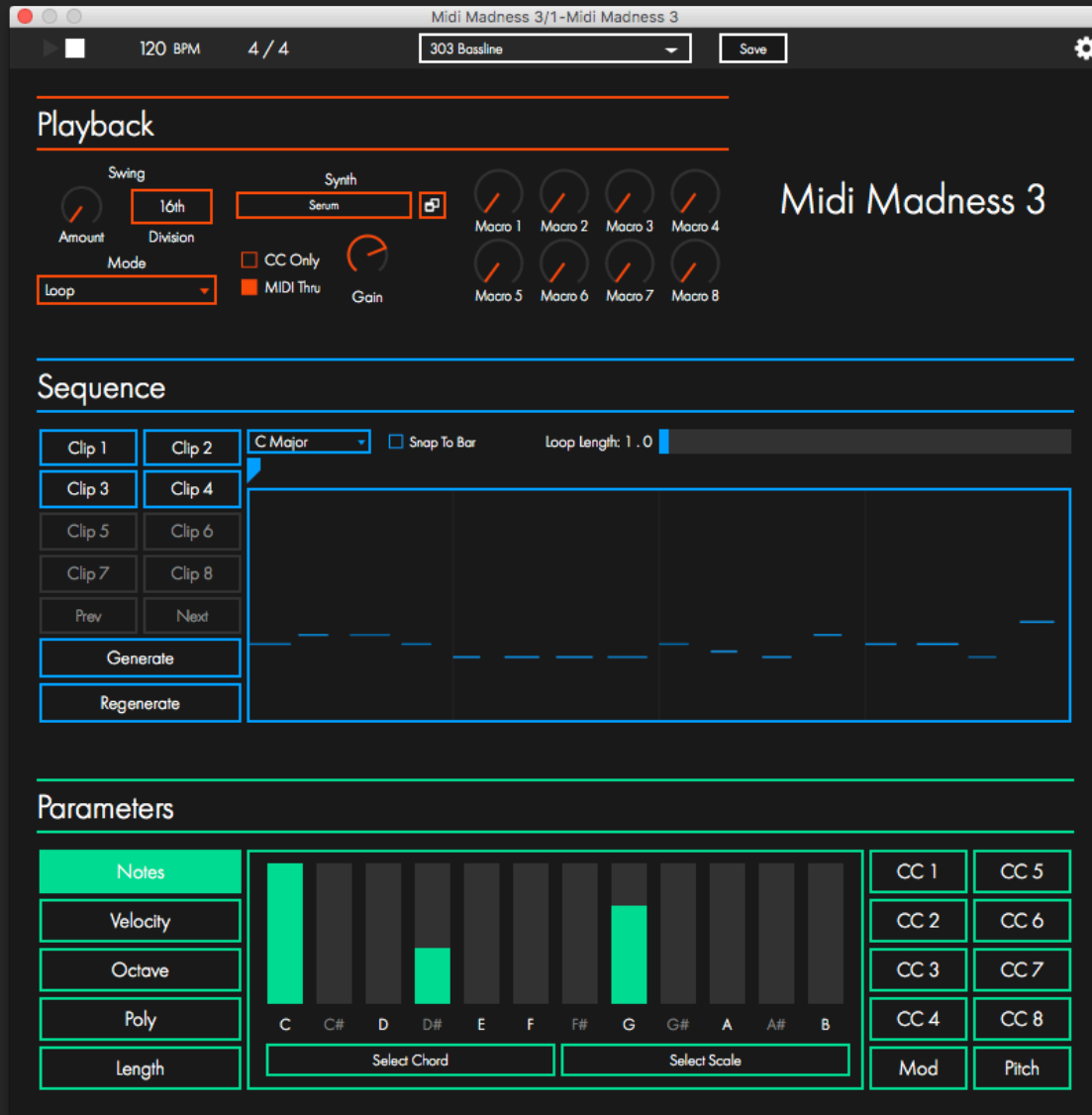


# Midi Madness 3

Owner's Manual



V3.0.2-RC1

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# Introduction

Thank you for downloading MIDI Madness 3. We hope you find this manual useful in discovering how the software works, and how you can boost to your creativity using it.

