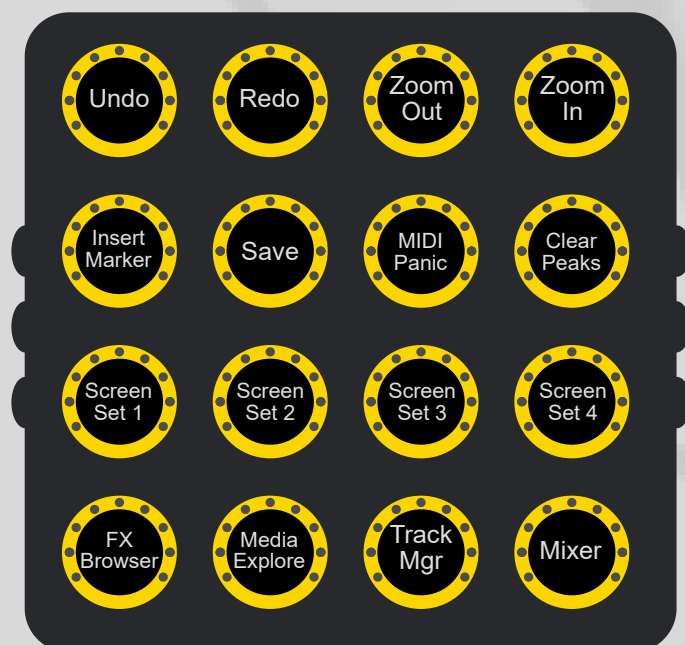


MIDI Fighter Twister Reaper CSI Setup Guide



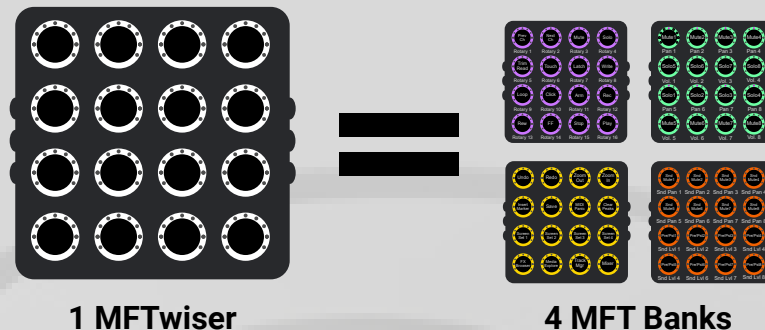
Installation

Pre-Condition: you've already properly installed Control Surface Integrator (CSI) plugin and relevant surface/zone folders.

1. Open the MIDI Fighter Twister Utility.
2. Locate the included "Reaper CSI MFT.mfs" file. This is the MIDI Fighter Twister (MFTwister) template.
3. Load this to your device using the MIDI Fighter Twister Utility. Note: this will overwrite your existing MFTwister setup.
4. Exit the Midi Fighter Twister Utility application.
5. Launch Reaper
6. Make sure the MIDI Fighter Twister MIDI Ports are disabled in Reaper's **Preferences -> MIDI Devices**
7. Now go to **Preferences -> Control/OSC/web**
8. If you already see "Control Surface Integrator" select it and click the Edit button. If not, click the Add button and select Control Surface Integrator from the dropdown.
9. Click on Pages -> HomePage (or Home, etc.)
10. Click Add MIDI
11. Name the Surface (e.g. "MFTwister")
12. For MIDI In and MIDI Out select "Midi Fighter Twister"
13. For Surface select "MIDIFighterTwister.mst"
14. For Zone Folder select "MIDIFighterTwister"
15. Check the box for "Auto Map Sends"
16. Check the box for "Auto Map Focused FX"
17. Click OK a few times to commit the changes and go back to Reaper

Concept

This takes the MIDI Fighter Twister (MFTwister) and splits it out between 4 banks, each pre-programmed for certain tasks in Reaper. Some banks make use of knobs, encoders, and shift-encoders, giving you a huge amount of control.



We'll get into how the banks map shortly, but this basically allows you to turn your MFTwister into a fully functional Reaper control surface, with a wildly space-efficient design.

Note: The idea was to provide a LOT of control and flexibility, while also trying to keep things simple enough that you can easily memorize what does what since the MFTwister doesn't have labels. Colors are also used for providing visual cues as to what may be happening.

Banks

The 4 banks are as follows...

