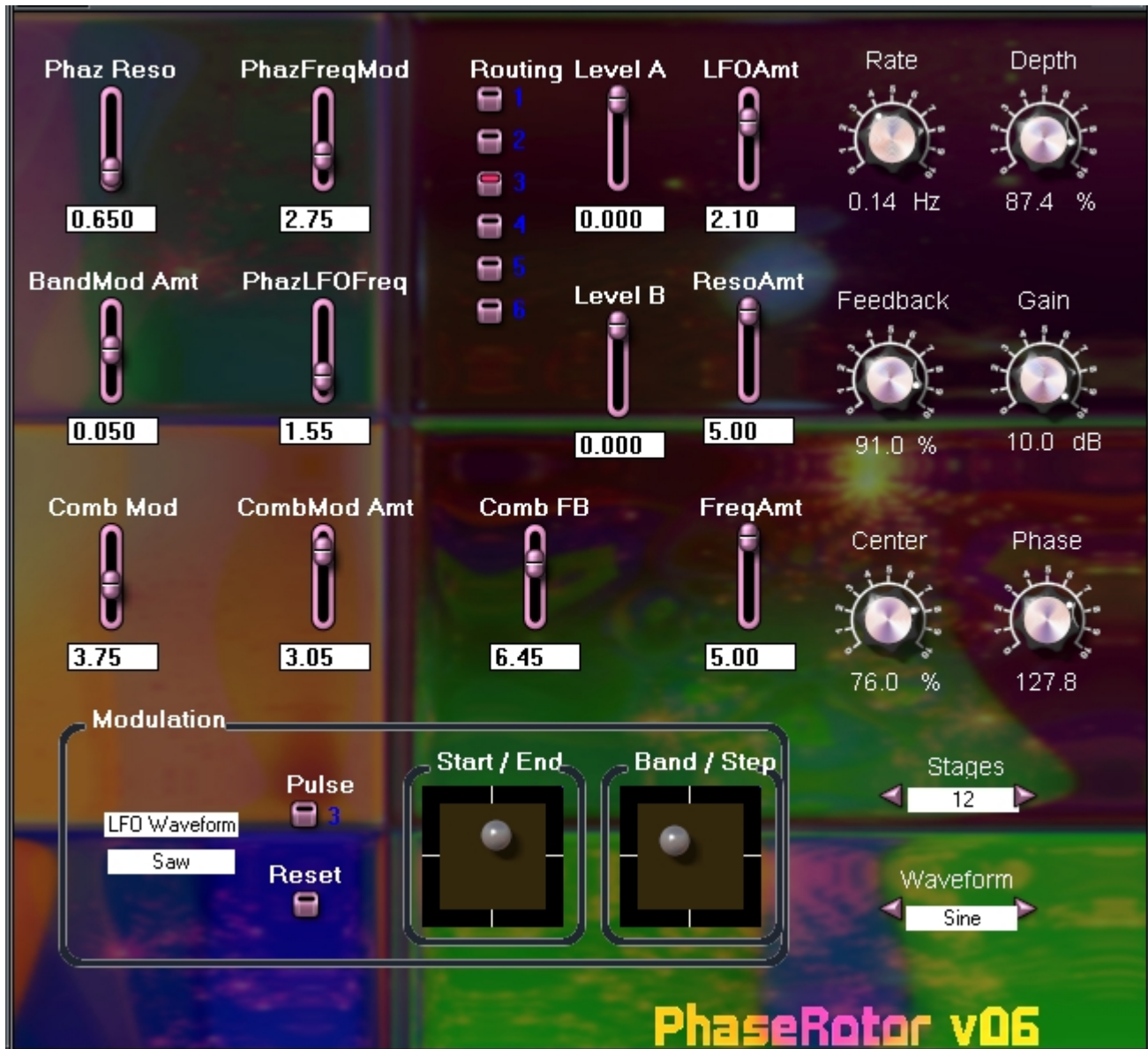


# PhaseRotor VST v06 Manual



This is what substitutes for a manual for **PhaseRotor v06** until the project is completed. If you tried v03 you may note drastic changes. Much of the sound of v03 is still possible with v06, but it is a very different beast.

