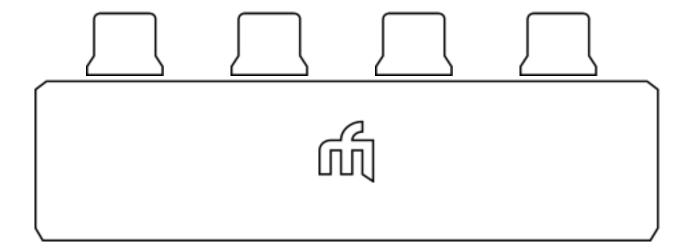# Midi Fighter Twister

User
Guide

DJTECHTOOLS.COM

Introduction

This user guide is split in two parts, first covering the Midi Fighter Twister hardware, then the second covering the Midi Fighter Utility and all relevant device settings.

If you are simply looking to learn how to set up and use an existing mapping in either Traktor or Ableton, please refer to the quick start guides, these are both available here.

djtechtools.com/midifighterhelp

Nomenclature

The Musical Instrument Device Interface (MIDI) protocol at its most basic level describes 16 channels, each consisting of 128 Notes, and 128 Control Change (CC) messages.

This user guide and the Midi Fighter Utility refers to these 16 channels as channels 0 through 15, the notes as notes 0 through 127, and the control change messages as CC's 0 through 127.

The Midi Fighter Twister Hardware

This section describes the hardware & MIDI operation of the Midi Fighter Twister in detail and should be used as a reference when creating your own MIDI mapping in your software of choice.

This section assumes that the reader is already familiar with the basics of the MIDI protocol.
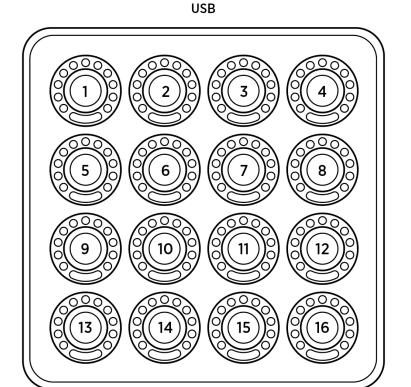
Introduction

The Midi Fighter Twister consists of 16 encoders each with an integrated push switch, and 6 side buttons.

Each encoder has a display consisting of 11 white LEDs to indicate the current control value or position, a large RGB segment which indicates the switch state, and a red/blue LED to indicate detent state.

The Midi Fighter Twister firmware makes it possible to access up four virtual 'Banks' or 'groups' of encoders. To access the virtual banks ensure that some of the side buttons are configured for bank change actions in the Midi Fighter Utility Software.

Each of the 16 encoders will send a different message in each bank, allowing access of up to 64 unique encoder & switch controls across the 4 banks.

For a full description of the bank operation refer to the virtual bank section.

Fig 1 Hardware Naming Convention

Encoders

Each encoder sends a CC, note, or relative encoder message depending on its configuration, with the current value indicated on its 11 LED display. There are a variety of user configurable display types, these are covered in the Midi Fighter Utility section of this user guide.

It is possible to sync the display value of the CC or note to the parameter it is controlling in your software of choice. Simply map the MIDI OUT for that parameter to the same MIDI number on channel 0.

Using the Midi Fighter Utility it is possible to remap the MIDI channel and number for each encoder except for the Shift CC and Superknob CC messages.
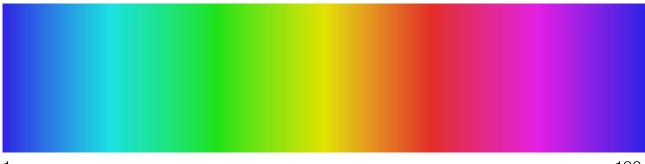
Encoders Push Switches

Each encoder also has an integrated push switch, this will send a CC (default), a Note message, or perform some special action depending on its configuration.

Please refer to the Midi Fighter Utility section of the manual for a full description of the various available switch actions.

The large RGB segment at the 6 o'clock position of each encoder display is used to indicate the state of the switch control, using the Midi Fighter Utility it is possible to set the color for both the inactive (not pressed) and the active (pressed) switch state.

