Force “Follow Action” automation mode. (MPCAuto)

This document explains how to create an automation track using the Mockba the Borg modded image for the Force.
It is VERY IMPORTANT to read the full manual first before trying to use the automation functionality, as there might be some “gotchas” which can prevent it from working correctly if not done right.

1. When booting, select “MPCAuto” from the software selection menu:

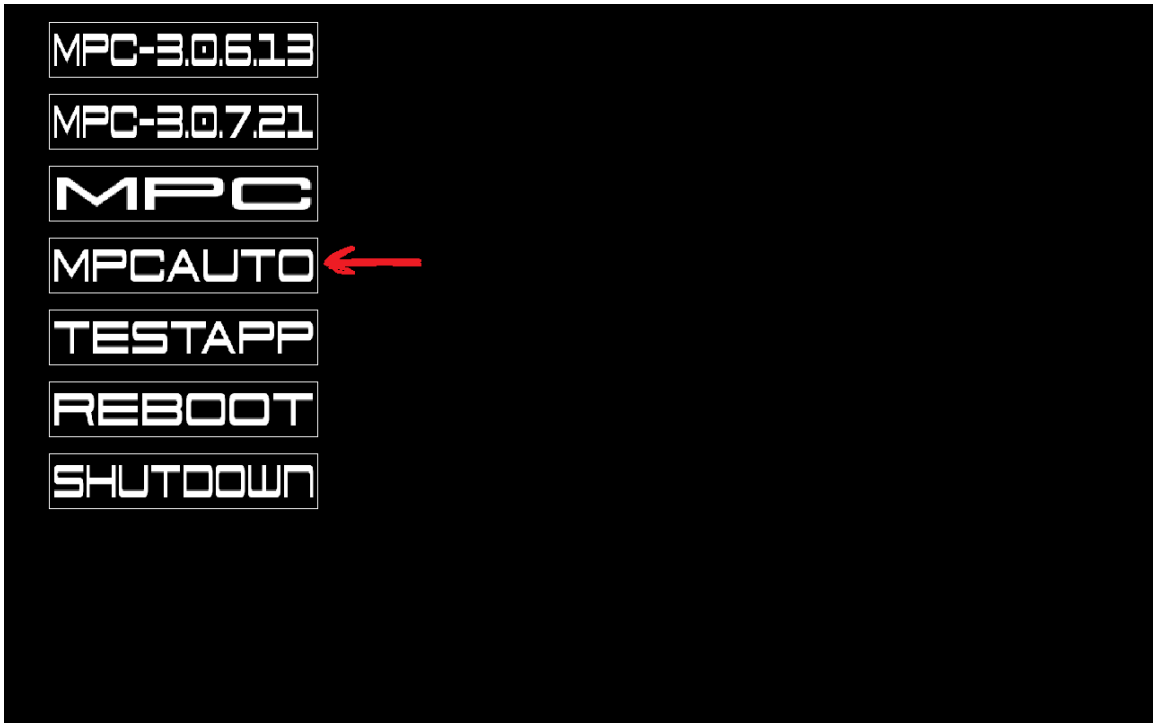

Figure 1

2. Once MPC loads, create a MIDI track called “Automation” and point it to the RtMidi automation interface. Make sure this track is using MIDI channel 1 and there is no midi input device selected, like so:

