FADER / MATE

FaderMate Moving Fader Automation System

Apple Logic Pro Setup Guide - v1.0.0 (September 2018)

Table of Contents

1   Introduction

This guide explains how to use FaderMate with Apple Logic Pro.

It was prepared with reference to Logic Pro X version 10.0.7 running on Apple Mac OS X 10.8.5.

Some details may vary slightly depending upon the versions of Logic and OS X/macOS you are running.

NOTE: This document is not an exhaustive product guide for Logic Pro. If you need more in-depth information about operating the software, please refer to https://help.apple.com/logicpro/mac/10.3/index.html***.***

2   Before You Begin

Before starting the setup process, please ensure that you have:

- Connected your MIDI interface to the computer correctly

- Connected the FaderMate MCU to the MIDI interface as outlined in the *Product Manual.* This can be downloaded from http://fadermate.co.uk/downloads.html.

- The HUI full scale settings for all FCUs in your FaderMate system are set to the value 14848. It is necessary to use the *FaderMate GUI* application to change this setting. Please refer to the *Fader Mate GUI User Guide*, section 11 for more details. This can also be downloaded from http://fadermate.co.uk/downloads.html.

  NOTE: If you do not alter the 'HUI full scale value' using FaderMate GUI, Logic Pro will not move your physical faders through their entire range. You will notice that your faders never 'reach the top' due to the fact that the full scale value used within Logic Pro is <u>***lower***</u> ***than that used by a HUI.***

  This is not important when using a control surface but is critical when using moving faders.

3   Basic Setup

It is first necessary to configure the FCUs in your FaderMate installation as HUI banks in Logic Pro.

Select the menu item *Logic Pro X > Control Surfaces > Setup*. You will see the *Control Surfaces Setup* window.

NOTE: Repeat the following steps once for each FCU you would like to connect.

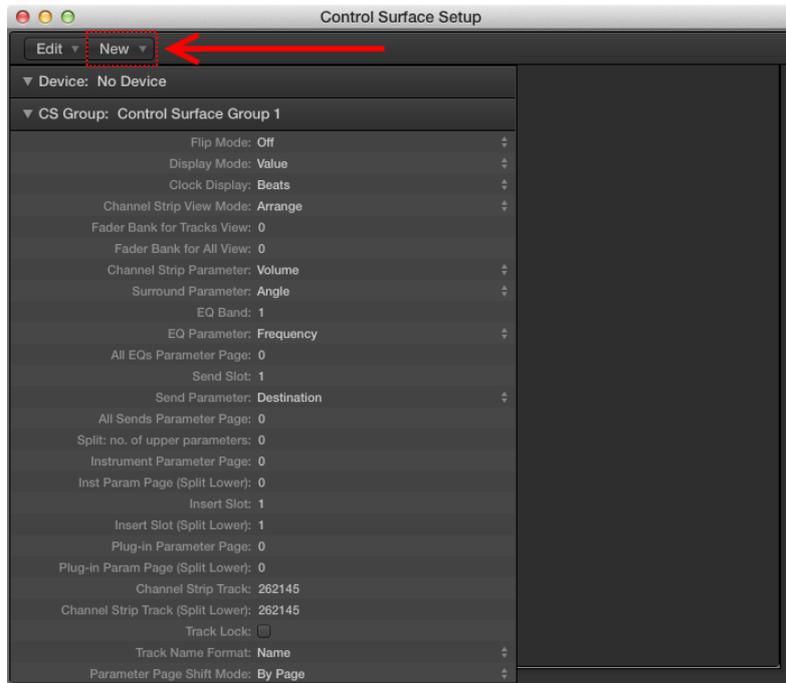Select the dropdown menu *New* as shown in Figure 3.1

Figure 3.1 – Adding a New Control Surface

Choose the *Install* option.