It is also possible to override the color of the RGB segment by sending a MIDI message (Note or CC) of the same MIDI number, on channel 2 . Sending a message of value 0 will force it to its inactive color state, while sending a message of value 127 will force it to it's active color state. Any value *between* 0 and 127 will set it to a color as shown in the scale below.

1   126

Setting RGB / Indicator Segment Animation State

By sending MIDI message of a particular value it is also possible to set a variety of animation states for each ring, these animations modify the current state of the indicator ring and RBG illumination.

The available animation states are,

RGB Strobe | Value 1 - 8

Allows the user to gate (flash) the current color at one of 8 different rates. If a MIDI clock signal is present the timing is derived from that, otherwise the timing is based on a half second interval which is the equivalent of 120 BPM. This is useful for creating warnings, for example in Traktor you could map the Track End Warning output to flash an LED when the track is nearing its end.

RGB Pulse | Value 9 - 16

Similar to the Gate animation this allows the user to pulse the current color at one of 7 different rates. If a MIDI clock is present the timing is derived from that otherwise the timing is based on a half second interval which is the equivalent of 120 BPM. This animation is useful for creating subtle alerts, for example in Traktor you could map the Loop On output to control the pulse rate to reflect that the loop is active, and what length it is set to.

RGB Brightness 17-47

Allows the user to control the brightness of the RGB LEDs. Very useful to give or take emphasis from a parameter. I.e. showing a parameter in a off state while color is still visible or VU meters.

Indicator Strobe | Value 49 - 56

Allows the user to gate (flash) the current color at one of 8 different rates. If a MIDI clock signal is present the timing is derived from that, otherwise the timing is based on a half second interval which is the equivalent of 120 BPM. This is useful for creating warnings, for example in Traktor you could map the Track End Warning output to flash an LED when the track is nearing its end.

Indicator Pulse | Value 57 - 64

Similar to the Gate animation this allows the user to pulse the current color at one of 8 different rates. If a MIDI clock is present the timing is derived from that otherwise the timing is based on a half second interval which is the equivalent of 120 BPM. This animation is useful for creating subtle alerts, for example in Traktor you could map the Loop On output to control the pulse rate to reflect that the loop is active, and what length it is set to.

Indicator Brightness 65 - 95

Allows the user to control the brightness of a RGB LEDs. Very useful to give or take emphasis from a parameter. I.e. showing a parameter in an off state while color is still visible or VU meters.

RGB Rainbow | Value 127

Forces the LED to display a rainbow animation.

To set the animation state of a given encoder send a CC or Note On message of the same number, but on channel 6. If you'd like to send an animation to the RGB LED do so on channel 3.

I.e. To set the animation state of the first encoder to Gate 1/4 send a Ch6 CC 0 of value 5.

It is important to note that the MIDI color setting and MIDI animation setting can be used in conjunction.

I.e. To set the first encoder switch to yellow flashing at a rate of 1/2 first send the color information with a Ch2 CC0 of value 64, then the animation setting with a Ch3 CC0 of value 4.

If the encoder switch MIDI channel or number settings are changed from default the color and animation controls will change, i.e., if you change Encoder 1 in Bank 1 from channel 1 number 0 to channel 7 number 8 it will send MIDI on channel 7 number 8 and expect MIDI out on the same number and channel.

Be aware that if you change from the defaults it could conflict with other MIDI sent by the Twister. Check the Appendix for a full listing of all the default MIDI messages for the Twister.

Note: MIDI channels noted as 1-16.

Side Buttons

Using the utility the 6 side buttons can be configured to send notes, CCs, or perform certain internal functions like changing the bank selection.

If a side button is set for MIDI function the pitch of the note or CC number will be unique in each virtual bank. This can be disabled by unchecking the "Bank Side Button" check box in the Utility.

Side button MIDI messages are sent on the Global Channel (Ch.4 by default). *

Please refer to the utility section of this user manual for a complete description of the various side button functions.

In Appendix 1 you will find a complete list of MIDI data for each side button in each bank.

* Note: MIDI channels noted as 1-16.