- 1. Selected Channel & Transport*:** Used for channel navigation, arm/record/mute/solo or change automation on selected track, along with transport controls.
- 2. Global Actions:** Used for Undo/Redo, changing screen sets, opening browsers, track manager console, etc.
- 3. Mixer 1-8:** Used for adjusting track volume, pan, mute, solo of tracks 1-8. Pan 1-4 are the top row with Encoder press as acting as Mute, Volume 1-4 second row with Encoder press acting as Solo. Pan/Volume 5-8 make up the next two rows.
- 4. Sends 1-8 (selected track):** Used for controlling the send levels on the selected track for sends 1-8. You can also mute the sends (top 2 rows of encoder buttons) and toggle between pre/post fader sends (bottom 2 rows of encoder buttons).

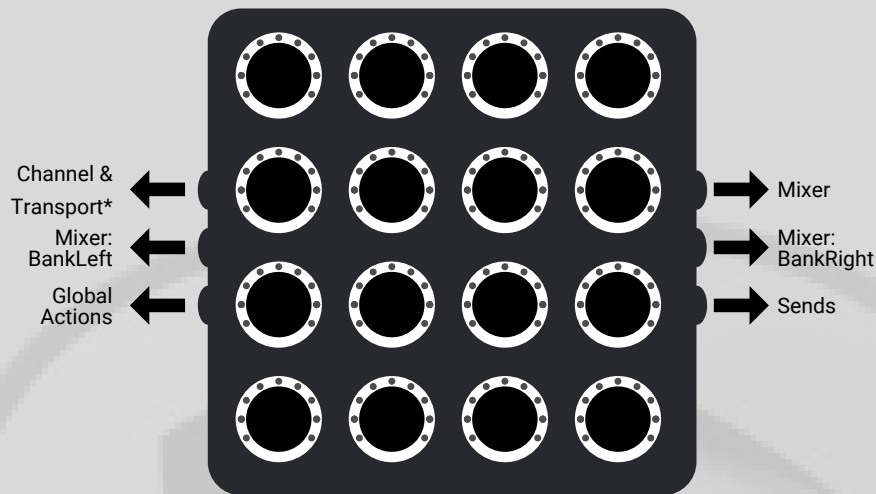
*The Rotary encoders on this bank are also designed to map to Focused FX within Reaper. You'll have up to 16 standard encoders, 16 shift encoders, and some buttons you can map to Focused FX.

What If I Don't Like The Default Mapping?

If you don't like the default mapping, want to replace an action, etc., CSI allows you to do this. Just find the "widget" in CSI you want to reassign, and assign it to a new action in CSI. See the CSI documentation for steps on how to do this.

Side Buttons

The buttons on the side of the unit are designed to work for navigation.



*Also toggles Focused FX mapping

Top-Left → Channel/Transport. This also toggles the Focused FX mapping.
Example: let's say you're using a mapped EQ plugin but want to hit the play button. You may need to jump out of FocusedFX view.

Center-Left → Bank Left. Designed to Decrease the current bank (i.e. jump down 8 tracks) on the mixer**.

Bottom-Left → Global Action.

Top-Right → Mixer.

Center-Right → Bank Right. Designed to Increase the current bank (i.e. jump up 8 tracks) on the mixer**.

Bottom-Right → Sends Page.

****Tip:** If you're ever not sure what mixer bank you're currently on, quickly toggle the top-right encoder and watch the mixer in Reaper for which Mute state was just toggled. That's the first channel in the current bank.

Channel & Transport (Bank 1)



Previous, Next Channel - Navigates the current focused channel.

Mute, Solo - Mutes or Solos the currently focused channel.

Trim/Read, Touch, Latch, Write - Sets the current automation mode for the focused channel.

Loop - Enables cycle (loop) playback or recording in Reaper's transport.

Click - Enables the Metronome.

RecordArm - Arms the focused channel for recording.

Record - Engages recording on the transport.

Rewind - Returns to the start of the project.