You will see the *Install* window. Locate and select the item *HUI* (under manufacturer *Mackie Designs*) as shown in Figure 3.2.
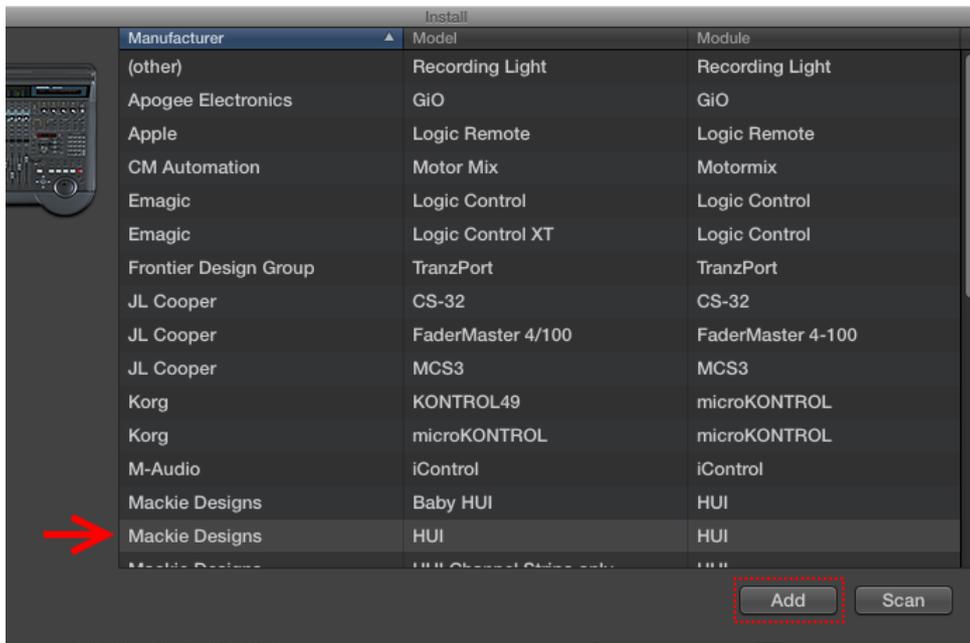
Figure 3.2 – Adding a HUI Device

Click **Add**.

You will be returned to the *Control Surfaces Setup* window as shown in Figure 3.3.

Configure the MIDI input and output for the FCU appropriately using the *Output Port* and *Input Port* drop down menus in the *Device* pane (as shown in Figure 3.3).
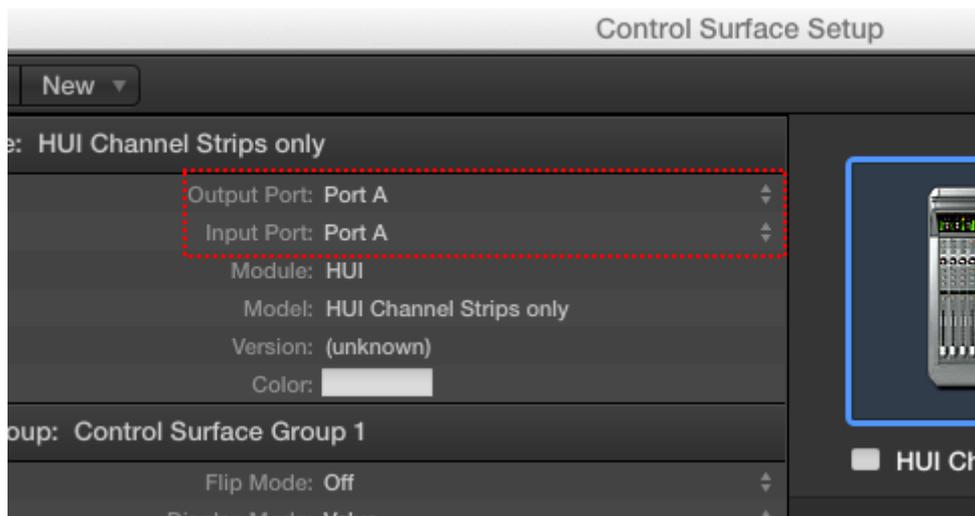

Figure 3.3 – MIDI Input/Output Selection

Figure 3.4 shows the *Control Surface Setup* window after the following settings have been entered for the first FCU:

- **FCU index**: 1 (first 8 faders)

- **MIDI input:** M-AUDIO MIDISPORT 4x4 (Input A)