MIDI Madness is an algorithmic melody generator, designed as a VST and AU audio plugin. It can be used to create short melodic phrases or longer lines that follow a chord progression. It can generate the notes for basslines, leads, pads, arpeggios, or whatever other uses you may have for its output.

MIDI Madness creates MIDI notes and controller data for you to use as you wish. You can route the MIDI to another plugin, drag and drop a loop to your DAW, or host a third party instrument directly in Midi Madness. Midi Madness also has various features for using it live.

# Installation

To install Midi Madness, simply run the installer for your operating system, and follow the instructions. For Windows installations, you can install the 32-bit and/or 64-bit VST versions into custom folders. For Mac OSX installations, you can choose the VST/AU/AUFX versions, which are installed in the default location for plugins on OSX (*/Library/Audio/Plug-Ins/*).

# Registering

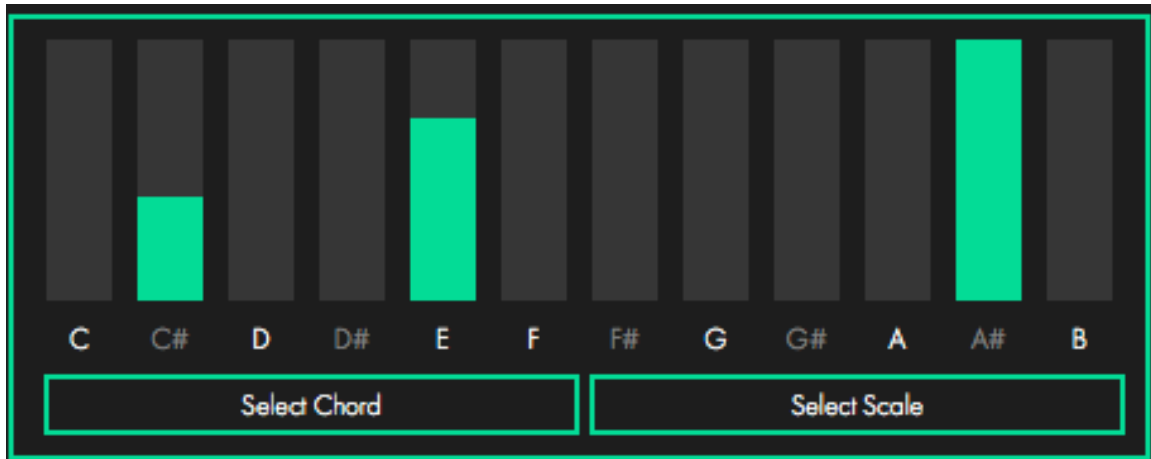
Midi Madness requires registering before all the features are unlocked. The demo version will only allow editing 1 chord, will expire after 28 days, and does not allow saving presets.

Once you have bought the plugin, a registration email will be sent with the details you need to register to software. To register Midi Madness, click the settings icon at the top right of the screen, and enter your name, email and serial number in the 3 boxes, and click the 'Register' button. Make sure you enter the details EXACTLY as they were given in the email. You may find it easier to copy-paste from the email.

# Probability Concept

Midi Madness generates notes and events based on selected probabilities (or probability weightings). You, the user, select the likelihood for something to happen; then Midi Madness makes decisions based upon your choices.

