

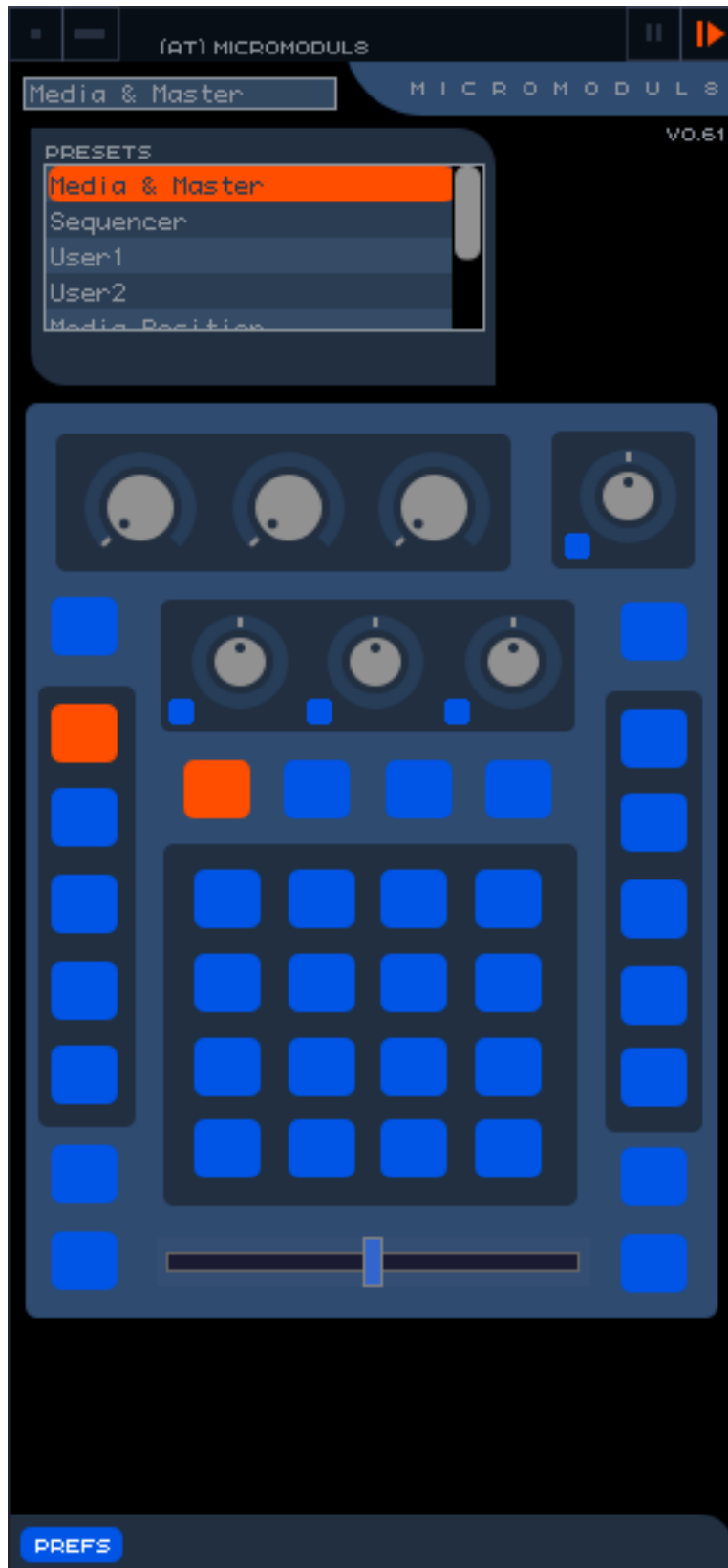
MICROMODUL8 MODULE

FOR FADERFOX VJ3 MICROMODUL8 CONTROLLER



WRITTEN & DESIGNED BY ANDY TEASDALE
ORIGINAL CONCEPT BY BORIS EDELSTEIN

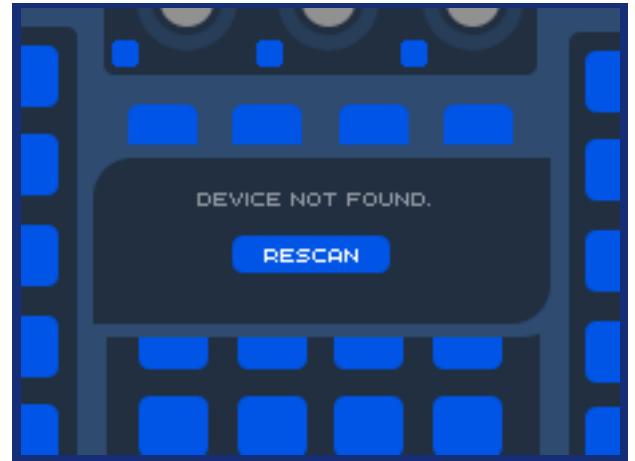
Set-Up:



The (at) Micromodul8 module is designed to work 'out of the box' with the controller set in its factory settings.

Simply plug in your VJ3 and start-up Modul8, open up the Micromodul8 module, and it should look like the image on the left.

If the module cannot find your controller, the following error warning will pop up:



If this happens, check your leads and connection and try again, by pressing the 'rescan' button.

For those of you with multiple MIDI controllers it is also a good idea to make sure each one is set to work on its own separate MIDI channel. To adjust the controllers MIDI channel put your controller into System mode (press & hold preset buttons 1 + 4), then use the blue buttons to select the MIDI channel number. Then leave System mode to preserve your changes (press & hold preset buttons 1 + 4).

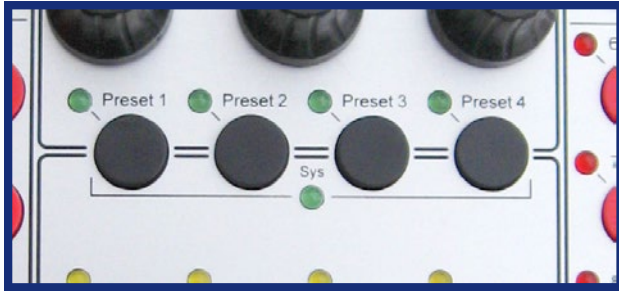