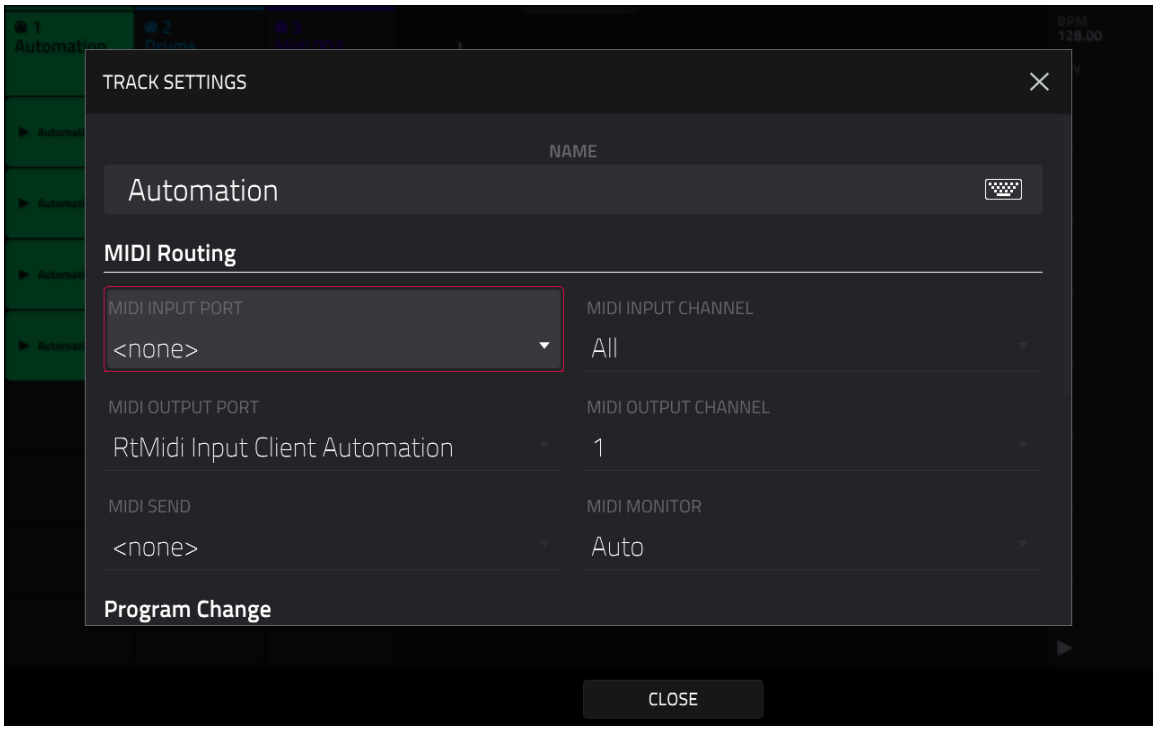

Figure 2

3. **AUTOMATION TRACK**: The automation track will contain the automation commands, which are added in the form of notes and MIDI CC.
   Midi notes on this track are seen as immediate “button presses” while MIDI CC will manipulate counters which can be used to launch a specific scene a certain number of times, then going to a different one.

4. **LAUNCHING SCENES**: Each scene (The “Launch” buttons to the right of the pad matrix) is launched by playing a midi note on the automation track. As if someone is actually pressing the launch button.
   Note “G#2” (56) “presses” the first “Launch” button, note “A 2” (57) “presses” the second “Launch” button and so on.
   This is a list of the possible notes and the buttons they “press”:

Midi Note	**Note Number**	**Button Pressed**
G#2	56	Launch 1
A 2	57	Launch 2
A#2	58	Launch 3
B 2	59	Launch 4
C 3	60	Launch 5
C#3	61	Launch 6
D 3	62	Launch 7
D#3	63	Launch 8
B 5	95	Stop All
E 7	112	Up Arrow
F 7	113	Down Arrow

Table 1

   The button press happens when the note is played in the automation track, so when creating a clip there, make sure to put the note close to its end (or whenever you expect the button press to happen).
   The automation clip can be of any size, but it is recommended that it is at least the size of the longest clip in the scene, which is usually when someone would press the button to go to the next one.
   There is **NO** control regarding the notes which are added to the automation track, so if you add a wrong note, it will “press” a completely different/unexpected button and it might select the wrong screen or something else.

Below is an example of a note in Scene 1, which will launch Scene 2 when reached:

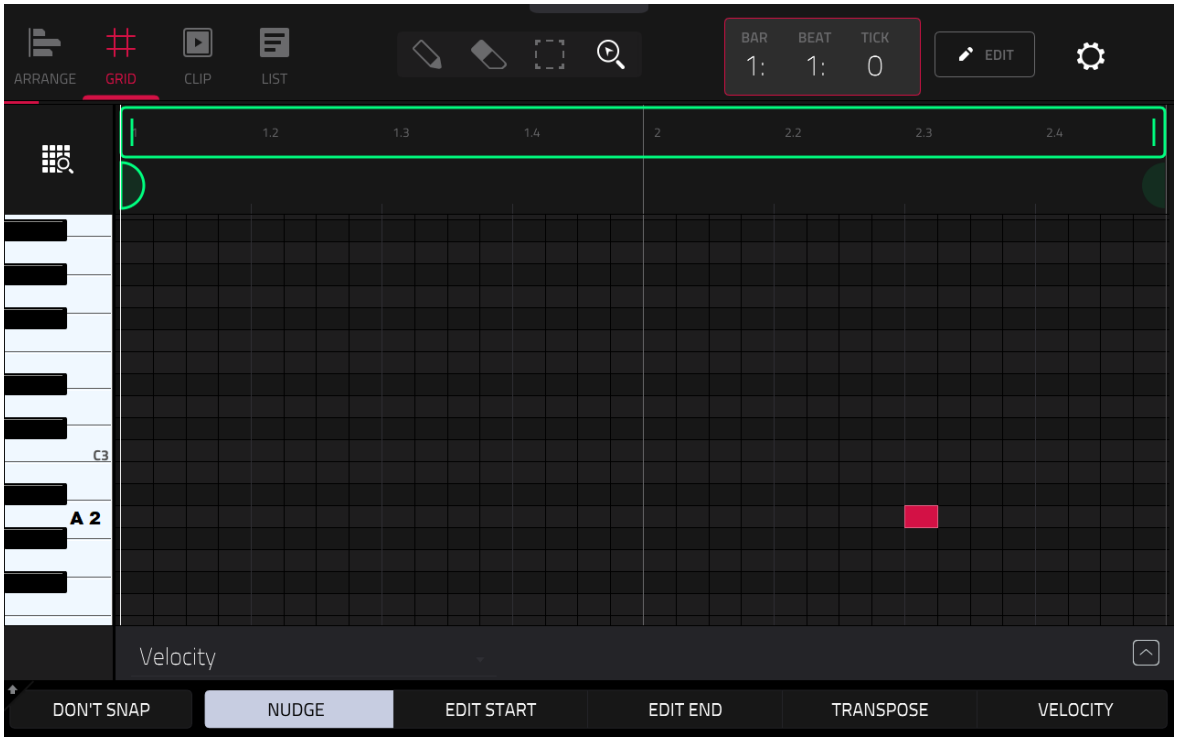

Figure 3

You can make a drum clip which is 4 bars long, and an automation clip which is 16 bars long, for example, and this will make the drum clip play 4 times until the button press is reached.
When we press the button manually we try to do it a little bit before the scene actually ends, so the logic here is the same.
When editing the automation clips, make sure to NEVER touch either the note itself or the piano roll to the left, as this will play the note and immediately “press” the corresponding button.
Select instead the note using the “square lasso” and move it around using a nudge.
Though the best/safest way to deal with a wrong note is to just delete it and add it again.

5. **MIDI CC - OVERRIDING SCENES**: The automation feature contains 10 counters which are used to modify the behavior of the note immediately following a MIDI CC.
   There are two types of MIDI CC available: CC 10 to CC 19 will initialize the values of the counters Counter0 to Counter9, while CC 20 to CC 29 will decrement the respective counters by 1.

The best way to enter CC values is by using the “List Mode” editor, like so:

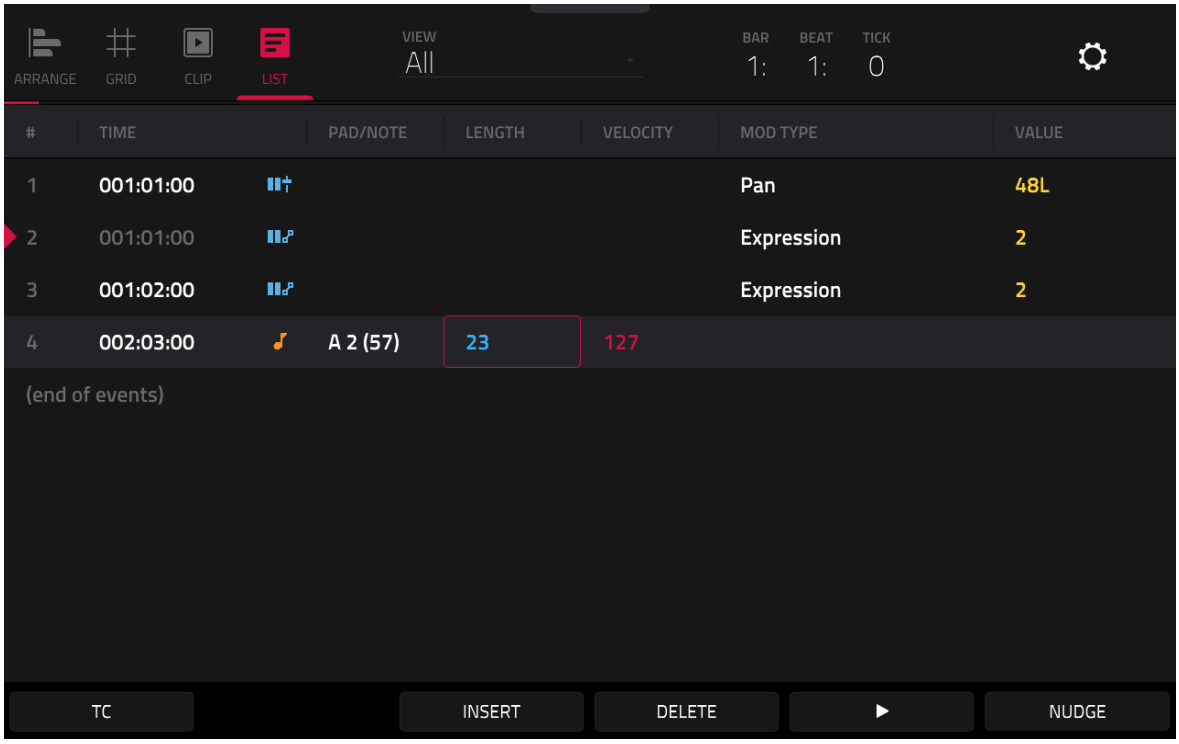

Figure 4

The first line sets Counter0 (Pan is CC 10) to 2 (48L).
The third line sets Counter1 (Expression is CC 11) to 2.
The second line was added by Force automatically for some reason, maybe a bug.
The fourth line will launch the second scene (See table 1 above) when 002:03:00 is reached.
Make sure to **ALWAYS** initialize a counter before using it on a clip.

