

# PERIMETERSOUND KLANGLABS RHYTHMIC TANGENT

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Alright, enough with the lawyers, you know how that goes. Welcome to Rhythmic Tangent. There's a lot going on here, but most of the effects in RT, are ones you've seen and/or used before. This is going to be more of a guide than a manual, just to kind of point out the more unusual parts of RT, and to maybe give you some ideas and pointers to get you programming your own patches for it.

## A SHORT HISTORICAL BRIEF

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Back in April 2006 Jeff Rhodes (Perimeter Sound – [www.perimetersound.com](http://www.perimetersound.com)) contacted Matias Monteagudo (KlangLabs – [www.klanglabs.tk](http://www.klanglabs.tk)) to make a plugin with certain useful features either not found in other plugins, or taking a standard effect and give it a new twist (you know)...Initially, Rhythmic Tangent was conceived as a bonus for Perimeter Sound loop sample sound library customers, the intention was to give the user a tool to further tweak the samples they had just bought, and also to offer a more attractive product. Obviously, that plan changed slightly, more on that later.

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As you can see from the original sketch, RT has changed a bit, and although it wouldn't change too greatly from the V2 sketch, (see picture above), many small changes were made, more in depth controls were added, and the layout was made much better. (Jeff never claimed to be a Gui designer, he was just scribbling in a rectangular box, trying to find a good combination of effects that hadn't been done to death already, and get some ideas down on paper ha-ha.) A few suggestions were made by beta testers, as well as Matias and Jeff emailing back and forth, to hammer out the final version of RT.

The first idea around this plugin was the Dual Octavers, which became the Octowarp, which got scrapped after some testing, (there were some minor latency problems, and ultimately, we just didn't feel at the time, that SE was really handling octave pitch shifting all that well). After that we moved

on to the Macro Filter, and the Bit Crusher, and were much more successful. From there, Matias tackled the "Filter Gater" section, which is a dual filter gater but not the common "Trance Gate", but more like something to experiment with and get cool patterns, it turned out so funny that Matias decided to add "shuffle" and things like "how many steps you want on each gate" in a drop box.

After that we decided to do a "Gated Delay" with more or less the same principle, but thinking about someone tweaking a knob that sends some audio to a send/return effect...Like in dub for example. (The original idea, was a dual delay, much like the dual tremolo, but Matias's gate delay idea seemed much more user friendly, and it matched the filter gates too, so we went with that instead.)

After that, well, we basically became crazy adding stuff, then removing more stuff in RT, making presets, manual etc. Until finally in mid 2007, we finished Rhythmic Tangent, then we decided not to use it

commercially and give it for free instead. Not because we failed in our mission, (we really like this creation), instead we decided to give it for free and enter it as a participant into the "KvR developer challenge" ([www.kvraudio.com](http://www.kvraudio.com)) community competition. Yes we are hippies from the future, as Matias feels the internet is all about sharing most of the time, and Jeff did not want RT to fade away and only be used by Perimeter Sound loop sample library customers.