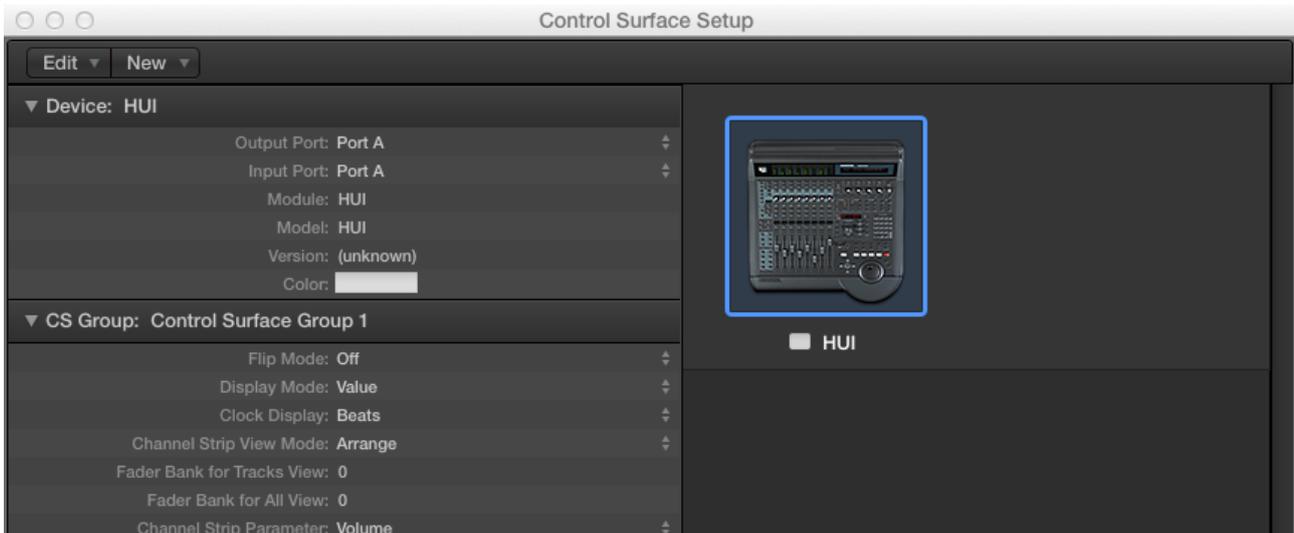- **MIDI output:** M-AUDIO MIDISPORT 4x4 (Output A)

Figure 3.4 – Control Surface Settings For FCU 1

Figure 3.5 shows the *Control Surface Setup* window for an example FaderMate system featuring 3 FCUs, each configured as a HUI device.
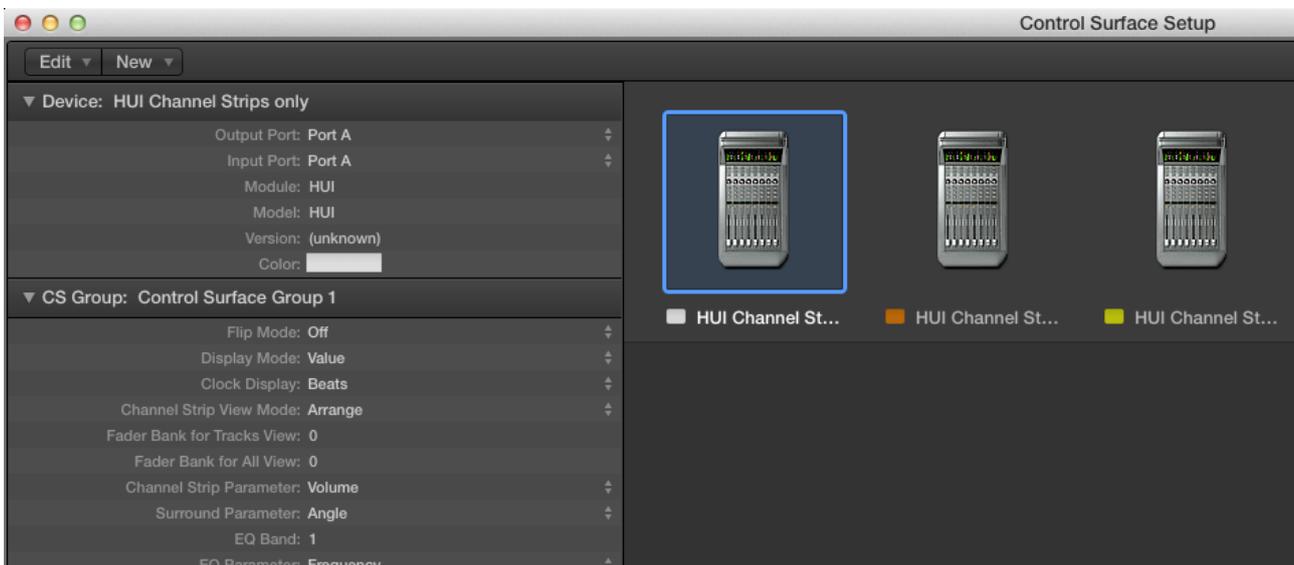