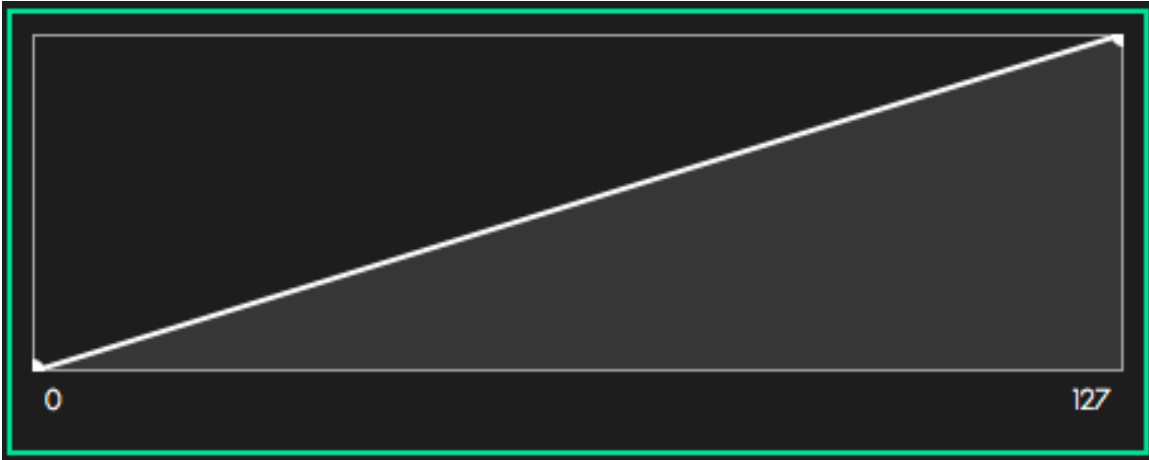
For instance, you may be after short repeated phrase to sit in a piece of music. The particular section you have in mind uses only the unusual chord of 'A sharp diminished. To let Midi Madness know this, you would indicate that the notes A#, C# and E should be available to be chosen. This is done using one of the available modules (in this case 'Notes').



As you can see, of all the notes available there, only A#, C#, and E have bars against them. This means that Midi Madness will only choose one of those notes when looking for a note. Notice that each of the notes has a different height bar. This indicates the relative probability of the notes being selected. The 'A#' has the highest bar, and so is more likely to be selected than the others. If you looked at what Midi Madness generated for this chord, you would expect to find more 'A#'s, followed by 'E's, and the least occurring note would be the C#. The note length section uses a similar format to select probabilities.

Once you know which notes and lengths you want to use, you then need to make a decision as to which velocities these notes are going to use. A different type of probability selector is used to do this.

The image below is the velocity selector window. This works similar to the notes screen above; the higher the curve in a particular location, the more chance it has of playing. In the image below, loud notes (127 velocity) are the most common, whereas the quiet notes are played less frequently.



Midi Madness uses these probability controls to allow you to select everything about the choices it is allowed to make – which notes, which octave, the duration of the notes, the polyphony, if there are to be rests, how loud and how accurate to the beat. Midi Madness can also be used to include pitch-bend and Continuous Controller (CC) events to twist up your sound. The controls are covered more in the ‘Controls’ section.

## Using Midi Madness

### The User Interface Overview

Midi Madness has an interface that attempts to present all the controls in the simplest and most manageable fashion possible.

The screen is divided into 4 main sections; the ‘Top Bar’, the ‘Playback Section’, the ‘Sequence’ section and the ‘Parameters’ section. Each section provides controls for a different part of the software. The section where you edit the probabilities of Midi Madness’s algorithm is the bottom ‘Parameters’ section. It contains 15 buttons to switch between the

different screens, and the window showing the selected function.

## Controls: Sliders

There are 2 types of sliders in Midi Madness – a rotary, and a linear slider. You can change the position of the linear sliders by clicking anywhere in the range. Rotary sliders are used by dragging the slider up or down.

