



## Pattern Editor/Controller

### Introduction

The MIDI MuRF Pattern Editor/Controller serves two main functions: It allows you to edit and save custom Animation patterns for your MIDI MuRF and it allows you to control the parameters of the MIDI MuRF (the knobs and switches) from your computer desktop.

The software consists of two main windows, which we will call the MuRF Panel and the Pattern Editor. The first window you will see when the program opens is the MuRF Panel.



This is a photorealistic representation of the front panel of the MuRF and the on-screen knobs and sliders here send MIDI messages to your MIDI MuRF for control. If you move your mouse to the top of the window, you will see a Menu bar appear, with the options FILE, MIDI, ADVANCED, PATTERNS, and HELP.

### MIDI Setup

Of course, in order to control your MIDI MuRF from the software, you will need to have MIDI output from your computer set up correctly. Make sure your MIDI interface has the latest drivers installed and connect your computer MIDI output to the MuRF MIDI input. You will also need to select your MIDI output device within the MuRF Editor software.

Click on the MIDI menu at the top of the MuRF Panel and select your MIDI output device from the list. At the bottom of the MIDI menu, you can set the MIDI channel to match your MuRF. If necessary, consult the MIDI MuRF manual for information on how to set the MIDI channel on the MIDI MuRF.

Once you have set the MIDI output device and channel correctly, the MuRF Editor will be connected and ready to go. You should find that all of the on-screen knobs, sliders and switches on the MuRF Panel will control their corresponding functions on your MIDI MuRF.

If you click the ADVANCED button on the MuRF Panel menu bar, you will see some additional on-screen controls: knobs for LFO RATE and ENV SCALE, and switches for STACCATO and TRIPLETS. These are MIDI-only parameters which do not have physical controls.

### Advanced Parameters

LFO RATE and ENV SCALE always have an effect on the sound. LFO RATE controls the speed of the MuRF's internal LFO, and ENV SCALE compresses or expands the duration of the filter envelopes, independent of the pattern rate.

STACCATO mode controls how the MIDI MuRF behaves when you play MIDI notes in Triggered mode (MIDI notes 48-60). If Staccato Mode is turned ON, then the MuRF will sound only for as long as notes are held down; that is, if you release one of these MIDI notes while its filter envelope is still active, the envelope will be brought abruptly to zero and the note will be cut off early. This allows for short, sharp sequences with precise articulation.



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TRIPLETS on/off changes the MIDI clock division options when the MIDI MuRF is synchronized to MIDI clock. Normally, the available clock divisions are as listed in the MIDI MuRF manual, including several "triplet" time bases. In some cases you may want to change the clock divisions "live" using the Rate knob or another controller, and the triplet settings could throw your groove off of the downbeat. If you turn off TRIPLETS, these clock divisions are removed from the list, and only evenly-divisible clock divisions will be selected.

### FILE Menu

The MuRF Panel not only provides live control of the MIDI MuRF parameters, it allows you to save and restore these settings as well. The FILE menu on the MuRF Panel allows you to "Save Single MuRF Panel" and "Load Single MuRF Panel." These options will save and restore the settings of all of the knobs, sliders and switches on the MuRF Panel, with the exception of the Bypass switch which is not saved or restored. The FILE menu also allows you to access a Playlist, where you can arrange a group of saved Panel and Pattern settings for quick access.

### Murf Pattern Editor

This is where the magic happens. Create and save an infinite number of custom MuRF patterns to your computer, and load up to 22 of your custom patterns at a time into the MIDI MuRF's internal memory. To access the Pattern Editor, click the PATTERNS button on the menu bar at the top of the MuRF Panel.



### Editing Patterns In The Pattern Editor

Click to add or remove steps on the pattern grid, and listen to the result. Each row of the grid represents ON or OFF steps for a single filter band. The frequency of each filter band can be seen to the left of the pattern grid. The vertical columns of the grid represent evenly-spaced steps in time.

**IMPORTANT NOTE:** the length (in steps) of each row is completely independent. When you first load a pattern and start the MuRF's pattern clock, all pattern rows will begin at the same time on step 1, but after that each pattern row will cycle for however many steps you set per row, independent of the length of any other row. This allows for extremely complex poly-rhythms and cyclical, moving relationships between pattern rows.