Virtual Bank Operation

The Midi Fighter Twister makes it possible to access up to four virtual banks. In each bank the encoders, encoder switches and side buttons* will send different MIDI Notes or CC's.

To switch between virtual bank the side buttons must be configured to allow bank switching. By default the middle left side button decrements the bank selection, and the middle right side button increments the bank selection. Please refer to the side button section of this manual for further information.

*Side buttons can be set to not change with bank by disabling the "Bank Side Buttons" option in the Utility.

Advanced Bank Control

It is also possible to use MIDI to read and set the currently selected bank.

When the virtual bank selection changes the Midi Fighter Twister sends a CC to indicate a new bank has been selected. By default the bank selection notes are sent on MIDI Channel 4 but this can be set to a different channel using the Midi Fighter Utility.

> **I.e. When changing from Bank 1 to Bank 2 the Midi Fighter Twister will send a Ch4 CC0 Off followed by a Ch4 CC1 On.**

By sending CC messages to the Midi Fighter Twister it is also possible to force it to automatically change to a specific bank.

> **i.e. To force a change to Bank 2 send a Ch4 CC1 message with velocity 127**

Bank Change CCs

> **Bank 1 |** Ch4 CC0

> **Bank 2 |** Ch4 CC1

> **Bank 3 |** Ch4 CC2

> **Bank 4 |** Ch4 CC3

Note: MIDI channels noted as 1-16.

The Midi Fighter Utility Software

This section covers the Midi Fighter Utility software. This is an application for PC & Mac that can be used to control, configure, and update your Midi Fighter Twister.

Getting Started

The Midi Fighter Utility software can be downloaded using the following links.

Download For Mac

Download For PC

Once this has been installed you will find a shortcut on your desktop if using PC, or you can find the utility in your Applications folder if using Mac.
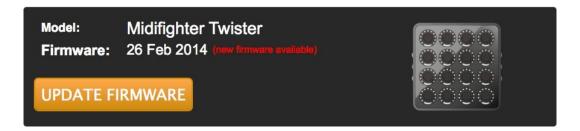
To get started launch the application and connect your Midi Fighter Twister to a spare USB port.

Note: If the Midi Fighter Utility does not detect the Midi Fighter Twister please make sure all other MIDI software has been shut down, then restart the utility and reconnect the device.

Firmware Update

It is important to ensure your device is loaded with the latest firmware. You can tell if you need to update your firmware by looking at the device information section.

If the device firmware needs to be updated the "Update Firmware" button will display in orange, and the text "new firmware available" will display in red. If the firmware is already up to date the 'Update Firmware' button will display in grey and the text "up to date" will appear in green.

To update the device firmware simply click the update firmware button.

Note: When updating the firmware do not connect the Midi Fighter Twister via a USB HUB, this may lead to a bricked device.

Performing a Factory Reset

Using the Midi Fighter Utility it is possible to restore all device settings and color information back to the factory defaults. If you are having trouble with your Midi Fighter Twister this can be a good place to start when diagnosing the problem.

To perform a factory reset connect your Midi Fighter Twister to the Utility and in the menu bar click,

Tools>Midi Fighter>Factory Reset

Importing & Exporting Settings

It is possible to import and export device settings, this is useful for saving and sharing device settings and color information used for a particular mappings.

To export your settings click File>Export Settings and enter the name you wish to save the file under.

To import your settings click File>Import Settings and select the settings file you wish to load.

Note: Once these settings are loaded you must still press "Send to Midi Fighter" to save them to the device.

Configuring your Midi Fighter Twister

There are two different types of settings for the Midi Fighter Twister, global settings and encoder settings. Global settings are not related to any particular encoder, while the encoder settings are unique for each of the 16 encoders in each of the 4 virtual banks.

The global settings are found under the "Global Settings" tab in the left hand pane of the utility, while the encoder settings for the currently selected encoder are displayed in the "Encoder Settings" tab.

Any edits you make must be saved to the device by clicking the large blue 'Send To Midi Fighter' button.

Editing Encoder Settings

The Encoder Settings can be found under the "Encoder Settings" tab in the left hand pane of the utility and are unique to each encoder in each bank.