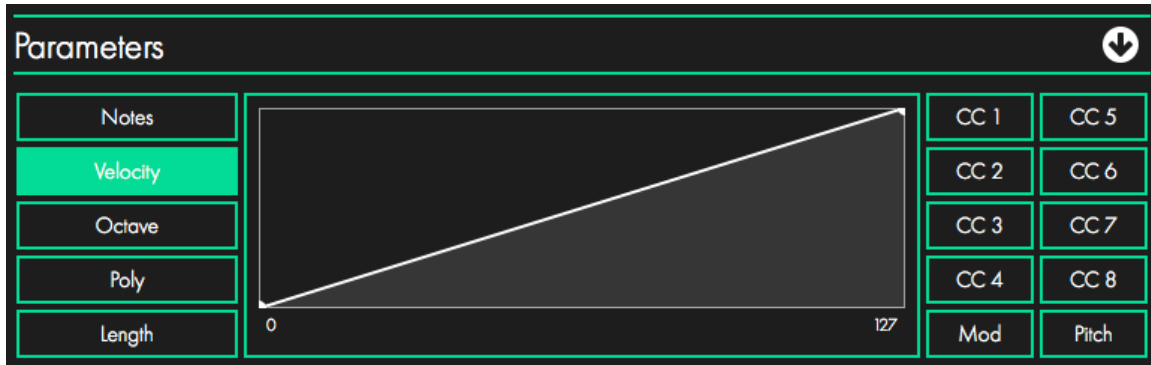
## Controls: Envelopes

Curves allow you shape a probability curve as you wish. The curve follows the path of the solid white nodes, and travels horizontally if there are no more nodes. cc

Dragging a node will move its position, whereas dragging the curve will move the whole curve left or right. If you right-click on a solid node, you can delete it from the drop-down menu.

Right-clicking anywhere in the envelope window will allow you to create a node at that position, as well as save or load a preset curve. You can have as many nodes as you wish, but there must always be at least one node.

# Parameters Section



The parameters section allows you to set all the probability weightings for the generated MIDI. This section is divided into many different windows, which can be selected by clicking on a button.

## Notes

The Notes window allows the user to specify the probability of a particular note being chosen during the generation process. The higher the value of a note, the more chance that note has of playing.

Clicking the 'Select Chord' and 'Select Scale' buttons open a menu to select from a list of different chords and scales respectively. The generator uses these note weightings in conjunction with the Octave module to determine the actual MIDI note chosen.

## Velocity

The velocity window uses a simple distribution curve to allow the user to select how hard the selected notes are played. The x-axis gives an indication of the level the selected curve covers (from 0 to 127 – the standard MIDI velocities).

In the image above, the velocity 127 will be the most common.



## Length

The length window allows for the selection of the note lengths, performance note lengths, and the chance of a rest being played. Midi Madness allows for standard note lengths from demisemiquavers (32<sup>nd</sup> notes) through to semibreves (whole notes), with dotted and triplet versions of the notes in between.

The staccato/tenuto control allows the user to select the performance length of the note, i.e. how long the note is actually held for. The staccato slider is marked as a note with a dot underneath, and the tenuto is the note with a line underneath. A staccato note will be played shorter than the note's actual length, and the tenuto will play for the whole note's length.

The range for each can be selected by clicking and dragging on each slider, and the generator chooses a length between the 2. If the staccato slider is at the bottom, and tenuto is at the top, then all notes will be a random length, but if both sliders are at the top, then every notes will be held for it's full length, resulting in a legato phrase. The sliders will adjust if it goes beyond the boundaries of the other.

All different lengths of note can be selected, whether it be sharp and choppy (both sliders low), smoothly joined up (both sliders high), or a mixture (sliders opposite).

The rest slider (shown as a crotchet rest, but applies to any note length) is used for selecting the chance of a rest being selected. When the generator creates a note, it picks a length, and then looks at this slider chance to see if it should play the note. This control can be quite sensitive, and it is worth experimenting to find what works well for what you are hoping to achieve. For instance, if the control is raised above 50%, then most of the generated melodic fragment will actually be empty space, since there is a greater than 50% chance that Midi

Madness will select a rest of whatever metrical length selected.

## Octave

The octave window allows the user to select what range the generated notes are to cover, from a single octave, to the full 10 octaves that the MIDI specification covers. During the generation process, when an octave is selected, it is combined with the note choice to make the output note event.

The numbers along the bottom show the MIDI note name octave number. In the image above octave 2 will be the most likely octave to be played; octave 4 will hardly be used whereas octave 6 will not be used.

## Pitch Bend

The pitch window allows the user to determine whether pitch-bend modulations will occur during the melodic fragments, and the nature of them.

