sent at once. To manually trigger a Mixer Map dump, press and hold the SELECT button to open the Mixer Map Utility Functions page. Then press the "dump" button to dump the current Mixer Map - this will send all of the values for all 16 Mixer Channels (all the values that are set, anyway - it won't send values set to "—"). Each MC's messages will be sent out the MIDI Port/Channel that you selected for that Mixer Channel.

You can set an external control CC that triggers Mixer Mode dumps. Configure this from the MIDI Page's (MENU+GP#15) External Control subpage.

The SEQ can also be programmed to dump Mixer Maps automatically when patterns change in Song Mode or Phrase Mode. You could use this, for example, to send a prog. change message to a few of your synths to tell them to change to a different patch for the upcoming pattern.

Dumping Just One Column

Since SEQ V4 Firmware V4.087: Press the GP button underneath one of the Mixer Map columns to send all of the mixer map values set for each of the control pages in that column at once.

With this feature, you could set up a mixer map with different settings for one synth on all 16 mixer

map columns (ie: all columns set to the same port and channel, so they all control the same synth), and instantly switch between settings on that one synth by pressing the mixer map channel dump buttons.

Disable Live Sending

Since SEQ V4 Firmware V4.087: Press the SELECT button to deactivate/reactivate "live send" mode - when "live send" is disabled, midi signals won't be sent when encoders are turned on the Mixer Map page. This allows you to set up your mixer maps without affecting the external midi device until you dump the whole mixer map (or mixer map column).

Mixer Map Utility Functions

```
Map #    Mixer Utility Functions         CC Assignments                    Edit
  1   Copy Paste Clr      Load Save Dump  CC1  CC2  CC3  CC4                Name
```

Press and hold the SELECT button to access the Mixer Map Utility Page. On this page, you can load, save and dump Mixer Maps, Copy, Paste, and Clear them, and access the CC number assignment pages.

Use Cases

- Control many parameters of one synth: Set all 16 channels of a mixer map to the same port and channel, and use the 4 CC pages to control up to 64 different parameters of your synth. (each CC mixer map page contains 16 CCs which can be set to different CC numbers, so 4×16=64 different CCs). Copy this mixer map and set the copy to a different port and/or channel to control another of the same synth (if you have two of them, or if it's a software synth and you can run more than one instance).
- Set each column to the port/channel corresponding to the synths you're controlling. Use the volume/pan/etc. controls in the mixer map page to mix your synths (this would allow you to use a passive summing mixer into your amplifier, doing all the volume mixing in the SEQ instead of using an audio mixing board.)

Resources

- A forum thread discussing Mixer Maps
- How to send a bank select signal before sending a Prog. Change when dumping a Mixer Map