

## THE DELAY LOOPER By BobF (Robert Foulke)

Hello gang,

This is a unique delay in that it is much more than just a delay, it is a stereo audio looper. Guitarists are probably the most familiar with loopers as the stomp box device you hit with a foot switch and it repeats over and over that riff you just played on your guitar. This looper is much more in that it has the capability of setting the START and END time of the delay time and then repeating that sound over and over. What does this mean, well say you had the phrase “my name is Bob” looped. By adjusting the start or end time knobs you could have it say “my name is”, “my name”, “is Bob”, “Bob”, and so on. Also many, many other effects can be had such as looped echoed delay, looped pitch delay, looped reverse echo, looped doubling, looped modulation effects, looped harmonies, looped ping pong effects, and even looped time effects.

Ok then let's discuss what the knobs and buttons all do. Starting at top upper left are the start and stop buttons. There is a left start/stop, a right start/stop, and also an S start/stop button (S for Stereo). You can start left or right looping independent of each other or start them at the same time with the S button. As an example for stereo looping, you would press the S button (turns green), say your phrase, play your guitar riff, synth riff, and so on, then hit the S button again to start it looping.

To the right of these buttons are L feeds R, R feeds L, and Parallel/Series buttons. These are left channel feeds right, or right channel feeds left, and parallel/series connects left channel output into the right channel's input. Buttons again turn green when activated. Next, to the right of these buttons is the “cross Fader” LFO, Cross Fader knob, Volume, and pan knobs. The Cross Fader knob reverses left channel for the right channel or right channel for the left channel, and the LFO can modulate this. The pan knob just gives you all of the left channel or all the right channel unless you have the mix button selected (little white button below knob). Volume is output volume.

Below the white line is the Left channel controls and below the next white line is the right channel controls. As they are identical, I will only cover the left channel here. The start and end knobs (Knobs with green markers) can take a little time to learn. As an example again let's just start with a phrase like I did and just say “my name is ‘name’ “(your name). Set the start knob to 0 (0 to 10) and the end knob say to 1 or so (also 0 to 10). Press the S button (stereo start/stop) say your phrase and then press the S button again. Now you can play with the start and end knobs to get a feel for how they work. Notice the left and right channels are independent of each other, if want left and right control the same, press the “Sync L & R” button. This button allows the left channel start and end knobs to control both the left and right channels simultaneously. Note there are readouts (in yellow) in Samples and in Seconds. There is approximately 3 minutes of loop time. The key here is to just experiment a lot! For instance you could loop on the left channel (left start/stop button), “my name is”, and on the right channel (right start/stop button) “ ‘name’ “. You can also have multiple sounds on the same loop. As an example say you have looped “ Happy birthday” and it was 2 seconds in length. You could now then move the start knob past that loop time and do another, such as “ to Jonny” and so on till the 3 minutes is used up.

Below the Start and End knobs is a standard delay with feedback. The little white button labeled D/P is either “D” for delay feedback or “P” for pitch feedback. Also included is a pre/post delay button (little white button left of delay knob). This allows you to add a delay to the loop (pre delay) or a delay to the output from the loop (post delay). Also note the feedback can be inverted via the “Invert Feedback” button.

Next to the delay is a knob labeled “Speed”. This can be used alone or in conjunction with the “Pitch” control knobs. There are two pitch controls, Pre Pitch (upper knob and buttons) and Post Pitch (lower knob and buttons). The two pitch buttons are “Semitone (left) and Reverse audio (right). Now back to the “Speed” knob. This will change the relative speed of the looped sound (time stretching). The knob is set for very fine increments for finer tuning and 1 is the normal setting. There is also of course a pitch change, but this can be corrected with the Pitch controls knobs thus giving you a pseudo time stretching/shrinking effect. The pitch knobs can also of course be used by themselves. The Pre Pitch, pitch shifts the looped sound while the Post Pitch Shift acts on the output of the looped sound. The little white buttons to the left of the pitch knobs are bypass. Sometimes even at a zero setting there seems to be a small audible effect on the sound.

To the right of the pitch knobs is a standard LFO. As set it is modulating the Pre/Post Delay, but if you select the small white button labeled “Speed Mod” it will modulate the Speed.

To the upper right of the LFO is a filter that acts on the final output. It can be used to soften the sound, remove some lows or highs, and so on. Standard options are low pass, high pass, band pass, and so on in various configurations, Butterworth, Moog, and so on.

Below the filter is a Compressor that acts upon the incoming stereo signal, but can also be bypassed via the little white “ByPass” button.

Down towards the bottom is an orange button, this is the “Kill” audio button. Useful when feedback or lockups occur. An example is when looping in stereo and you have both L to R, R to L set, and the pitch not bypassed.

To the right of the “kill” button, is a standard stereo output level meter.

Last at the bottom left is the Preset manager. I have NOT included a lot of presets as this Delay Looper requires a lot of hands on while you are using it. As example would be after a loop is created changing the Start and End times.

Have fun, I a sure there is a lot more to be discovered.

P.S., Many thanks to Martin Vicanek and Spoog (Rex) for their support and great modules that they supplied. Also if I have forgotten someone’s module, thank you for it.

Please if you make any changes PLEASE contact me as I would really like to see what you have done!