After adjusting the controllers MIDI channel, you will need to set up the module so that it receives on the same channel. To do this, simply press the 'prefs' button on the bottom left of the module and then adjust the parameter called '.MIDI Channel'. By default this is set to 1 (the same as the controllers factory settings).

To return your controller to its factory settings you will need to put it into 'System Mode' by pressing & holding Preset buttons 1 + 4. Once in System mode you can set the toggle functions of the buttons pressing the Preset buttons - make sure they are all set to Off. Then leave System mode to preserve your changes (press & hold preset buttons 1 + 4).

Further details can be found on the reverse of the controller.

Preset Buttons:

The 4 preset buttons switch between the different presets.



- 1) Media & Master (layer)
- 2) Sequencer (layer)
- 3) User 1 (layer)
- 4) User 2 (global)

By pressing the 'Shift' button on the controller you can access an extra 4 presets.

Shift Presets:

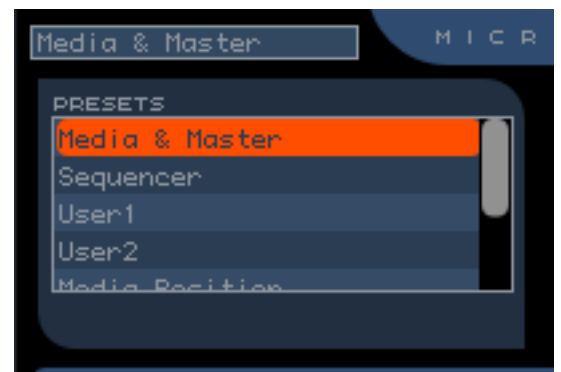
- 1) Syphon Input (layer)
- 2) Cue Position (layer)
- 3) I/O Crop (layer)
- 4) Colour (layer)

Preset buttons can not be mapped in user mode. They will always change between the above modes.