This VST plug-in is **freeware** made by runagate.  
It is an **FSU effect plug-in** based on modulated comb filters, multiband filters and a stereo phaser.

This is an **alpha version** of this software!  
Therefore be careful with the gain knob, and don't expect it to be especially stable.

As such, use the provided presets.  
**And be careful** - it's entirely possible to create huge swaths of feedback and hurt your ears or speakers so use a limiter after PhaseRotor.

## Last time around I said in the Read Me file,

"Real controls, a pre-loaded default bank, and a GUI may or may not be coming someday, but use the presets and you'll get some nice sounds."

Well, this version has working controls, a pre-loaded bank, and even a GUI of sorts (mostly cobbled together from ArtVera prefabs - thanks!) and a background made in Gimp and paint.net (both excellent freeware).

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## Controls and signal flow

There's 3 main "level" controls:

Level 1, Level 2 and a Gain knob.

The gain affects the overall level of the output

The Level 1 controls a basically dry mix

The level 2 controls a Schroeder **Comb Filter** effect which uses very different settings from what it's typically used for - a reverb - though sometimes you'll something akin to a reverb from PhaseRotor v06.

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There's also 6 "routing" controls, as there is a half-assed multiband splitter inside, and the routing button choses between any of the six possible combinations of two of them at once. Two-channel stereo is maintained throughout, however.

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The silvery knobs control the multistage **Phaser** (chose between 2, 4, 6, 8, or 12 stages)

The rest of the sliders control either the modulation for some part of the internal signal flow or the amount of said modulation which is allowed to affect the processes.

The modulation is provided by a strange sequenced LFO.

Some of the sliders increase the level of modulation the higher you raise them, a couple work in the opposite direction.

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**Phaz Reso** - controls the Phaser's feedback modulation

**PhazFreqMod** - controls the Phaser's frequency modulation

**BandMod Amt** - controls the amount that the internal multiband frequency splitters' frequencies are modulated

**PhazLFOFreq** - controls the frequency of the Phaser's internal LFO's phase modulation

**Comb Mod** - controls the Comb Filter's internal delay time modulation

**CombMod Amt** - controls the amount of modulation the Comb Filter gets from the LFO

**Comb FB** - controls the amount that the Comb Filter's feedback is modulated

**LFOAmt** - controls the amount of phase modulation the Phaser's LFO receives

**ResoAmt** - controls the amount of modulation the multibands' resonance controls get

**FreqAmt** - controls the amount of modulation the multibands' frequency range receives

The 2 joysticks control the "start" (X axis), "stop" (Y axis) and "step amount" (Y axis on the second joystick) which are parameters of the sequence-driven LFO. The fourth parameter controlled is the bandwidth modulation amount for the multiband filters inside.

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Supposedly these joysticks should have a huge effect on the sound in real time. In practice for whatever reason they short out and have to be re-instantiated by pressing the "reset" button to tell the plug-in where you've set the joystick balls. This even happens when loading presets, **so when you load a preset or change the joysticks you should hit the reset button** to kick off the weird modulations. The "waveform" text box is just a label, and beneath it you can select which waveform the LFO is sending out to modulate the effects' parameters. This has a huge effect on the sound! Be warned. Lastly, **the "pulse" is what division of a beat the modulation's frequency is operating at**. Pulse waveforms and random don't work well at anything under a "3" pulse setting.

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I know I should be thanking a ton of people for all the help, knowing or not, as well as modules, prefabs and stiff to learn from but that'll have to await a final release. Thanks to de la Mancha for his forbearance in the face of the crazy avalanche of newbie projects I've sent him and to bobsled.

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**questions, comments, or other communiques are always welcome:**

*(as are presets you've made, and I'd love to hear any music you make with PhaseRotor)*

**[www.3amnoise.net/runagate](http://www.3amnoise.net/runagate)**