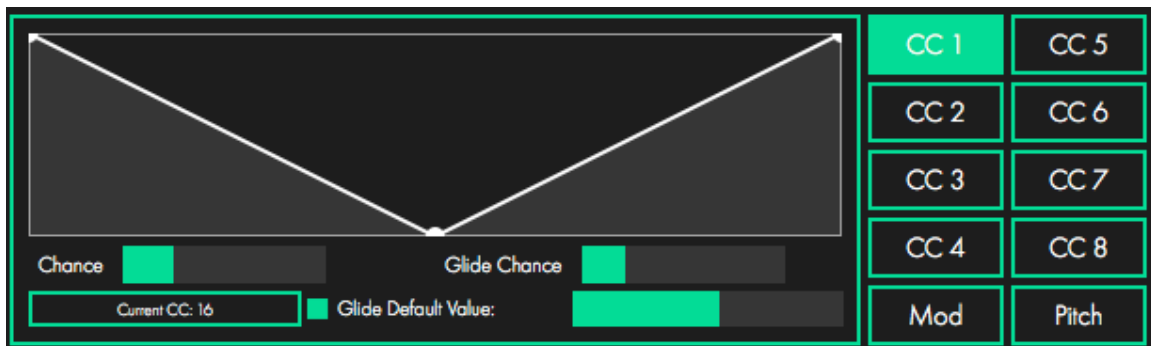
The envelope allows you to adjust the weights of the bend. Centre pitch is in the middle, and down and up are left and right respectively. The direction and depth of the bend can be chosen to be only up, only down, or a selection of either depending on the nature and placement of the curve.

The chance slider allows the user the freedom to choose how likely it is that a note will bend, from not at all (0%), to every note (100%).

The glide chance selects how often the pitch is bent rather than stepped. At maximum, every bend will gradually bend from one note to the next, whereas at minimum, it will always step.

**Note** – the pitch-bend events generated by Midi Madness follow the MIDI specification, but can make no guarantee that the third-party instrument plays the notes or will render them as hoped, this will depend on the patch selected to play, and the pitch bend range set within that patch.

## MIDI CCs



Midi Madness has the capability to generate up to 8 different Continuous Controller events for each note, in addition to modulation and pitch bend events.

The CC windows are the most complicated module within Midi Madness, and allow for control over the final value of a CC modulation, the chance of a CC being generated, the chance of a gliding CC, whether to reset to a given value when a new note is chosen, and if so what value to reset to.

The envelope allows you to adjust the weights of the controller event. For pitch bends, default pitch is in the middle, and down and up are left and right respectively. For CCs, the range is from 0 to 127. The direction and depth of the bend can be chosen to be only up, only down, or a selection of either depending on the nature and placement of the curve.

The chance slider allows the user the freedom to choose how likely it is

that a note will trigger a controller change, from not at all (0%), to every note (100%).

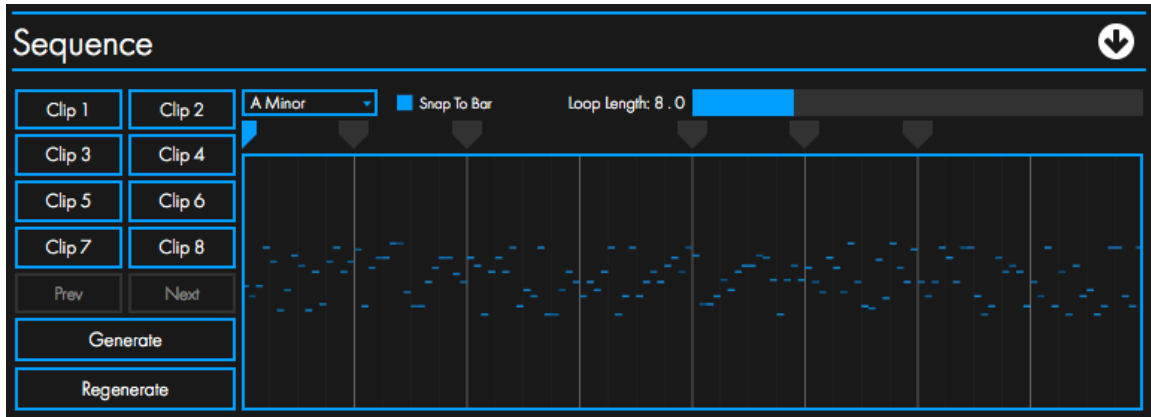
The glide chance selects how often a CC glides rather than steps. At maximum, every event will gradually glide from one note to the next throughout the length of the note, whereas at minimum, it will always step to a value at the start of a note.