The preset leds will light to show you which preset you are in. For the shift presets they will display an inverted light pattern with all leds on except for the one pressed.

Presets can also be changed in the module's preset menu. The selected preset will display its name at the top of the module (and this can be edited in User modes).

This list corresponds to the preset buttons, items 5-8 being the shift presets.



User modes 1 & 2 have their own preset menus, allowing you to build your own layouts for the module.

We will discuss the user modes later.

Layer Mode:

In 'layer' presets*, certain controls have the same functionality: (colour key; **SHIFT OFF** **SHIFT ON**)

LAYER SELECT BUTTONS

Select layer [1-10]
Create/Hide/Show layer

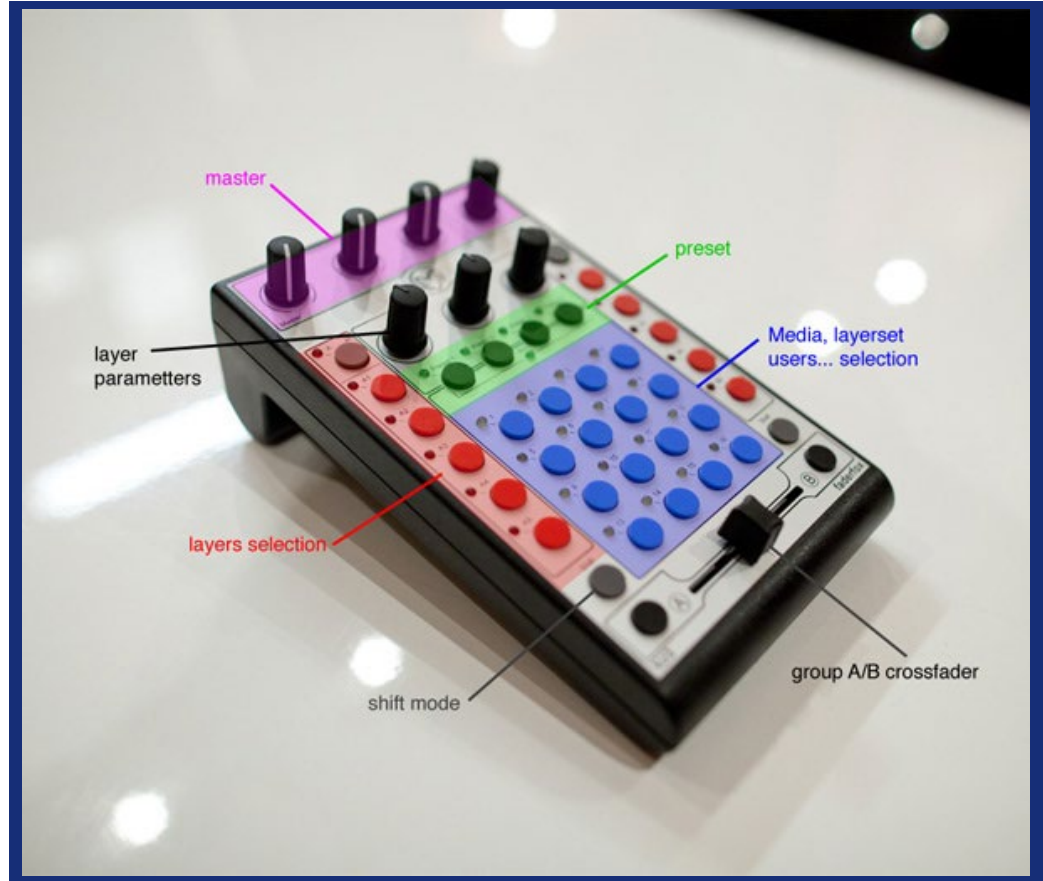
Layer buttons for inactive layers will be unresponsive, unless the 'shift' button is pressed and then a new layer will be created.