To select an encoder for editing first select its bank by clicking one of the bank buttons, and then select the encoder by clicking on it, the circular blue cursor indicates the currently selected encoder.

Editing Encoder Color Settings

Each encoder has two different color settings types, On Color (switch is pressed) and Off Color (switch is released). The color palette at the top right of the window is used to set the color of the currently selected encoder, and color setting type. To change which color setting type is being edited use the buttons at the bottom right of the window.

Editing Multiple Encoders

It is possible to set certain settings for multiple encoders at the same time, this is called "Multiple Edit" mode. To access this mode click the 'Multiple' button in the lower right hand side of the utility. You can now select multiple encoders (in the same bank only) and modify the available settings in the "Multiple Edit" tab on the left hand pane of the utility.

To save any edits made in Multiple Edit mode you must press the 'Send to Midi Fighter' button, to cancel without applying any changes just click 'Cancel' and it will discard the changes and return to single edit mode.

The Global Settings

The following is a description of all available global settings.

System MIDI Channel

Allows you to customize the MIDI channel where global device messages such as Bank Navigation is sent. It's 4 by default. If you change either the System or Encoder's channels make sure they don't overlap to avoid crosstalk.

Super Knob Start Point

Defines the velocity value at which all Super Knobs engage.

Super Knob End Point

Defines the velocity value at which all Super Knobs end.

RGB LED Brightness

Defines the maximum brightness for all RGB LEDs.

Indicator Global Brightness

Defines the maximum brightness for all Indicator LEDs.

Side Button Function

Allows you to assign the different messages and functionality available for each of the 6 side buttons available on the Midi Fighter. The different functions are:

- CC Hold
- CC Toggle
- Note Hold
- Note Toggle
- Shift Page A
- Shift Page B
- Previous Bank
- Next Bank
- Bank 1-4
- Cycle Banks

The Encoder Settings

The following is a description of all available encoder settings.

Enable Detent

If enabled the encoder will behave like a potentiometer with a center detent. Commonly used for controlling EQ or filter settings. In this mode it's LED display will start from the middle rather than the left hand side, and when its value is 50% (a MIDI Value of 64) the LED will change color to indicate this.

Detent Color

This can be used to change the color of the detent indicator, which is a red blue LED. A value of 0 will select red, while a value of 127 will select blue, and any value between will be a mix of the two.

Sensitivity

There are two sensitivity settings, 'Responsive' for which 270 degrees of rotation changes the CC by the full MIDI range of 127, or 'High Resolution' which gives the highest resolution control.

Indicator Type

The indicator type setting changes how the encoder value is displayed on the LED ring. There are three options; Dot which is a single LED, Bar which is a bar graph style display, and Blended Bar where the leading LED changes in brightness as the position changes, this gives the most detailed indication of position.

Enable Super Knob

If enabled the encoder will send a secondary CC over the range specified by the Super Knob Start & End points in the Global Options.

Encoder Switch Action Type

Each encoder switch can be set to perform one of a range of actions.

CC Hold

The switch will send a CC of value 127 when pressed and a CC of value 0 when released.

CC Toggle

The switch will alternate between sending a CC of value 127 and a CC of value 0 each time it is pressed.

Note Hold

The switch will send a Note On of velocity 127 when pressed and a Note Off of velocity 0 when released.

Note Toggle

The switch will alternate between sending a Note On and a Note Off each time it is pressed.

Reset Encoder Value

When pressed the switch will reset the encoder value to 0, or 63 if Detent is enabled. In this mode the switch also sends a MIDI message as if it where configured for CC hold.

Encoder Fine Adjust

When pressed the encoder sensitivity is reduced allowing fine adjustment.

Shift Encoder Hold

While the switch is pressed the encoder sends a secondary value, allowing one encoder to control two knobs independently. These messages are sent on Ch.5

Shift Encoder Toggle

When pressed the switch toggles between primary and secondary (shift) encoder values. These messages are sent on Ch.5

Encoder MIDI Type

Each encoder can be configured to send either of the following MIDI messages

Note

The encoder sends Note On messages where the velocity corresponds to the Encoder Value.

CC

The encoder sends Control Change messages with a value corresponding to the Encoder Value.