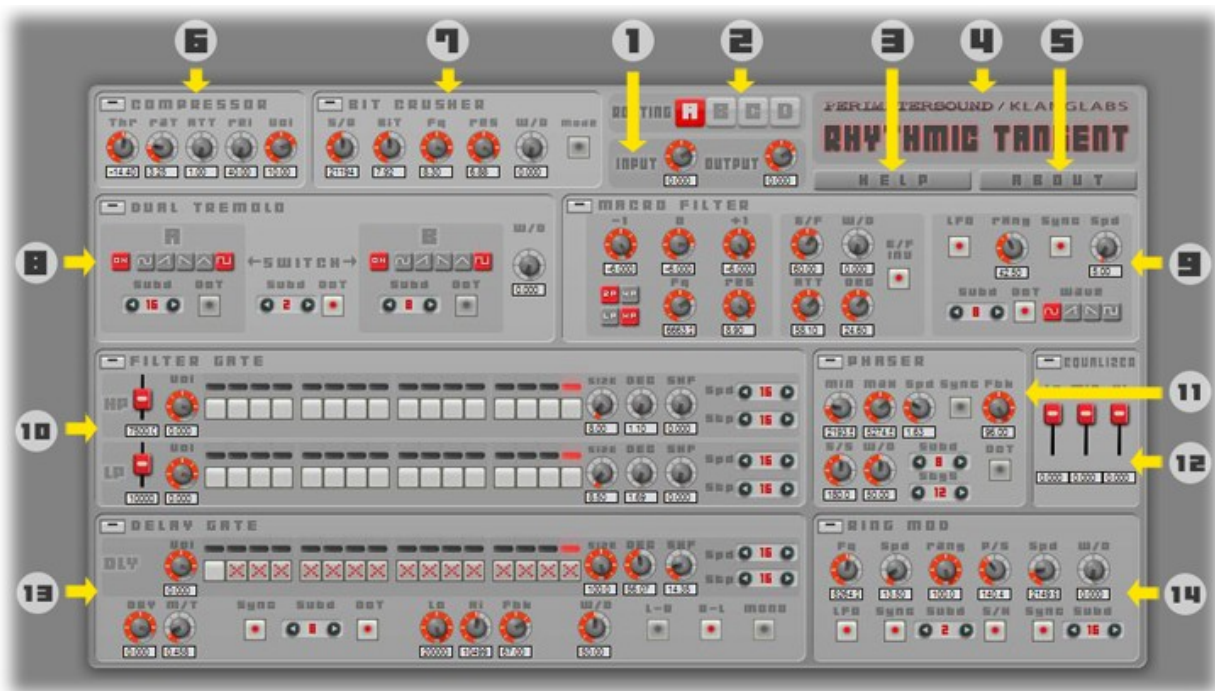


## QUICK INSTALLATION NOTE

- 1) Extract the "Rhythmic Tangent.dll" file into your VST plugins directory, (You probably ought to just add an RT folder inside your plug-ins folder, so you can keep the extra RT presets banks in it, and give it a place to extract the SE files to after the first time you run it.)
- 2) Please copy the provided TTF font into your "C:\\Windows\\Fonts" folder before running Rhythmic Tangent. (This is just so the graphics look correct and readable, it does not do anything weird to your Windows folder, and it can simply be erased later on if you decide you do not wish to keep RT.)

Sorry for all the install notes, but this is all very normal and basic stuff. We did not want to hassle people with an installer, so ya gotta place the font in the other folder yourself is the only difference really. :)

## MANUAL



## FIRST AND FOREMOST

Watch the volume levels people. We highly recommend that you do not use RT on tracks that are within 6db of the red, (ie = lowering your output volume, or track volume, to -6db might very well save your hearing as well as your monitors). This is the same for ANY multifix out there really, we just really, REALLY, don't want you to blast your ears, or blow a speaker o.k. :)



## ABOUT THE CONTROLS



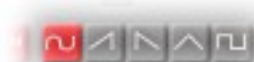
**Section button:** You'll find this one located in the top-left corner in every section . They turn on/off the determined section (or FX), thus saving CPU when that effect is not needed. When this button is RED it means is ON, otherwise is off. In the presets included, all non-used fx are turned off, rather than just set to a zero point, and we are just suggesting you do the same with any presets you make, to conserve your cpu power.



**Knob:** Just drag up/down to adjust, you can also manually enter numerical values on the bottom readout. You can actually override any value by typing it, (we normally put reasonable limits on some knobs, for example filter cut and res, but not on some things, so watch those values before you hit enter or click out of the value box).



**Slider:** Same as the knob, just click and drag up/down, same for the readouts as in knobs.



**Waveform Selectors:** Just some buttons arranged in a row to select the type of waveform you want in certain sections. Choices are: "Sine", "Ramp", "Saw", "Triangle", "Square" or "Pulse".



**Button.** You'll find this one all around this plug-in for example as "sync" (for LFOs) and to turn on/off determined feature inside a section, when is RED is ON...otherwise is off.



**Step buttons:** You'll find this one in the Filter Gater and Delay Gater sections. They just turn on/off each step in the 16 steps sequencer. The red X is to show you if a step is on or off (reversed for

Delay, just so it's easier to tell them apart at a glance.)



**Numeric DropBoxes:** Click on each arrow to move one by one into the cycle of available values (of course they vary on each case). Click the RIGHT arrow to raise one value unit, or click the LEFT arrow to lower one value unit. You can also click on the value itself and a drop down box displaying all possible values will show up, this is useful when you want to jump between distant values.

## DIFFERENT SECTIONS



**1) Input/Output volume.** It is what it says it is, used for helping you level out your sound after all the crazy RT effects are applied. Simple, useful, nuff said.



**2) The Routing area,** you can click on the word, Routing, and a pop-over screen will show you how the effects are going to be processed, in what order that is, when you select A, B, C, or D. Pretty straight ahead, but important to know, in case you didn't click on \*Help\*, which also tells you about the routing info screen, and a few other bits of info.



