EXTERNAL MIXING Mode

When the MX-1's mixer mode is set to EXTERNAL MIXING mode, the 18 channels of USB audio output are assigned to the faders of the MX-1, allowing you to mix or perform while applying effects. This EXTERNAL MIXING mode is particularly convenient when used with loop-based DAWs. The following explanation of this mode uses Ableton Live (subsequently called Live) as an example.

Even if you're using other DAW software, you can use the same types of settings to mix and perform in synchronization with the MX-1.

Switching the Mixer Mode

Here's how to switch the MX-1's mixer mode to EXTERNAL MIXING mode.

- 1. While holding down the [GAIN] button, turn on the MX-1's power.
- 2. Press the [TONE] button.
- **3.** Turn the [VALUE] knob to set the mixer mode to [EHE].
- 4. Press the [START/STOP] button to save the settings.
- The settings are saved, and the MX-1 restarts.

Settings in Live

In Live, make settings for synchronization with your audio device.

Audio device settings

- 1. Launch Live.
- 2. If you're using the Mac version of Live, open [Live]-[Preferences] and then click the "Audio" tab. If you're using the Windows version of Live, open [Options]-[Preferences], and then click the "Audio" tab.
- 3. Select "MX-1" as the audio input device and audio output device.

Audio Input Device	MX-1 (18 In, 18 Out)
Audio Output Device	MX-1 (18 In, 18 Out)
Channel Configuration	(Input Config) (Output Config)
Sample Rate	
In/Out Sample Rate	96000

4. Press the [Input Config] button, and make the settings shown below.

Choose which audio hardware inputs to make be used as one stereo in and/or two mono ins	available to Live's tracks. Every input pair can . Deactivating inputs reduces the CPU load.
1 (mono) & 2 (mono)	1/2 (stereo)
3 (mono) & 4 (mono)	3/4 (stereo)
5 (mono) & 6 (mono)	5/6 (stereo)
7 (mono) & 8 (mono)	7/8 (stereo)
9 (mono) & 10 (mono)	9/10 (stereo)
11 (mono) & 12 (mono)	11/12 (stereo)
13 (mono) & 14 (mono)	13/14 (stereo)
15 (mono) & 16 (mono)	15/16 (stereo)
17 (mono) & 18 (mono)	17/18 (stereo)

5. Press the [OK] button.

6. Press the [Output Config] button, and make the settings shown below.

Output Config			
Choose which audio hardware outputs to make available to Live's tracks. Every output pair can be used as one steree out and/or two mono outs. Deactivating outputs reduces the CPU load.			
1 (mono) & 2 (mono)	1/2 (stereo)		
3 (mono) & 4 (mono)	3/4 (stereo)		
5 (mono) & 6 (mono)	5/6 (stereo)		
7 (mono) & 8 (mono)	7/8 (stereo)		
9 (mono) & 10 (mono)	9/10 (stereo)		
11 (mono) & 12 (mono)	11/12 (stereo)		
13 (mono) & 14 (mono)	13/14 (stereo)		
15 (mono) & 16 (mono)	15/16 (stereo)		
17 (mono) & 18 (mono)	17/18 (stereo)		

7. Press the [OK] button.

This completes the audio device settings.

Synchronization settings

Synchronize the tempo of the MX-1 with Live.

- If you want the MX-1 to be the master
- 1. Press the [SYNC] button to make it light.
- 2. Turn the [TEMPO] knob to set the MIDI clock master to [In E].
- 3. Press the [SYNC] button to confirm the setting.
- 4. Press the [SYNC] button to make it go dark.
- Launch Live.
- 6. Open [Live]-[Preferences], and click the "MIDI Sync" tab.
- 7. In "Input: MX-1," turn on the sync.



 Turn on the [EXT] button that is shown in the control bar. When you press the MX-1's [START/STOP] button, Live will also start.



If you want Live to be the master

- 1. Press the [SYNC] button to make it light.
- **2.** Turn the [TEMPO] knob to set the MIDI clock master to [PL].
- 3. Press the [SYNC] button to confirm the setting.
- 4. Press the [SYNC] button to make it go dark.
- Launch Live.
- 6. Open [Live]-[Preferences], and click the "MIDI Sync" tab.
- 7. In "Output: MX-1," turn on the sync.
 - When you press Live's [PLAY] button, the MX-1 will also start.