Enc 3FH/41H

The encoder sends relative Control Change messages, a value of 65 is sent for each clock wise step, and a value of 63 is sent for each anti-clockwise step.

Encoder & Encoder Switch MIDI Number & Channel

You can set the MIDI number (pitch if configured as a Note) and Channel for each encoder and encoder switch in each bank. Be aware that if you change from the defaults it could conflict with other MIDI sent by the Twister. Check the appendix for a full listing of all the default MIDI messages for the Twister.

These are the default channels used for each of Twister's messages.

- **Channel 1:** Rotary Encoders & LED Rings Indicators

- **Channel 2:** Encoder Switches (RGB)

- **Channel 3:** Encoder Switches animations & brightness

- **Channel 4:** System MIDI Channel (Banks & Side Buttons)

- **Channel 5:** Shift Encoders & LED Rings

- **Channel 6:** Encoder LED Ring animations & brightness

- **Channel 8:** Sequencer

Note: MIDI channels noted as 1-16.

Appendix 1

Bank 1 MIDI

Control	Ch	CC #	Note
LH Side Switch 1*	System (4)	8	G#-1
LH Side Switch 2*	System (4)	9	A-1
LH Side Switch 3*	System (4)	10	A#-1
RH Side Switch 1*	System (4)	11	B-1
RH Side Switch 2*	System (4)	12	C0
RH Side Switch 3*	System (4)	13	C#0

* Side Switch MIDI only changes with bank when the "Bank Side Button" option is enabled.

Control	Enc Ch	Enc CC#	Switch Ch	Switch CC	Switch Note*
Encoder 1	0	0	1	0	C-1
Encoder 2	0	1	1	1	C#-1
Encoder 3	0	2	1	2	D-1
Encoder 4	0	3	1	3	D#-1
Encoder 5	0	4	1	4	E-1
Encoder 6	0	5	1	5	F-1
Encoder 7	0	6	1	6	F#-1
Encoder 8	0	7	1	7	G-1
Encoder 9	0	8	1	8	G#-1
Encoder 10	0	9	1	9	A-1
Encoder 11	0	10	1	10	A#-1
Encoder 12	0	11	1	11	B-1
Encoder 13	0	12	1	12	C0
Encoder 14	0	13	1	13	C#0
Encoder 15	0	14	1	14	D0
Encoder 16	0	15	1	15	D#0

* Encoder Switch MIDI type defaults to CC. MIDI channels noted as 0-15.

Bank 2 MIDI

Control	Ch	CC #	Note
LH Side Switch 1*	System (4)	14	D0
LH Side Switch 2*	System (4)	15	D#0
LH Side Switch 3*	System (4)	16	E0
RH Side Switch 1*	System (4)	17	F0
RH Side Switch 2*	System (4)	18	F#0
RH Side Switch 3*	System (4)	19	G0

* Side Switch MIDI only changes with bank when the "Bank Side Button" option is enabled.

Control	Enc Ch	Enc CC#	Switch Ch	Switch CC	Switch Note*
Encoder 1	0	16	1	16	E0
Encoder 2	0	17	1	17	F0
Encoder 3	0	18	1	18	F#0
Encoder 4	0	19	1	19	G0
Encoder 5	0	20	1	20	G#0
Encoder 6	0	21	1	21	A0
Encoder 7	0	22	1	22	A#0
Encoder 8	0	23	1	23	B0
Encoder 9	0	24	1	24	C1
Encoder 10	0	25	1	25	C#1
Encoder 11	0	26	1	26	D1
Encoder 12	0	27	1	27	D#1
Encoder 13	0	28	1	28	E1
Encoder 14	0	29	1	29	F1
Encoder 15	0	30	1	30	F#1
Encoder 16	0	31	1	31	G1

* Encoder Switch MIDI type defaults to CC. MIDI channels noted as 0-15.

Bank 3 MIDI

Control	Ch	CC #	Note
LH Side Switch 1*	System (4)	20	G#0
LH Side Switch 2*	System (4)	21	A0
LH Side Switch 3*	System (4)	22	A#0
RH Side Switch 1*	System (4)	23	B0
RH Side Switch 2*	System (4)	24	C1
RH Side Switch 3*	System (4)	25	C#1

* Side Switch MIDI only changes with bank when the "Bank Side Button" option is enabled.