- LEDs
Layer button LEDs indicate which layer is focused.
When 'shift' is pressed, the layer LEDs indicate which layers are active.

MASTER ROTARY KNOBS

These will affect Modul8's Master functions.

Speed Scale Alpha
Colour Add R Colour Add G Colour Add B



TOP RIGHT ENCODER

Selecting or adjusting a control in the main window will allow for it to be adjusted by this encoder in the TURN state. (NOTE: The default focused control setting is 'ctrl_layer_alpha')

TURN Focused control 2nd Focused control
PUSH Preview window mode Preview window mode

Each encoder can have up to 6 functions.

TURN - Regular twist of the knob.
PRESS - Push the encoder like a button.
PUSH - Push down, then turn.

Simultaneously pressing the **SHIFT** key will give you 3 further options.

The 2nd Focused control works in a slightly different manner; the module will only record changes to the 2nd focused control while the **shift** button is pressed. This allows you to map 2 separate controls very quickly.

SHIFT BUTTONS

Holding either shift key will enable the **shift** function, and display a different pattern of LEDs to show such things as 'activated layers' and 'selected layersets' etc. depending on the current preset.

MULTI-FOCUS MODE ('All' buttons)

Enable Multi-focus for either A layers or B layers.

Adjusting a control with MultiFocus enabled will send the keyword to all active layers in that deck. The keyword value is sent as a modifier (i.e. + or -), not a precise value (i.e. 0.75). This means that a value will not jump, but be adjusted incrementally



CROSS FADER

For mixing the A + B channels.

Cross fade

Cross fade

The module itself mirrors the functions of the controller, giving you a 'virtual VJ3'.



BLACK A/B BUTTONS

These functions set-up how the crossfader works.

A/B XFade toggle

A/B scaling toggle

PRESET 1: Media & Master

BLUE BUTTONS

Media select

Layer Set select

Pressing the blue buttons will select the corresponding media in the media panel, on the currently selected set.

With **shift** pressed, the blue buttons change between layer sets. Buttons 1-8 (beginning top left) are layer sets 1-8 A, buttons 9-16 are layer sets 1-8 B.

- LEDs

The LEDs indicate the currently selected media in the media panel. When '**shift**' is pressed they will show the currently active Layerset (Group),

CENTRAL ENCODERS

TURN	Media set select	Un-assigned
PUSH	Media Select	Un-assigned
TURN	Direct Media Time Position	Movie Position In
PUSH	Layer Movie Speed Factor	Movie Position Out
TURN	Layer Alpha	Un-assigned
PUSH	Layer Scale Uniform	Un-assigned

