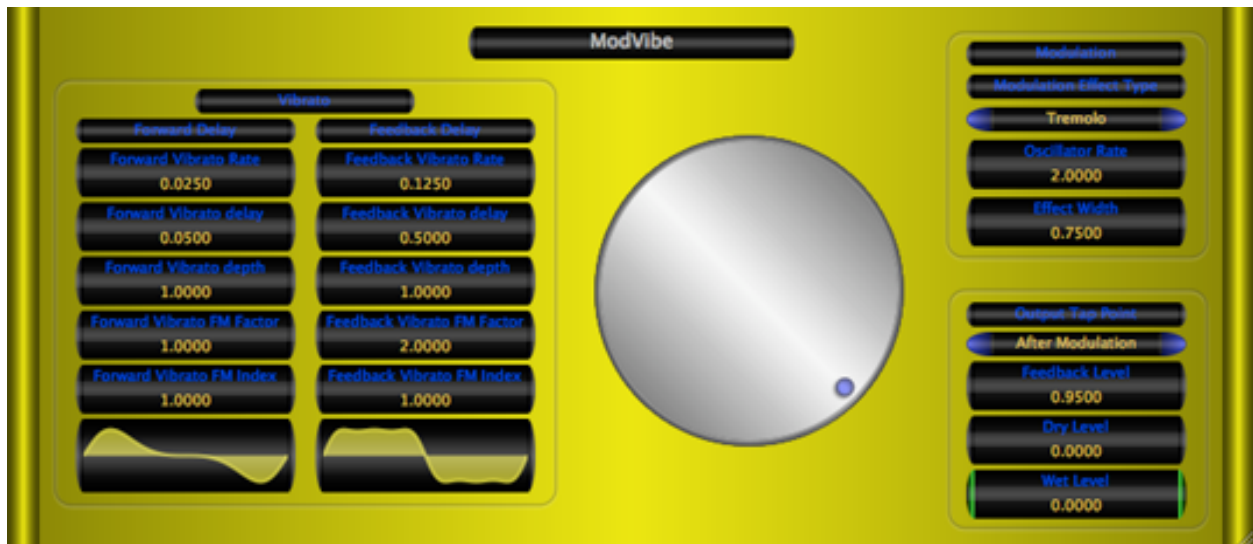


Music Unfolding ModVibe Audio Unit User Guide



Requirements:

OS X 10.6 or higher is required. ModVibe requires an Audio Unit (AU) capable host. A host that supports Cocoa user interfaces (UI) for AU's is needed. Please check ModVibe's operation in your host of choice for suitability before purchasing.

Installation:

ModVibe can be installed in any of the standard Audio Unit component locations. These are commonly `/Library/Audio/Plug-Ins/Components` and `~/Library/Audio/Plug-Ins/Components` (where "~" stands for the user's home directory). Drag `ModVibe.component` into the Components directory and relaunch your AU host software. The included presets also need to be installed into one of the standard locations (`/Library/Audio/Presets/MusicUnfolding/ModVibe` and `~/Library/Audio/Presets/MusicUnfolding/ModVibe`). If you already have a MusicUnfolding directory in your "Presets" directory, then drag the ModVibe directory into this location. If not, drag the MusicUnfolding directory that contains the ModVibe presets directory into the "Presets" directory.

Introduction:

First, a quick introduction to the editing controls for ModVibe. All controls are set using the same knob. Click the desired control readout to select and then move the knob to control. The active (selected) control is indicated by the green end caps. The knob works with a circular control motion. The closer to the center you are dragging the knob, the rougher the increments. Moving farther out makes the increments finer. You can even click the surface of the knob and drag out of the surface of the knob and then move in a circular motion if you want finer control. To set a parameter to an exact value, double click the parameter readout. This brings up a text box where the parameter value can be set exactly. Double-clicking the knob sets the selected parameter to its default value. The knob will act with a linear, logarithmic, or power response depending on the parameter that is selected.

The controls also support click-and-drag directly on the surface of the readout. Clicking-and dragging in a vertical direction changes the parameter values. Dragging in a horizontal manner causes the value to change ten times slower. The control behavior (linear, log or power) is the same as it is while using the knob for parameter control. In addition, hovering the mouse over the control and using the scroll wheel also changes the control value. If you have a mouse with a horizontal scroll wheel motion, scrolling horizontally changes the parameter value with 10 times finer control.

The colors of the parameter displays can be changed in the preferences/registration panel. To bring up the panel, click on the name tag/badge for the AU. Select the colors of your choice and then to see the new colors in effect, you must close and reopen the AU. The preference is applied in all hosts for a given user. Note that these color preferences apply to all of the Twister series AUs. Setting your color preference in one will apply this preference to all of the Twister AUs.

ModVibe is a delay vibrato with a couple of little features to mix things up. There are two delay units. The first is a forward delay and the second is a feedback delay. In between these two is a modulation unit to scramble, shake, sift and swirl the contents. The vibrato oscillators are independently set and can be shaped using frequency modulation.

The Sections:

Vibrato: The two vibrato sections are fairly straight forward vibrato units, except that the delay can range from a few milliseconds to 4500.0 ms. Between the two, that's a bit of delay. In addition, the vibrato can be up to 500.0 ms in depth. These two combined provide effects ranging from phasor/flanger and chorus to wild, extreme doppler shifts. The sweeps can be tailored to a high degree using the vibrato oscillator FM parameters. Let's take a quick look at the vibrato oscillators. The formula for the oscillators is $o(t) = \sin(f + M \sin(n f))$ where M is the "Vibrato FM Index" parameter and n is the "Vibrato FM Factor" parameter. Usually, these will be integers. But, they don't have to be. On the other hand, this is one of those cases where very precise values can make a big difference. Double-clicking the parameter readouts for the "Vibrato FM Index" and "Vibrato FM Factor" parameters will allow you to enter exact values. The presets have some examples of what various values will do.

Modulation: Modulation is post the forward unit and before the feedback unit. Several of the modulation effects only work when operating in stereo. When in mono use, choosing one of these will effectively set the modulation type to "None." The "Oscillator Rate" sets the speed of the LFO for the modulation effect. The "Effect Width" parameter takes values from zero to one. A value of zero causes the effect to do nothing. One is the most extreme setting.

Mix: The final section is the mix section. It includes controls for setting the feedback level, the output tap point and the wet and dry mix levels. The wet/dry mix levels are in decibels. The "Wet Level" parameter sets the amount of signal from the output tap point that is mixed into the final signal. The "Output Tap Point" selects the point that the wet signal is taken from in the effect chain. Changing this point can have some pretty dramatic effects.

Note: High feedback settings can cause the effect to go into self oscillation. But, the modulation unit can pull the feedback level down too. So, it needs to be able to go to 1. The final output is protected by a hard clip at a linear level of 1.2. (This is outside the bounds of normal audio output levels.) If you hear a harsh digital clipping, you have probably exceeded this level. Backing off the feedback level or the output levels will stop the clipping. This is not something that normally occurs in ModeVibe. It's just a just-in-case kind of protection measure.