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There are several keyboard and mouse shortcuts to help you create patterns. To set the length of a pattern row instantly, CTRL+click on a pattern step. You can also click and drag the last step left or right to lengthen or shorten a pattern row. To "paint" in all ON or OFF steps: Hold down SHIFT and click+drag the mouse to paint in all ON steps. Hold down ALT and click+drag the mouse to paint in all OFF steps. A complete list of keyboard shortcuts can be found on the EDIT menu->Preferences->Key Shortcuts tab.

### Send Pattern As

In the Pattern Editor window, you will find the pattern grid of 64 steps for each of the eight filter bands. In the top left of the window is "SEND PATTERN AS". Click this button to choose which memory location in the MIDI MuRF to store the pattern you are currently editing. Note that you will only hear this pattern if the same pattern number is selected on the MuRF; you can send a pattern to any location but the MuRF does not automatically switch to make this pattern active. So, if for example you want to SEND PATTERN AS: Pattern No.2, make sure to select Pattern 2 on the MuRF so that you can hear your pattern as you make changes to it.

Lastly, note the FREQ switch to the right of the Pattern Number button. This changes the filter voicing of the MIDI MuRF, and it also selects which group of patterns you can send to: 2-12 (BASS), or 14-12 (MIDS). In this way it acts like the FREQ switch on the physical MuRF, which controls whether the Pattern Select knob on the MuRF is selecting from the Bass or the Mids pattern bank.

The menu bar in the top middle section of the Pattern Editor has buttons for **FILE**, **EDIT**, **FUNCTION**, and **HELP**.

### File Menu

**Load/Save Single MuRF Pattern:** Allows you to save patterns to your hard drive, and restore saved patterns to the Editor. Loading Patterns from this menu loads only the pattern steps and the LFO Rate (LFO Rate is saved as a part of each Pattern). Panel Knob settings do not change when you load a Pattern. Knob settings are saved and restored from the FILE menu on the MuRF Panel screen.

**Import/Export Pattern SysEx file:** You can Export a SysEx file which you can use to load a single pattern into the MIDI MuRF without needing the MuRF Editor software. The SysEx file can be sent to the MuRF using any computer software which is capable of sending MIDI SysEx data. The SysEx file will always load the pattern into the memory location that was specified by "SEND PATTERN AS" at the time the SysEx file was saved. Import Pattern SysEx file will load a previously-saved SysEx format pattern into the Editor.

**Playlist:** Opens a playlist where you can queue up a list of patterns for easy access.



**Preferences:** Shows a list of useful keyboard shortcuts, and allows you to change some mouse-behavior options for on-screen knob adjustments.



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**Close / Quit:** Close closes only the Pattern Editor; Quit exits the program and closes both the Pattern Editor and the MuRF Panel.

### Edit Menu

The Edit menu allows you to copy and paste patterns, and provides controls for how patterns are sent to the MIDI MuRF.

AUTO SEND automatically sends the pattern to the MuRF every time you make a change to the pattern. The MuRF will wait until the end of the current pattern row before switching to the new pattern, so it does not lose the rhythm. With Auto Send turned on, you can edit patterns in real time and hear the changes almost as soon as you make them.

If you would prefer not to hear the changes until you are finished editing, you can turn off Auto Send. In this case, use the EDIT menu option "Send Current Pattern" to send the edited pattern to the MuRF when you are ready to try it out.

### Function Menu

This menu contains useful shortcuts and functions you can use while creating patterns. CLEAR ALL resets the Pattern Editor to a blank pattern. "8 Steps" to "64 Steps" sets all pattern rows to the selected length. "Invert" sets all OFF steps to ON and vice versa, while "Flip Channels" flips the pattern upside down (pattern row for the highest frequency band is moved to the lowest frequency band, and so on). You can also load any of the MIDI MuRF Factory Preset patterns from this menu.

### Help Menu

Provides version information and a link to the [Soundtower.com/murf](http://Soundtower.com/murf) website.

That's it; all the info you need in order to start sculpting unique MuRF patterns and making your own filtered grooves. I hope you enjoy the MuRF Pattern Editor, and that it brings new life and animation to your music.

Best wishes,

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