PRESET 2: Sequencer

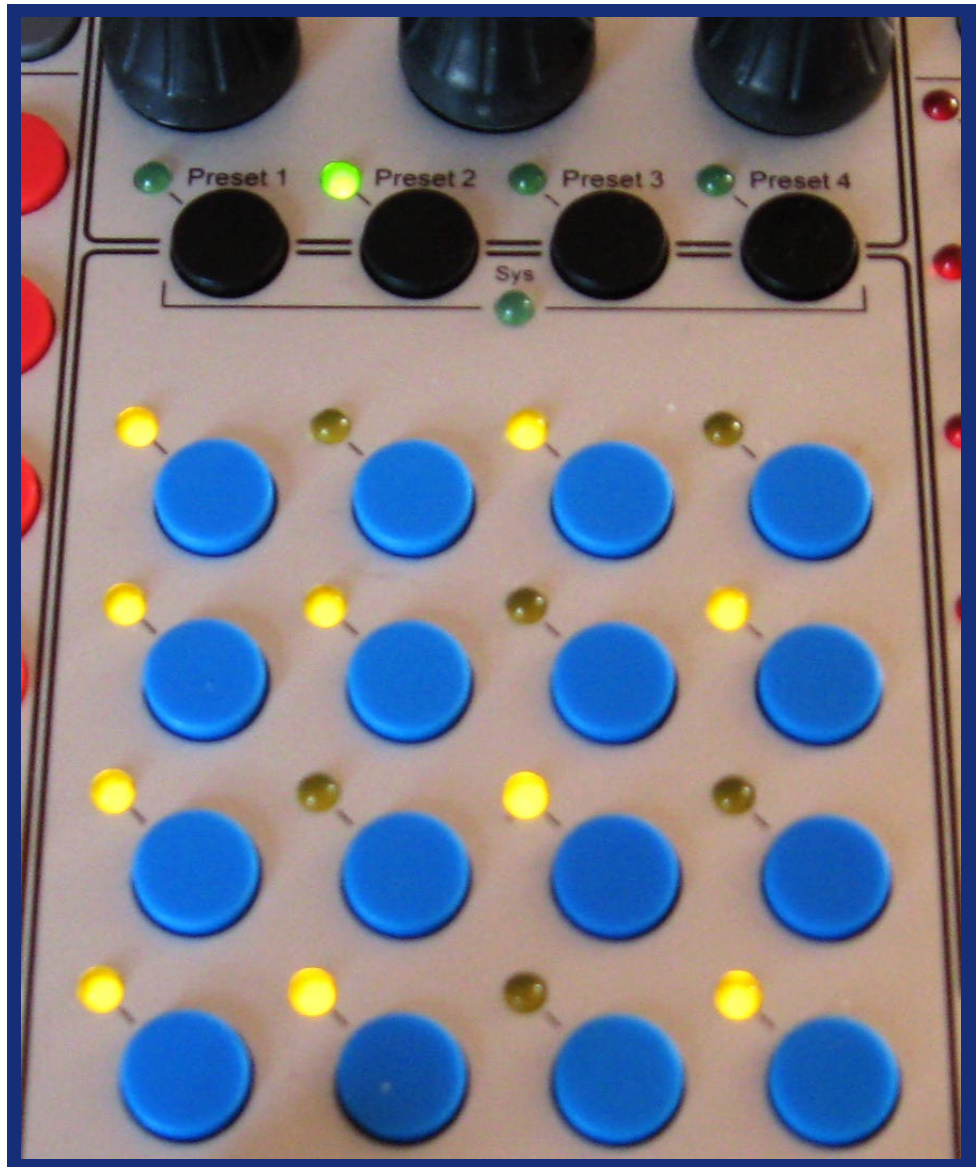
The Micromodul8 module is equipped with its very own sequencer, which can sequence the visibility of layers in a 16 step grid.

You can also create 8 Patterns per layer (accessible through the **shift** mode).

BLUE BUTTONS

These display the current sequence for the focused layer. The sequence is displayed as a 16 step block starting at the top left button. Pressing a button will toggle that step to show or hide the layer. To view the sequence for a different layer

Under **SHIFT**, the blue buttons will adjust the sequencer pattern, in a similar manner to the layer set display in preset 1. Buttons 1-8 show the A layers patterns, and buttons 9-16 show the B layers patterns.



CENTRAL ENCODERS

Left: PRESS = Resync to beat 1 (does not apply when synced to TIMECODE)

Right: PRESS = Sequencer Start/Stop toggle

TOP RIGHT ENCODER

4 taps of this encoder will set the BPM. Normal unctonality of the encoder still applies (see page 3).

Any module which accepts changes to the shared-Dict['BPM'] value will also be updated by this process.

It is possible to synchronise this sequencer with the TIMECODE module or GENER8 Launchpad module.

To do this select the 'Use Timecode' option in the preferences. (more on preferences later)

PRESET 3 & 4: User Modes

The User modes allow for the creation of your own presets, enabling you to 'Map' your chose control to any desired knob, encoder or button.

PRESET 3 - USER 1 (layer)

In User 1 mode, only the central 3 encoders and the blue buttons can be mapped, the other controls retain their original functions (see page 3).

In this mode each control will be sent to the focused layer.