Every time a counter decrementing CC is reached the corresponding counter is decremented by 1 and, when it reaches zero, the note immediately following it is replaced by the value of the CC value.
This overrides the note and launches a different scene, basically working as an IF/THEN command.
This becomes more clear when looking at the example below.

Here is one example of a decrementing counter:

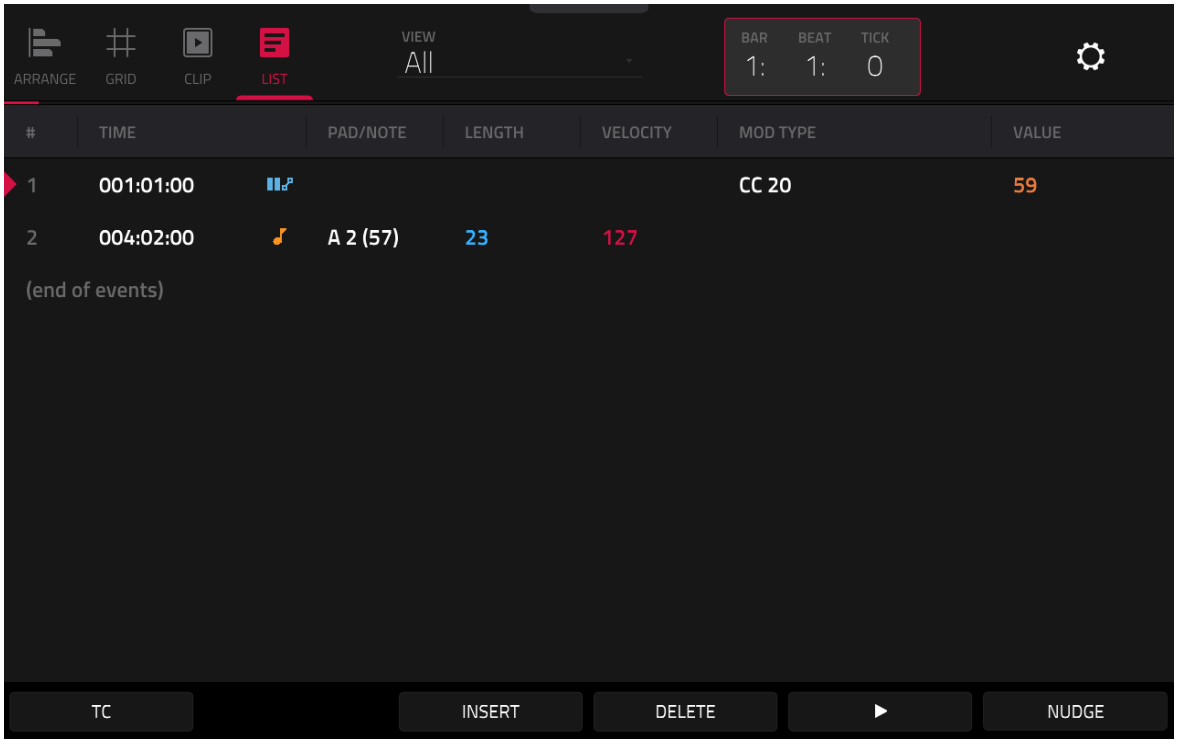

Figure 5

The first line decrements Counter0 (CC 20 = Counter0) and, if it reaches 0, the note following it (57 on the second line) will be replaced by 59 at this time. The counter is then reset to the value it was initialized before (2 in this case).
So the behavior will be: the note at 004:02:00 will keep launching the second scene (Note 57) until the counter reaches 0, which will cause it to launch the fourth scene (Note 59) instead.
There is **NO** error check or control over the values put here, so wrong and meaningless values **WILL** be accepted.
There is also **NO** control also over the sequence of events and amount of notes, so one must take care of making sure the CC precedes a note, and only one note exists in the clip.

6. **CREATING A PROJECT**: I recommend creating the automation track first, so it stays in the left, but leaving it empty and creating the rest of the project to the right of it.
   Once the project is mostly complete, save it as a “No Automation” version, then add the CC and the notes to the automation track accordingly and save an “Automation” version, this way you can have a fully manual and an automated version of the same project.
   The automation can also be disabled by muting the automation track.

Have fun!