**3) The HELP button.** It displays useful and key information/tips for quick help.



**4) The logo section.** Click on it and you'll go to [www.perimetersound.com](http://www.perimetersound.com)

## ABOUT

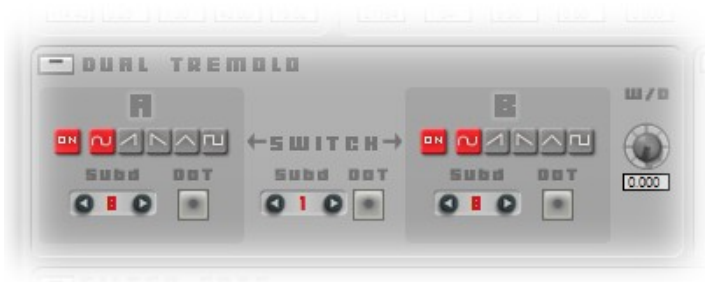
**5) About button.** Click on it and displays two handsome guys who are the creators of Rhythmic Tangent, alongside other credits and thanks.



**6) Compressor:** Despite the place where is located in the GUI (is that way for space reasons) the compressor is last in the sound chain. Note, this is a pretty basic compressor so don't expect a fancy limiter (it's not meant to replace your main compressor, it's like the e.q., just onboard for quick sound sculpting if you want it). The compressor helps a lot getting that sound more punchy if you want to, or to help even out your sound levels a bit.



**7) Bit Crusher.** The Bit Crusher has 2 \*modes\*. When the \*Mode\* button is on (red), then it is affecting all of the signal, but when it is off (gray) and in normal mode, it is affecting the signal more relative to the chosen frequency (FQ knob control). The idea here is simple, it's normally set to kind of peak around the chosen frequency, so you can get a more detailed or specific bit crushing sound going on. There is also a wet/dry mix knob, to help you dial in just right amount of grit also. Props to Matias for bringing this one to life so well, we think it's capable of sounding just about as good as any bit reduction type effect out there, and has more control over the sound than most of them.



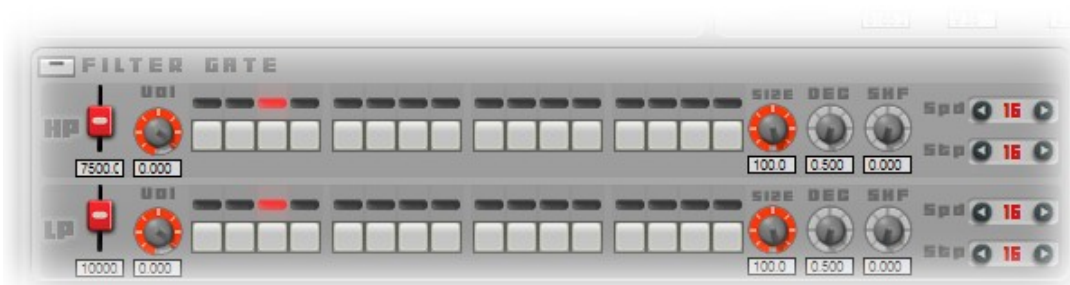
**8) Dual Tremolo:** This one is a bit unusual, and requires some explaining. You set 2 different tremolo effects up, with different settings (or you can shut one off, for a non-tremolo sound part of the time), and then you select a Switch time, for them to alternate between.



Perhaps you want the first 1/2 of something to have no tremolo, and the other 1/2 to have a fairly fast tremolo, easy enough, just turn off Tremolo A, and set Tremolo B for the speed/shape you want, then set the Switch control for 2-4-8, or whatever 1/2 of the length of your sound is, and there you go. It takes a few minutes and some experimentation get to get the hang of programming it, and you might want to avoid having it set to 100% wet, other than when first learning it. We usually leave it about 50%-75% dry, so only 25%-50% wet, to get a little wobbly/pump modulation sound going on. Once you get the hang of it, (it's probably going to take you 20-30 minutes to really master using just this effect, but it's worth it), you'll find it's a really simple concept that has many good uses.



**9) Macro Filter.** Macro Filter. Alright, let me just say there's a reason or two that some of the effects and controls for RT have been range-limited, and that was done for everyone's safety (think how not fun it would be to get a cool new plug-in that blows your monitors by the 4th preset eh), and for maximum overall usefulness. This filter is FAT, but it's made to not scream as much as some do. Because of the way it was designed, if we didn't control it internally, it would probably make your neighbors dog deaf on the high end, and literally rip your inner ear apart on the low end, so it had to be capped. As long as you avoid the most extreme settings, you'll be fine, and you should be able to turn anything into a stomping bassline, or am radio thin whisper on the further edges of the settings. The Macro Filter also has a simple built-in envelope follower, to get some looser and funkier filtering going on if you want, or just to add a subtle swoosh here and there. And it has a pretty cool LFO for programming in sweeps and wobbles. The \*SubD\* control, (just like we talked about in the Dual Tremolo section above, SubD controls when the tremolos switch), it's for choosing how many beats before it retriggers. In this case, the higher the SubD is set, the faster, and the lower the number, the slower the filter modulations, pretty easy to get the hang of.