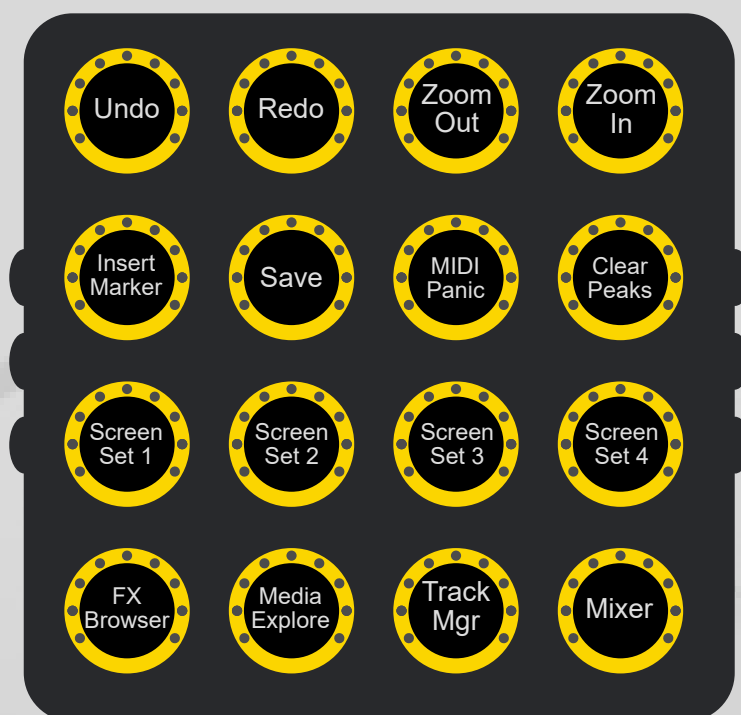
FastForward - Fast Forwards in the timeline.

Stop - Stops playback in the transport.

Play - Engages playback in the transport.

Rotary Encoders - Each rotary encoder can be mapped to Focused FX using CSI. You have 16 encoders and 16 shift+encoders (by pressing the encoder button).

Global Action (Bank 2)



This is a great place to remap some actions and create your own customized surface. You'd only need to go into the MIDIFighterTwister.zon file, look at the section labeled "GlobalButtons," and remap the widgets to different Reaper actions. **Example:** "ZoomOut Reaper 1011" means the ZoomOut widget is mapped to Reaper action 1011. You can edit this to any other Reaper action you'd like by replacing the number with one that corresponds to a different Reaper action..

Undo, Redo - No explanation needed.

Zoom Out, In - Zooms in horizontally on the timeline.

Insert Marker - Inserts a marker at the current edit cursor position.

Save - Saves the active Reaper project.

MIDI Panic - Sends Note Off events to all synths and MIDI devices.

ClearPeaks - Clears all current peaks in the mixer channels.

Screen Sets 1, 2, 3, 4 - Loads the corresponding screen set.

FX Browser - Opens the FX Browser window.

Media Explorer - Opens the Media Explorer window.

Track Manager - Opens the Track Manager window.

Mixer - Opens the Mixer window (in Reaper only, doesn't set focus of the MFTwister mapping to the mixer like pressing the Top-Left button).

Mixer (Bank 3)



Top-Row Rotary Encoders - Pan and Mute (Channels 1-4). The rotary encoders are mapped as 'fader' widgets in CSI this means knob turns result in absolute changes to pan. Pressing the button for each encoder Mutes the respective channel. Pan knobs always have a center detent/indicator on the MFTwister.

Second-Row Rotary Encoders - Volume and Solo (Channels 1-4). These are mapped as relative encoders in CSI. So any knob turns will increase or decrease the fader volume relative to the current position. Pressing the button for each encoder Solos the respective channel.

Third-Row Rotary Encoders - Pan and Mute (Channels 5-8). Same as above. Only difference is the channel numbers.

Bottom-Row Rotary Encoders - Volume and Solo (Channels 5-8). Same as above. Only difference is the channel numbers.

Important: Remember, you can click the Center-Left or Center-Right buttons to bank to the next set of channels in the mixer. You're not limited to just 8 channels.

Tip: If you're ever lost and aren't sure what channel is currently being shown on the MFTwister, a good trick is to quickly toggle a mute on one of the channels to help get your bearings.

Sends (Bank 4)



Important: Sends are mapped to the currently selected channel. So you're not looking at Send 1 for channels 1-8, but rather Sends 1-8 of the current channel.

Top-Row Rotary Encoders - Send Pan and Mute (Sends 1-4). The rotary encoders are mapped as 'fader' widgets in CSI this means knob turns result in absolute changes to pan. Pressing the button for each encoder Mutes the respective channel. Pan knobs always have a center detent/indicator on the MFTwister.

Second-Row Rotary Encoders - Send Level and Pre/Post Fader Toggle (Sends 1-4). These are mapped as relative encoders in CSI. So any knob turns will increase or decrease the fader volume relative to the current position. Pressing the button will toggle pre or post-fader sends.

Third-Row Rotary Encoders - Send Pan and Mute (Channels 5-8). Same as above. Only difference is the channel numbers.

Bottom-Row Rotary Encoders - Send Level and Pre/Post Fader Toggle (Channels 5-8). Same as above. Only difference is the channel numbers.

FX Zones

Included are a number of FX mappings for some common plugins in case you also happen to own them.