Control	Enc Ch	Enc CC#	Switch Ch	Switch CC	Switch Note*
Encoder 1	0	32	1	32	G#1
Encoder 2	0	33	1	33	A1
Encoder 3	0	34	1	34	A#1
Encoder 4	0	35	1	35	B1
Encoder 5	0	36	1	36	C2
Encoder 6	0	37	1	37	C#2
Encoder 7	0	38	1	38	D2
Encoder 8	0	39	1	39	D#2
Encoder 9	0	40	1	40	E2
Encoder 10	0	41	1	41	F2
Encoder 11	0	42	1	42	F#2
Encoder 12	0	43	1	43	G2
Encoder 13	0	44	1	44	G#2
Encoder 14	0	45	1	45	A2
Encoder 15	0	46	1	46	A#2
Encoder 16	0	47	1	47	B2

* Encoder Switch MIDI type defaults to CC. MIDI channels noted as 0-15.

Bank 4 MIDI

Control	Ch	CC #	Note
LH Side Switch 1*	System (4)	26	D1
LH Side Switch 2*	System (4)	27	D#1
LH Side Switch 3*	System (4)	28	E1
RH Side Switch 1*	System (4)	29	F1
RH Side Switch 2*	System (4)	30	F#1
RH Side Switch 3*	System (4)	31	G1

* Side Switch MIDI only changes with bank when the "Bank Side Button" option is enabled.

Control	Enc Ch	Enc CC#	Switch Ch	Switch CC	Switch Note*
Encoder 1	0	48	1	48	C3
Encoder 2	0	49	1	49	C#3
Encoder 3	0	50	1	50	D3
Encoder 4	0	51	1	51	D#3
Encoder 5	0	52	1	52	E3
Encoder 6	0	53	1	53	F3
Encoder 7	0	54	1	54	F#3
Encoder 8	0	55	1	55	G3
Encoder 9	0	56	1	56	G#3
Encoder 10	0	57	1	57	A3
Encoder 11	0	58	1	58	A#3
Encoder 12	0	59	1	59	B3
Encoder 13	0	60	1	60	C4
Encoder 14	0	61	1	61	C#4
Encoder 15	0	62	1	62	D4
Encoder 16	0	63	1	63	D#4

* Encoder Switch MIDI type defaults to CC. MIDI channels noted as 0-15.

Shift Page A

Control	Ch	Switch Note*
Encoder 1	System (4)	G#1
Encoder 2	System (4)	A1
Encoder 3	System (4)	A#1
Encoder 4	System (4)	B1
Encoder 5	System (4)	C2
Encoder 6	System (4)	C#2
Encoder 7	System (4)	D2
Encoder 8	System (4)	D#2
Encoder 9	System (4)	E2
Encoder 10	System (4)	F2
Encoder 11	System (4)	F#2
Encoder 12	System (4)	G2
Encoder 13	System (4)	G#2
Encoder 14	System (4)	A2
Encoder 15	System (4)	A#2
Encoder 16	System (4)	B2

Shift Page B

Control	Ch	Switch Note*
Encoder 1	System (4)	C3
Encoder 2	System (4)	C#3
Encoder 3	System (4)	D3
Encoder 4	System (4)	D#3
Encoder 5	System (4)	E3
Encoder 6	System (4)	F3
Encoder 7	System (4)	F#3
Encoder 8	System (4)	G3
Encoder 9	System (4)	G#3
Encoder 10	System (4)	A3
Encoder 11	System (4)	A#3
Encoder 12	System (4)	B3
Encoder 13	System (4)	C4
Encoder 14	System (4)	C#4
Encoder 15	System (4)	D4
Encoder 16	System (4)	D#4