Figure 3.5 – Control Surface Settings For a 24 Channel FaderMate Installation

After you have configured the HUI banks for your FaderMate system, exit the *Control Surface Setup* window.

Logic Pro allocates the HUI devices to the lowest-numbered tracks in the project. For example, if you have 3 FaderMate FCUs, they will initially interact with tracks 1-24 (inclusive) in your Logic Pro project.

You can verify that FaderMate and Logic Pro are talking to each other by adding tracks to a Logic Pro project and performing the following tests:

- Move track faders on Logic's *Mixer* and verify that the corresponding physical faders on your console move in a similar way (proves that Logic can transmit MIDI data to FaderMate)

- Move physical faders on your console and verify that the corresponding track faders on Logic's *Mixer* move in a similar way (proves that FaderMate can transmit MIDI data to Logic)

4   HUI Banking Behaviour

By default, Logic Pro will switch a control surface 'bank' (i.e. a group of 8 faders) to control a different set of tracks if a track <u>outside the current bank</u> is selected.

For example, if a project contains 9 tracks and you have a single FCU (HUI bank), FaderMate will behave as expected whenever any track between 1 and 8 (inclusive) is selected.

However, if you select track 9, Logic will switch the HUI bank to control a different set of tracks and so your control/automation will stop working as intended.

To prevent this issue from occurring, it is necessary to stop Logic from changing HUI banks upon track selection.

Select the menu option *Logic Pro X > Preferences > Control Surfaces.* This will open the *Control Surfaces* tab of the *Preferences* window as shown in Figure 5.1.
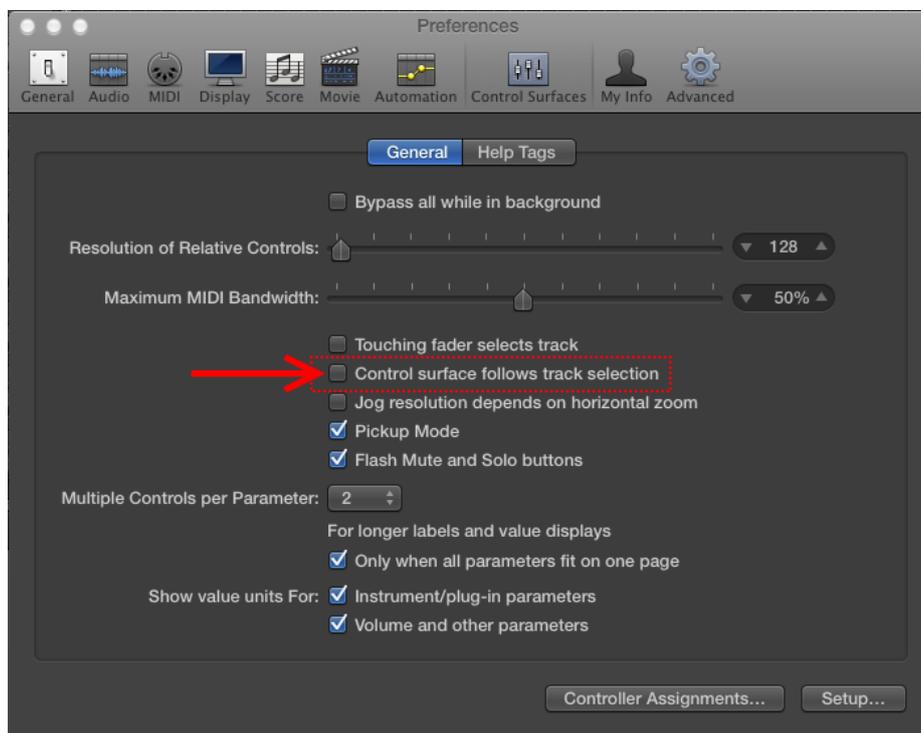