The 'Glide Defaults' button is a simple On/Off switch that sets whether a CC should start its glide from the last value outputted, or if the glide starts at the same value every time. The slider next to this button sets the default value to glide from when the button is selected.

To determine which controller number a module uses, click on the 'Current CC' button and select your chosen CC number. All 128 standard CCs are supported, but it depends on patch selected on the target synthesiser/ sample player/ media player how the CC events are rendered.

It is possible to send a CC event in order for a synthesiser or sample player to 'learn' a CC number that the user wishes to use. When the host's playback is stopped, then clicking the 'Send MIDI Learn' option will send a random value out. Simply activate MIDI learn in your instrument and click this button, and the CC should automatically control the parameter.

# Sequence Section



The sequence section is where you can generate loops, set up the chord sequence, and store clips to use later.

## Loop Length

You can select the loop length to however long you want your riff to be by adjusting the slider. Midi Madness will generate anything from 1 beat up to 32 bars. If you want a sequence that is not a full bar, then you can untick the 'snap to bars' button to adjust the length in beats instead of bars.

Unregistered copies of Midi Madness do not allow the number of bars to be altered from the initial 1 bar.

## The Sequence Window

The sequence window is the area that displays the generated riff in a familiar 'Piano roll' fashion. After using the 'Generate' button, this area is filled with the notes of the sequence. Note velocity is shown by colour; the darker the note the lower the velocity.

Clicking and dragging from this area will cause the notes shown in the window to be exported as a MIDI file, which can be dragged straight into your DAW or your computer's file manager. You can also store this in a clip slot by dragging it in. You can also drag MIDI files into this window.

The window also shows a line that indicates the currently playing position of the riff.

## Clips and History

The clip slots let you store generated loops within the plugin. Simply drag and drop from the sequence window to a clip slot to save it. To load a clip, drag the clip slot into the sequence window. The next and previous buttons will let you run back through the generated loops.

## Chord Sequences

Midi Madness allows for multiple note weightings to be used in to generate a riff, giving the ability to use chord progressions. There will always be one note weight at the very beginning of the clip, but more can be added afterwards. The chords are shown as white symbols, with a point indicating the time in the sequence. Additional chords can be added by right-clicking in this section, and selecting the 'Add Chord' menu item. You can also clear all the chords from this menu.

Chords can be dragged horizontally to rearrange the timing. The chords will snap to individual beats or bars. Note weightings can be edited using the notes window, and when a new chord is created or selected, that chord's weights will show in the Notes tab of the Parameters section.

## Song Key

The song key option lets you choose the key of your song. This doesn't affect playback, however the 'Select Chord' button in the Notes tab will show you a list of suggested chords for this key.

## Generate

The large 'generate' button will, when clicked, create a new riff, switch to the sequence window and display it. If you have routed the MIDI output to a synth (See 'Live Play' section), it will automatically playback the riff in sync with your host. If you want to use this riff, you can now drag and drop the sequence to your DAW, desktop or anywhere else you can drag a MIDI file, or alternatively keep playback from within Midi Madness.

# Playback Section



The Playback section allows you to manage the different ways Midi Madness plays back the MIDI.