Note: I may have renamed some plugins within Reaper to shorten their titles, and that may be reflected here. If you have a plugin that's not working, compare the name in the .zon file to the name in your version of Reaper. Making them match should correct the problem.

How FX Zones Work

1. Go to Bank 1/Channel+Transport on the MFTwister
2. Insert a mapped FX on a track in Reaper
3. Move parameters on the CSI
4. Clicking the Top-Left side-button on the MFTwister will toggle between the Focused FX Zone and the Home zone

If a plugin has been mapped, opening the plugin on a track and giving it focus in Reaper+CSI will automatically map and send parameter feedback to "Bank 1/Channel+Transport" of the MFTwister.

This will override the buttons and act as a phantom "5th MFTwister bank."

In FX Zones you have 16 encoders plus 16 shift encoders or 16 buttons to map. This provides a lot of control in a small surface.

Mapping of Effects

Since the MFTwister does not have labels, I tried to create an MFTwister parameter layout for the type of effect (e.g. compressor, EQ, reverb), then tried to map relevant VST effects controls to that layout. Some examples of this approach will follow in the next few pages.

Examples: In most plugins, Mix is Rotary 16, and pressing Rotary 16 toggles Bypass. In a compressor, Threshold/Compression is always Rotary 1 if it exists, and Ratio is always Rotary 2, etc. In a reverb, Pre-Delay is always first followed by decay controls. In an EQ, HP filter is always Rotary 5.

Don't worry, this will hopefully make sense after you review the next few pages of this guide and get used to using the plugins. Trying to create consistency makes it easy to build up muscle memory and find the expected parameter you're trying to control assigned to an expected knob.

Because FX parameters can vary so wildly, sometimes you just have to move something to figure out where it's mapped.

When in Doubt

Pop open the .zon file (located in the CSI\Zones folder) to see how things are mapped.

Remember: you can change these mappings at any time. These are just starting points.

Compressor FX



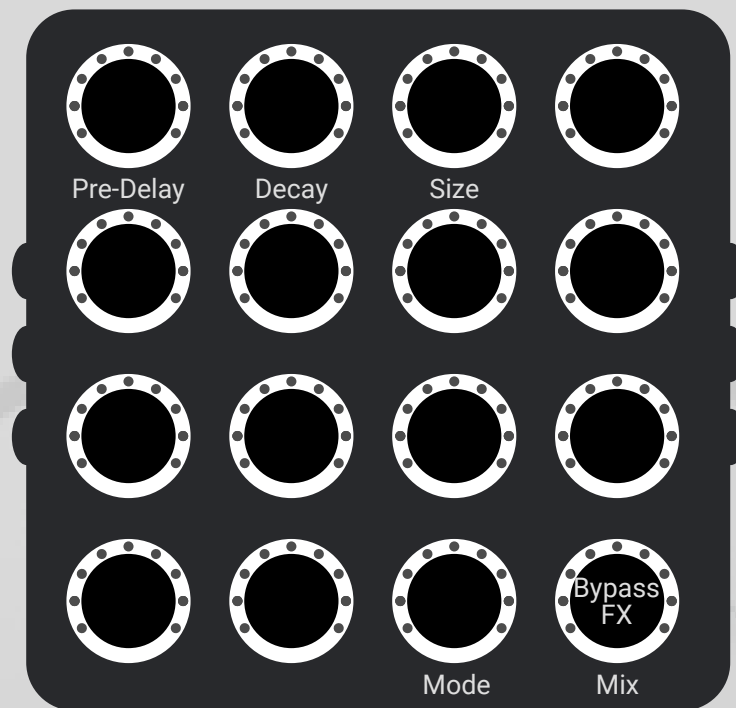
The above example is my starting guideline when mapping compressor effects.

EQ FX



When using variable band Equalizers like Equilibrium, ReaEQ or Pro-Q, this is the layout I designed towards. Where it made sense, I tried to follow a similar convention on other EQ's.

Reverb FX



The above example is my starting guideline when mapping reverb effects but reverb effects can really vary wildly in parameter layouts so this is probably one of the more looser ones.

Credits:

Reaper by Cockos: <https://www.reaper.fm/>

MIDI Fighter Twister hardware by DJTechTools:
<https://store.djtechtools.com/products/midi-fighter-twister>

CSI by Geoff Waddington. More info here:
<https://forum.cockos.com/showthread.php?t=183143>

Reaper Logo used in background by Emsti as found here:
<https://forum.cockos.com/showthread.php?t=214080>

MFT CSI mapping by Christopher Reis