Figure 5.1 – Disabling Control Surface Bank Switching on Track Selection

Ensure that the option *Control surface follows track selection* is **<u>unticked</u>**.

5 Automation Basics

5.1 Enabling Automation

In order to record or play back fader movements, it is necessary to enable automation on all tracks with which FaderMate will interact.

Figure 5.1.1 shows a mixer channel strip whose track has automation disabled.

Figure 5.1.1 – Channel Strip With Automation Disabled

To enable automation for the track, click the automation mode button (as highlighted in Figure 5.1.1) to reveal a dropdown menu as shown in Figure 5.1.2 and select the appropriate automation mode (see section 5.2).

Figure 5.1.2 – Automation Mode Dropdown

In order to make the volume envelope for a particular track visible, select the track and click the *Show/Hide Automation* button as shown in Figure 5.1.3.

Figure 5.1.3 – Showing Volume Envelope

5.2 Automation Modes

Logic Pro offers several modes in which automation envelopes can operate. The modes of particular interest when using FaderMate are as follows:

- **Read.** An envelope that has already been recorded will control the physical fader when the project is played back. Although you will be able to stop the physical fader from moving along with the envelope by touching it, any changes you make <u>will not</u> be recorded.

- **Write.** If you play back the project, moving the physical fader will write corresponding changes to the envelope. The existing state of the envelope will not cause the physical fader to move.

- **Touch.** An envelope that has already been recorded will control the physical fader when the project is played back. If you touch the physical fader, your moves will override the existing envelope and write the changes back. When you let go of the physical fader, its movements will revert back to following the existing envelope points.

6   Recommended Project Setup

In order to perform an '*Out of the Box*' mix using only Logic, it is advisable to configure your project as follows:

- **FaderMate automation tracks.** These tracks will not contain any audio. Instead they will be used solely to record and recall fader movements. Automation tracks should be the <u>lowest-numbered</u> tracks in your project. For example, if you have 24 channels of moving faders, allocate tracks 1-24 (inclusive) in your project as automation tracks.

- **Audio tracks.** All of the other things you would usually have in your project (e.g. audio, virtual instruments, MIDI etc) should only appear on tracks 'above' the FaderMate automation tracks. For example, if you have 24 channels of moving faders, only put actual project content on tracks numbered 25 and up.

7   Synchronising With Other Applications

It is possible to synchronise playback of your Logic Pro project to an external application or device using various different methods.

Synchronisation can be particularly useful in several cases:

- You are using a different DAW package, would like to do an '*Out of the Box*' mix but would like to keep your automation data in a separate project (to avoid having 'empty' tracks in your project)

- Your preferred DAW does not allow enough 8 channel HUI banks to support your automation requirements (e.g. Pro Tools only allows 32 channels of HUI-based automation) but you have 2 FaderMate MCUs and 48 moving faders installed in your console

- You would like to use something other than a DAW to store your audio (e.g. a tape or ADAT machine) but you still want to take advantage of the automation system.

7.1 MIDI Considerations

If you wish to synchronise playback of your Logic project with another device using MIDI Timecode (MTC), you will require a spare MIDI output (if Logic will be the master) or input (if Logic will be the slave). Note that the extra input or output is an additional requirement over and above the requirements for connecting FaderMate.

7.2 Configuring Logic For Synchronisation

A guide for configuring Logic Pro to synchronise with an external device is available here:
https://support.apple.com/kb/PH13347?locale=en_US

Version History

Version	Date	Author	Details
1.0.0	19 September 2018	AJN	First release