## Playback Modes

There are 4 playback modes to choose from:

- *Loop* mode plays the generated sequence back in time with the DAW.
- *Freestyle* mode will generate on the fly, using the parameters set in the Parameters section.
- *Trigger* mode will use incoming MIDI to trigger generation. Trigger is basically for re-pitching incoming audio to match the chords set in the Sequence section.
- *Off* will turn all generation off. No MIDI will be generated.
- *CC Only* mode will create controller values only, no notes will be created.



- *MIDI Thru* will allow any incoming MIDI to go straight through to the output. Using this, you can overlay your own MIDI with generated MIDI, or have Midi Madness generate CC data for your incoming notes.

## Swing

The swing slider lets you adjust how much playback is swung. Set fully to the left plays everything straight, whereas set fully to the right sets playback to be dotted. The division button lets you select between 16<sup>th</sup> notes and 8<sup>th</sup> notes. Swing affects all MIDI, both generated and incoming.

## Synth

The synth section is where you can host your own VST synth. Midi Madness 3 doesn't require complicated routing to work. To load the list of plugins, open the settings window by clicking the cog at the top right, and clicking the 'Scan' button. If you have installed your plugins in a non-default location, you can set this location here.

To load a synth, click the load button in the synth section and select your synth. Playback will now be automatically routed to the synth. You can open the synth's GUI by clicking the little button next to the synth name.

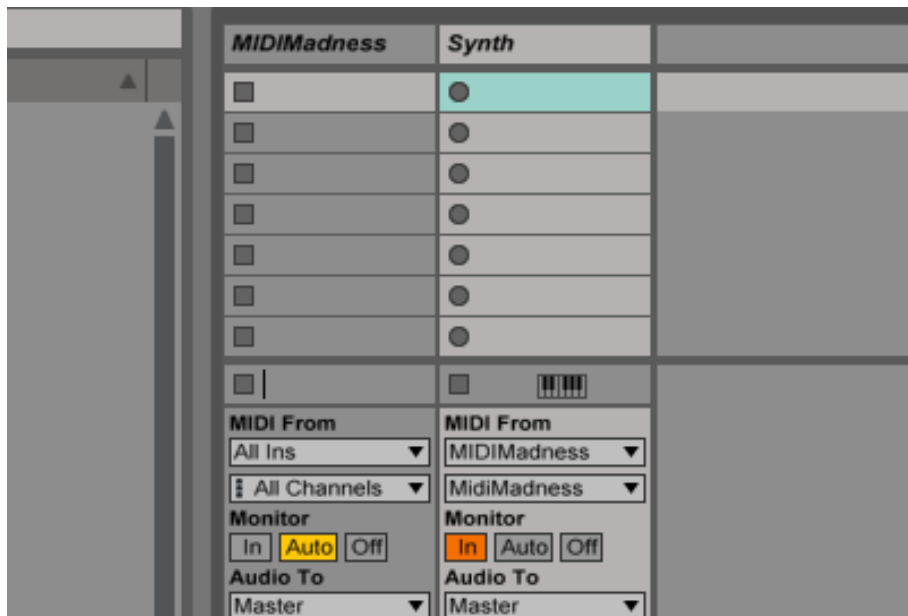
## Macros

The macros let you control the synth's parameters manually, rather than using the CC generator from Midi Madness. To map a parameter, right click on a macro slider and select map. Now go to the embedded synth and move the control you would like to map. This parameter should now be mapped, and will be automatable in your DAW.

# External Routing

Midi Madness can also output MIDI from the plugin. The VST version will output all MIDI out of a MIDI channel. This setup will be different for each DAW, but the general idea is for a MIDI channel to listen to the output of Midi Madness. You can see an example of how to route this in Ableton Live below.

The AU MIDI FX version can be loaded as a MIDI plugin. In Logic X, simply load Midi Madness in a MIDI FX slot, and all output will be sent to the synth loaded in the channel. Hosting a synth is not available in the AUFX version. Unfortunately, the standard AU version cannot output MIDI data.



# Acknowledgments & Legal

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Midi Madness was developed by Adam Rogers (Arctican Audio) based on a concept by Jim Urquhart (Midi Madness Recording Studios).

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