PRESET 4 - USER 2 (global)

In User 2 mode, the top right encoder selects the user presets from the modules list. Preset buttons, and the top encoder cannot be mapped, but everything else is game.

In this mode each control can be targeted to a specified layer (though you can set it to '0' for adjusting the focused layer).

MAPPING CONTROLS

Press the 'MAP' button (top right), and then select the button or knob you wish to map. If it has an LED it should now be flashing. Then select or adjust a control in the main interface, and its keyword will appear at the bottom of the module.

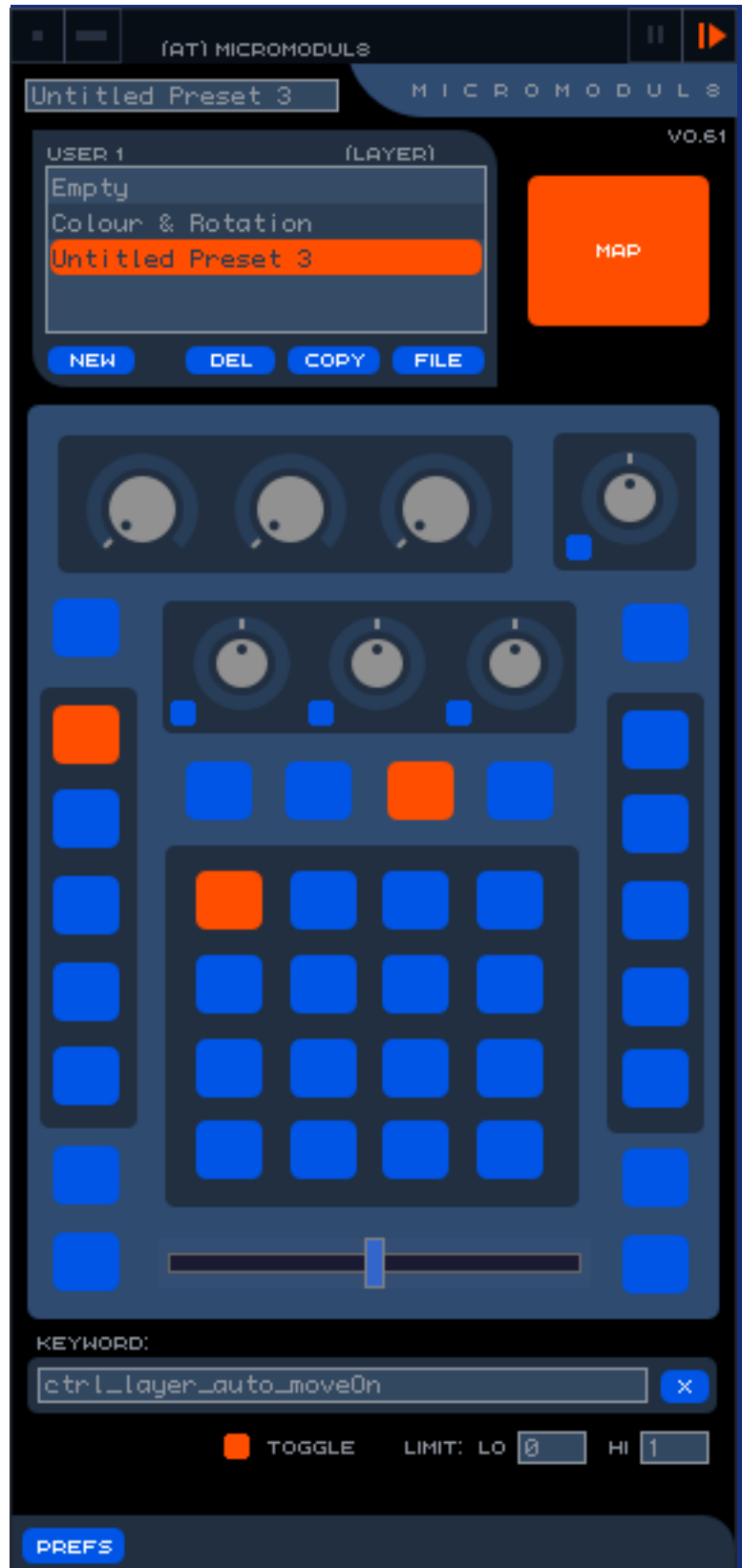
You can also set its toggle functionality and limits here.