Appendix 2

Animation Settings

Velocity / CC Value	Animation	Setting
0	None	-
1	RGB Gate	Toggles on every 8 Beats
2	RGB Gate	Toggles on every 4 Beats
3	RGB Gate	Toggles on every 2 Beats
4	RGB Gate	Toggles on every Beat
5	RGB Gate	Toggles every 1/2 Beat
6	RGB Gate	Toggles every 1/4 Beat
7	RGB Gate	Toggles every 1/8 Beat
8	RGB Gate	Toggles every 1/16 Beat
9	None	-
10	RGB Pulse	Pulses on every 8 Beats
11	RGB Pulse	Pulses on every 4 Beats
12	RGB Pulse	Pulses on every 2 Beats
13	RGB Pulse	Pulses on every Beat
14	RGB Pulse	Pulses every 1/2 Beat
15	RGB Pulse	Pulses every 1/4 Beat
16	RGB Pulse	Pulses every 1/8 Beat
17	RGB Brightness	0 - Off
18	RGB Brightness	1
19	RGB Brightness	2
20	RGB Brightness	3
21	RGB Brightness	4
22	RGB Brightness	5
23	RGB Brightness	6
24	RGB Brightness	7
25	RGB Brightness	8
26	RGB Brightness	9
27	RGB Brightness	10
28	RGB Brightness	11
29	RGB Brightness	12
30	RGB Brightness	13

Velocity / CC Value	Animation	Setting
31	RGB Brightness	14
32	RGB Brightness	15 - Mid
33	RGB Brightness	16
34	RGB Brightness	17
35	RGB Brightness	18
36	RGB Brightness	19
37	RGB Brightness	20
38	RGB Brightness	21
39	RGB Brightness	22
40	RGB Brightness	23
41	RGB Brightness	24
42	RGB Brightness	25
43	RGB Brightness	26
44	RGB Brightness	27
45	RGB Brightness	28
46	RGB Brightness	29
47	RGB Brightness	30 - Max
48	None	-
49	Indicator Gate	Toggles on every 8 Beats
50	Indicator Gate	Toggles on every 4 Beats
51	Indicator Gate	Toggles on every 2 Beats
52	Indicator Gate	Toggles on every Beat
53	Indicator Gate	Toggles every 1/2 Beat
54	Indicator Gate	Toggles every 1/4 Beat
55	Indicator Gate	Toggles every 1/8 Beat
56	Indicator Gate	Toggles every 1/16 Beat
57	Indicator Pulse	Pulses on every 8 Beats
58	Indicator Pulse	Pulses on every 4 Beats
59	Indicator Pulse	Pulses on every 2 Beats
60	Indicator Pulse	Pulses on every Beat
61	Indicator Pulse	Pulses every 1/2 Beat
62	Indicator Pulse	Pulses every 1/4 Beat
63	Indicator Pulse	Pulses every 1/8 Beat

Velocity / CC Value	Animation	Setting
64	Indicator Pulse	Pulses every 1/16 Beat
65	Indicator Brightness	0 - Off
66	Indicator Brightness	1
67	Indicator Brightness	2
68	Indicator Brightness	3
69	Indicator Brightness	4
70	Indicator Brightness	5
71	Indicator Brightness	6
72	Indicator Brightness	7
73	Indicator Brightness	8
74	Indicator Brightness	9
75	Indicator Brightness	10
76	Indicator Brightness	11
77	Indicator Brightness	12
78	Indicator Brightness	13
79	Indicator Brightness	14
80	Indicator Brightness	15 - Mid
81	Indicator Brightness	16
82	Indicator Brightness	17
83	Indicator Brightness	18
84	Indicator Brightness	19
85	Indicator Brightness	20
86	Indicator Brightness	21
87	Indicator Brightness	22
88	Indicator Brightness	23
89	Indicator Brightness	24
90	Indicator Brightness	25
91	Indicator Brightness	26
92	Indicator Brightness	27
93	Indicator Brightness	28
94	Indicator Brightness	29
95	Indicator Brightness	30 - Max
127	Rainbow Cycle	Cycle rate fixed at 4 Beats

Note: Animations are sent on the same CC as the Switches for both encoders and switches but on Ch.2 for RGB LEDs and Ch. 5 for LED Rings (e.g. Animations for the top left button and encoder on Bank 1 are sent to CC0 Ch2 and CC0 Ch5 respectively). MIDI channels noted as 0-15.