**10) Filter Gates:** Alright, here's another unusual one that Jeff had a weird idea for that Matias brought to life as a filter (We originally had it in mind as a split set of E.Q. gates, but Matias expanded on that, and overall we decided we liked it this way). The idea here is that you have 2 static filters, HP, and LP, and you can set the roll off frequency for each, and gate pattern for each, separately. As well as setting the speed, SubD timing, and size/decay, and add some Shuffle if you like. NOTE - If you change the speed/stp (Stp = number of steps, much like the SubD controls on other effects, see Dual Tremolo and others), and they are not the same for each of the Filter Gates, you will need to stop playback, and start it again, for them to synch up, kind of obvious, but just to be sure you understand how to make things stay synched up. Note : If you lower the size/decay times by too much, you are bound to get clicking, so if you are getting clicking and not liking it, try extending either, or both, the size & decay times on the gates. This is not exactly your typical gate

effect in a way, so it's going to take a little time and patience to get it to do the more normal sounding stuff, but it really does more in the end, so stick with it. :)



**11) Phaser:** The Phaser effect is pretty basic, but this one can run synced or un-synced, and it can be set to restart it's sweep, via the SubD control at rhythmic intervals (even dotted note times). You can also use S/S, to offset the phase of the phaser sweep and get a wider sound going on. Note that you can set the max frequency lower than the min frequency, to get some radical sounds, but for the most part, just beware of that causing glitches and pumping, in case you dare hit \*random\* when using RT, which we don't really recommend personally ha-ha.



**12) Equalizer:** A simple 3 band Eq is included to give a final touch to your sound, very effective though, try it, you will like it. Hint = A simple way to beef up a patch, add a couple decibels to each of the 3 EQ bands, it's subtle, but different than volume or compression.



**13) Delay Gate:** Much like the Filter Gates really. The red X's are opposite though. For the Delay Gate, do NOT X out the points where you want the delay to happen, un-X'd squares = delay \*On\*. There's a LP and HP filter cutoff freq control, to tame frequencies, a feedback and mix control, spd, stp, decay, size, and shuffle controls like the Filter Gates, and lastly, you can set the delay for stereo Left to Right, Right to Left, or mono (center). There's also a DRY knob to feed signal directly

to the delay, useful when RT is set in routing mode “B” and filter gaters are just playing tiny clicks so you can get whole duration steps on the delay for example. This is a really cool effect, and with some experimentation, we believe you're going to find it might be the single most tasteful thing you can add to a percussion/drum track, you want funk/swing, well here's 16 steps of funk control.



**14) Ring Mod.** I (Jeff) was always a sucker for a ring mod effect, it just sounded weird and freaky to me, so we put one on RT. This one is about as robust as you are going to find, it's got bells and whistles, and then some. It borrows the time switching from the Dual Tremolos, and adds phase shift control, and S&H. This one just kind of begs for experimentation, so we are going to leave this kind of open. Blame Matias if you suddenly develop an unhealthy addiction to ring mods, he really added a LOT of controls to this one ha-ha.



## THANKS

It is also worth to mention that this little plug-in was made using “SynthEdit” from Jeff McClintock (Modular based PC application) and this project wouldn't be a reality without the kind help and “guru-level” guys that constantly develop 3<sup>rd</sup> party modules for SynthEdit. Many many thanks and respect goes to Dave Haupt (awesome modules), Chris Kerry (top modules too), Ugo, Kelly Lynch (superb job), E-Phonic, Attila Fustos, Rick Jelliffe and Scoof.

Sincere thanks to all of them, and thanks to you for using (or at least trying) Rythmic Tangent v1.0 we are sure you'll have fun and find RT good enough to use it some of your productions.

**Matias would like to thank:** Jeff of course, for having this nice idea, for his hard work, his confidence in me and his patience. Thanks to David Haupt and Kelly Lynch for their NICE modules. Thanks to Claudio Daniel Bertolin (Argentina) for his beta testing and help with presets. Thanks to Javier Blanco (Taurus Studio) for his kind help in the toughest moments. Thanks to Reina Herrera for her guidance and for being the most lovely person in my life.

**Jeff would like to thank:** Matias (<http://klanglabs.siliconemusic.com/> ) for helping make RT such a funky, gated, sqwonky reality. :) Ugo (Mr. Chris Sciurba - <http://www.ugoaudio.com/> ) for technical advice, and answering countless retarded questions. And my Perimeter Sound Arts loop sample library partner in musical crime, the one, the only, Todd Milne, for just being an all around musical influence in these brave new digital days we live in. Also, all freeware devs out there, you guys are constantly raising the bar and giving us new toys, and on that note, thanks to all the patch makers out there too, it's always nice to get 64 or more presets with a free plug-in, and someone's gotta do the dirty work eh. :)