Holding **SHIFT** while creating a map will allow you to map the shift function of that control, and don't forget encoders have 3 functions!

Adjusting any mapped control will display the keyword and value at the base of the module.

```
ctrl_layer_color_additiveB: 0.34
```

PREFS



Pressing 'MAP' once more will take the module out of mapping mode and allow you to use your new preset.

Exporting User Presets



Presets created in the User modes are automatically stored within the modules preferences, and so will still be available after restarting Modul8. However, if you wish to export or import presets this is also possible.

In both User modes, you will find different buttons at the base of the Preset List, for copying, deleting and creating new presets. There is also an option named 'FILE'.

Clicking on the 'FILE' button opens up a dialogue for 'External Presets'. This is where you can load and save external preset files.

FILE PATH

The first option in the external presets window is the 'PATH'. This is where your presets will be saved. The default filepath is set to your 'Users/Your_user_name/' folder.

If you wish to, you can create a folder in your user directory to store your presets (eg. 'Faderfox Presets'). If you do, make sure to update the 'path' to point to the new folder (eg. 'Users/Your_user_name/Faderfox_Presets/').

SAVING & LOADING

To save a preset, simply select it from the preset list and click on the 'SAVE' button. You can give it a different filename if you wish. Once saved, it's filename will appear in the file list.

Loading a preset from a file is a simple process of selecting the file and clicking 'LOAD'. Once a file is loaded it will become the active preset. Click 'CLOSE' to finish the session.

Stored presets may be loaded into either User 1 or User 2 banks. However, if you load a Global (User 2) preset into User 1, then only the central encoders and blue buttons will be responsive.

Moving a preset file from one system to another is simple: Open up the folder where you store your preset files and copy them to the other machine. Be careful to place them into the folder set in the file path. You may need to refresh your file window to see any alterations made in the Finder.

SHIFT PRESET 1: Syphon Input



Since the advent of version 2.7, Modul8 comes with Syphon input. This preset allows you to view and choose between Syphon sources.

BLUE BUTTONS

The blue buttons will select items from the list of Syphon inputs - the top left button being item 1.

Syphon is an open source technology that enables application to application transfer of video.

For more info visit:
www.syphon.v002.info

CENTRAL ENCODERS

Left: TURN = [Select source from list](#)

SHIFT PRESET 2: Cue Position

BLUE BUTTONS

The Cue Position preset allows for quick adjustment of playback position by dividing the media into 16 segments and allowing you to trigger each segment individually with the controllers' blue buttons.

Holding the button will stutter the playback at that position.

SHIFT PRESET 3: I/O Crop

The purpose of this preset is to ease fast cropping of your media, in a similar fashion to the above 'Cue Position' preset. Pressing the blue buttons will crop your media by 1/16.

BLUE BUTTONS

[Movie Position In](#)
[Movie Position Out](#)

SHIFT PRESET 4: Colour

This preset allows you to adjust the layers additive and subtractive colour by using a colour swatch grid.

The swatch layout on the module relate to the position of the controllers blue buttons.



