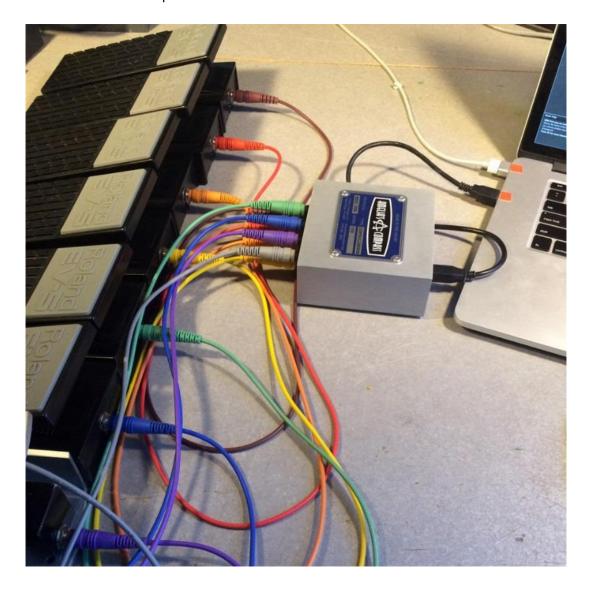
We're going to hook up a bunch of expression pedals to our rig, and map them to control on-screen parameters in MainStage. I've got a bunch of Roland EV-5 expression pedals here, and they're all connected to the controller inputs of the Controller Hub 8:



The default configuration of ControllerHub 8 as it comes out of the box is that the first four inputs drive MIDI CC#7 message streams out on the first four MIDI channels¹. CC#7 (Continuous Controller #7) messages are generally mapped to volume parameters, and that's what we're going to do today.

So the first pedal goes into Controller Input 1 and is putting out CC#7's on MIDI channel 1, while pedal 2 is driving CC#7's on MIDI channel 2, etc.

¹ The second group of four inputs default to footswitch hookup, but those inputs can be edited for expression pedals hookup as well.

Alright, let's go into MainStage and we'll map these physical expression pedals to some onscreen parameters. The concert I'm going to use today is in the Mixers category, and it's called "8 Backing Tracks", so go ahead and choose that as the concert:



It comes in and it has a bunch of onscreen controls:



Before we start mapping controller inputs to parameter destinations, let's make sure that MainStage can see the MIDI traffic being generated by ControllerHub 8. Take a look at the little window at the top center of the screen:



When I move the pedals that's connected to ControllerHub 8's input 1, our little window here shows that yeah, we're seeing MIDI channel 1, Continuous Controller #7, the right-hand number shows the value (80), and it's going up and down as I move the pedal. This shows that MainStage does in fact see the MIDI traffic, but nothing else is happening because we've not yet mapped the incoming MIDI to an onscreen parameter.

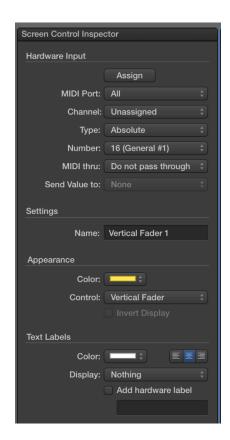
So let's now map the pedal we just moved to the first volume fader. This is done in the Layout tab (of the three tabs in the top left of the screen). So click on the Layout tab...



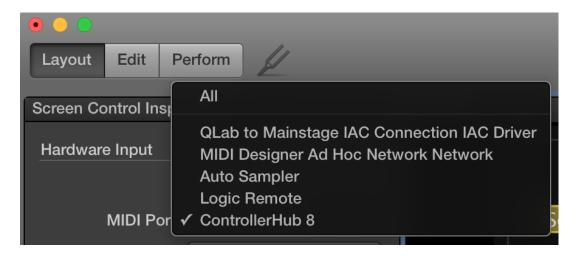
And then click the left-most fader:



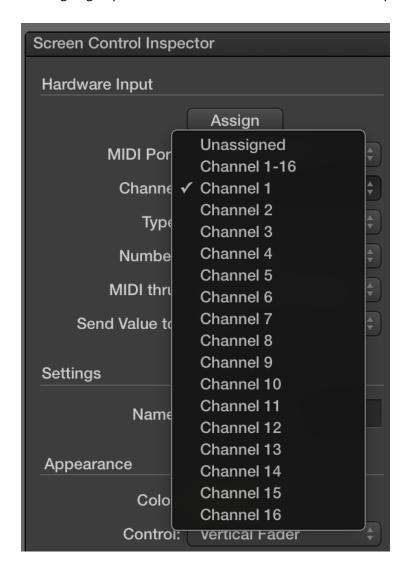
At this point the Screen Control Inspector pane (on the left side of the screen) populates with all the ways the fader can be customized:



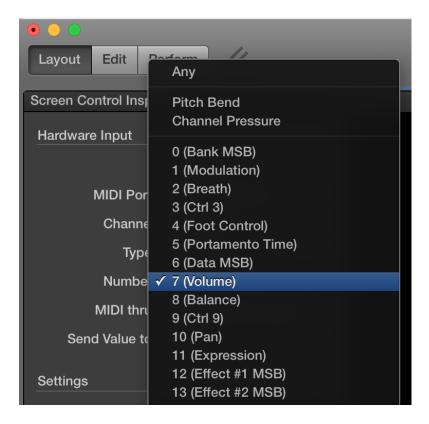
We're going to pick the MIDI port as ControllerHub 8...



We're going to pick Channel 1 so that we listen to the first expression pedal...



and then the CC# we listen to will be Volume, or CC#7:



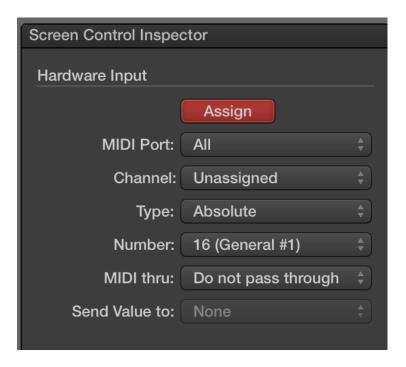
As soon as we do all that... hey! It moves! We have successfully mapped the first external expression pedal so that it controls the onscreen parameter called Vertical Fader 1 in this MainStage concert.

We've just learned what I'll call the "long hand" method, where we manually change all the settings in the Screen Control Inspector. **But there's a much simpler way!**

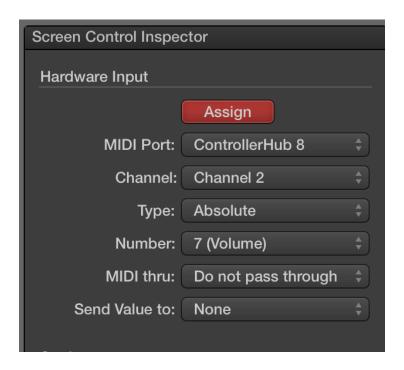
This time, we'll use the easy short-cut method to map the second expression pedal to the second onscreen fader. First, click on the second fader, so that the Screen Control Inspector pane populates with its details:



This time, instead of manually changing each of the settings individually, simply click the "Assign" button at the top. It lights up red and sort of undulates, letting you know it's ready to record:



At this point, the very next physical controller you move will be captured and mapped automatically. Let's try it, we'll move expression pedal 2... and bang!



All of expression pedal 2's information has been captured automatically. Don't forget to uncheck the "Assign" button after the capture.