	JINOne	•	None	* None		• (Dump)
NIDI	4 None	•	None	 None 		Dump
Bync	5 None	•	None	 None 		Dump
File	6 None	•	None	 None 		Dump
Folder	Tak	eover Mode	None	•		
Library	_	MIDI	0	Treat	0.000	Remote
Record	Input:		USB2 CTRL)	Track	Sync U Off	
Warp	 Input: 			0ff	Off	
Launch	D Input:	MX-1 (MX-1	USB3 CTRL)	Off	Off	Off
CPU	D Input:	MX-1 (MX-1	USB4)	MO	Off] Off
Licenses	D Input:	MX-1 (MX-1	USB4 CTRL)	no	Off	011
Maintenance	D Outpu	E MX-1		Off	On	Off

Performances that Combine Live with the MX-1

In this setup, you can use the MX-1 to mix the output of Live and apply effects to the audio output while you perform.

NOTE

To prevent high volume from damaging your hearing, check the fader positions of each MX-1 channel before you continue.

Realtime performance

In EXTERNAL MIXING mode you can use the MX-1's faders to adjust the levels of the output from Live, and apply pan and effects while you mix and perform in real time.

- 1. Launch Live.
- 2. On the "Create" menu, click "Insert Audio Track" to create a track. If you want to create multiple tracks, repeat step 2.
- 3. Place clips on the tracks that you added.
- 4. Press the [IO] button to display the track input/output section.



5. Set each track's output to "Ext. Out," and specify the output channel. Live's output channels correspond with the MX-1's channels as follows.

Live's output channels	Corresponding MX-1 channels	Notes
1	1	
2	2	
3	3	
4	4	
1/2	1 and 2	If you're outputting in stereo, enable channel link on the MX-1.
3/4	3 and 4	(->Owner's Manual: Various Settings)
5/6	5/6	
7/8	DIGITAL	1
9/10	USB 1	1 /
11/12	USB 2	
13/14	USB 3	
15/16	USB 4	
17/18	PC	1/

6. Play back the song.

Operate the MX-1's faders to adjust the audio output from Live.

By using the MX-1 to apply pan and effect settings, you can mix and perform in real time.

Advanced performance

In addition to mixing and performing in real time, you can also use EXTERNAL MIXING mode to record an external input and instantly apply the result to your performance, just as if you were using a loop recorder.

- * The explanations in the following procedure assume that you are performing (Live and the MX-1 are playing back).
- 1. Press the [IO] button to display the track input/output section.



2. On the track that's recording the external source, assign the track input to "Ext. IN" and the output to "Ext. Out," and specify the channel for each.

Live's input channels	Input from the MX-1	Notes	
1	INPUT 1 jack		
2	INPUT 2 jack	Mono	
3	INPUT 3 jack	Mono	
4	INPUT 4 jack		
1/2	INPUT 1 jack and INPUT 2 jack	Stereo	
3/4	INPUT 3 jack and INPUT 4 jack	(INPUT 1 and 3 are L; INPUT 2 and 4 are R)	
5/6	INPUT 5/6 jacks		
7/8	DIGITAL IN jack		
9/10	USB HOST 1		
11/12	USB HOST 2	Stereo	
13/14	USB HOST 3	-	
15/16	USB HOST 4		
17/18	Same sound as the MIX OUT jacks		

NOTE

If you select "17/18" for both input channel and output channel and set the Monitor setting to AUTO or IN, an audio signal feedback loop will occur.

- Take care with the Monitor setting if you select "17/18."
- **3.** Lower the MX-1 fader that corresponds to the track that you're recording.
- On the track that you're recording, press the [Arm Session Recording(record-ready)] button to make it light.



- 5. Click the [Record] button to start recording. Recording starts on the beat.
- 6. Click the [Record] button once again to stop recording. Recording stops on the beat, and the recorded clip plays.
- **7.** On the MX-1, adjust the pan and effects, and raise the faders. The recorded sound is added to the performance.