BLUE BUTTONS

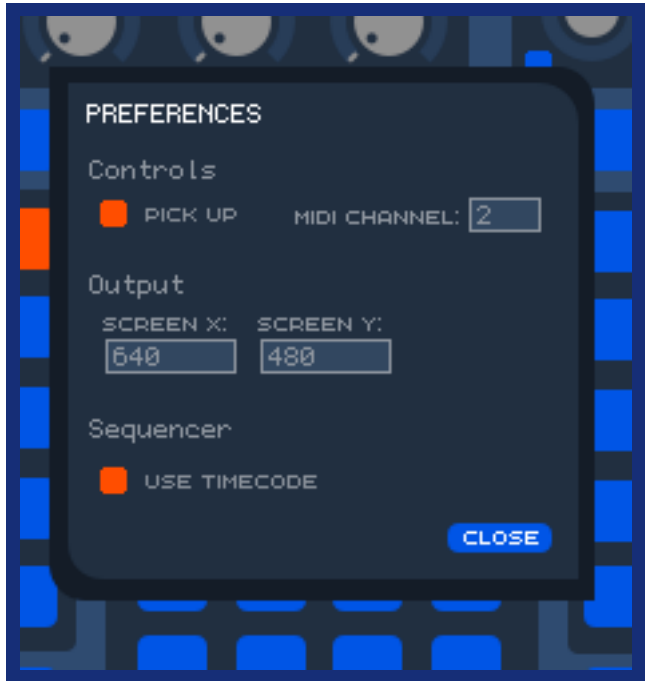
Layer Colour Additive
Layer Colour Modulate

SHIFT presets are accessed by pressing the **shift** button in combination with a preset button.

Preferences

Clicking the 'Prefs' button on the lower left of the module will open up the preference pane.

This allows you to adjust certain behaviours of the module.



PICK UP

The pick-up function determines how the rotary controls respond. It will attempt to remove any unwanted jumps if the Modul8 controller is very different to the mapped control.

If set to ON the module will wait until your controller value is close to the value of the Modul8 control before sending any changes to Modul8, therefore avoiding any big jumps and keeping your performance smooth.

If this is not for you, turn off PICK-UP.

MIDI CHANNEL

The Micromodul8 module will intelligently adjust itself to the MIDI channel of your controller, as soon as it receives any data. It is therefore unlikely that you will need to adjust this value. However, it is a useful visual reference.

OUTPUT

The screen size values are used by the module for some controller values (such as `ctrl_layer_position_x`)

SEQUENCER

This options determines the behavior of the Sequencer's clock. Setting 'use Timecode' to ON will switch the sequencers clock from the modules internal clock to using the shared TIMECODE library produced by either the (at) Timecode module or the (at) Gener8 Launchpad module.

Using the TIMECODE opens up the ability to sync to a midi clock, and match timing with any other modules using the TIMECODE library etc.

Sequencer mode is accessible on Preset 2, for more info see page 5 of this manual.

DEVELOPER MODULE

Like all my modules, I try to build in options for other module developers to build on, and this is no exception. If you are planning to design a module which utilizes the Faderfox Micromodul8, then these features may help save you some time.

The (at) Micromodul8 generates a library of useful data each time it receives a MIDI control signal from the FADERFOX VJ3.

This data is output through a shared dictionary and is accesible from any other module.

To give an example of how to use this dictionary I have created a small module called (at) Micromodul8 (Developer).

If you run the module you will notice it receives various info each time a control is adjusted. This is done without the need for any of Modul8's own Midi mapping.



It also receives data about the state of the (at) Micromodul8 module itself (ie, current preset.)

There is plenty of info and instructions in the Developer modules code, so open up the Script Editor (command-option-e), and flick through the code to get you going.

`sharedDict['FADERFOX_VJ3']`

Here is a quick reference to the data output from the (at) Micromodul8 module.

`sharedDict['FADERFOX_VJ3']['Note']` - MIDI note number as a string.

`sharedDict['FADERFOX_VJ3']['Value']` - The value of the control data

`sharedDict['FADERFOX_VJ3']['Percent']` - Another option for Value data. Received as percentage.

`sharedDict['FADERFOX_VJ3']['UserMode']` - User modes (0 = system, 1 = layer, 2 = global)

`sharedDict['FADERFOX_VJ3']['Preset']` - Name of the current preset.

`sharedDict['FADERFOX_VJ3']['Stamp']` - A count value updated with each new control adjustment.

Note that there is no value for **shift** in the dictionary.

The VJ3 produces different Midi note numbers for each control when a **shift** button is pressed.