

Klee Operational Tips

This is a guide to help you guys get used to operating the Klee Sequencer once you get your proto's up and running. These are more or less guidelines or helpful tips that I've picked up through working with the thing for nearly a year now.

1. Start off with minimal settings for the programming pots. In fact, you might first start with all of them set to 0 and slowly experiment with combinations of one or two pots with a given pattern. I find, for some reason, the 1V range is the easiest to program a nice Klee voltage pattern. With the ranges of 1V and below, you can crank certain pots full on or full off. Try doing that, but select one or two to set somewhere in the middle while listening to the sequence. Often, you'll be surprised how a certain pot can change the whole texture of what's going on.

2. The patch you use with the Klee makes a big difference in what it's doing. I normally will start off with two oscillators on two different voltage outputs, and use the gate bus output to control the EGs that are controlling a filter/VCA the oscillator is going through. I will normally play with the pitch of the oscillators to find a range that works best with what's going on.

3. Go easy on the gate bus settings. I rarely ever use more than two switches set to gate bus 1 or gate bus 3 - the pattern bits will normally take care of how many gate/triggers you get out of it. Too many bits or gate bus switches to 1 or 3 will eventually stop gate bus 2 from producing anything. I usually set the EGs for short, percussive notes initially so I can hear exactly what the gate bus is doing. Freely manipulate which gate bus switches you have activated - with short notes, the perceived pattern can vary quite dramatically depending on which stages are controlling a gate bus. Experiment with merging and unmerging a gate bus. Play with the attack and decay times of the ADSR.

4. When you add a second voice, play with the initial frequencies of both oscillators, listening by ear to how they interact within the pattern. One very effective method of playing the Klee sequencer is to control a VCO with the both the Klee and a V/Oct keyboard. You can easily listen to different musical intervals doing this, and find certain intervals that harmonize well, which you can form into a composition. Remember, if you have perfect intervals set on the pots, this doesn't mean they will always jibe musically together - often the gate bus can be used to extract coherent sequences out of two voices by blanking the note you don't want to hear. The Klee is very easy to program with short percussive notes. It's more difficult, but not overly so, to get slower, longer overlapping notes to agree.

5. Same with the third oscillator.

6. Play with how you have the gates and triggers routed - I often like to patch the gate from, say bus 2 to an EG, while triggering it with the trigger from a different gate bus. This can create really cool rhythmic variations within a voice. Don't forget to try just

simply trigger the EG without a gate or gating the EG without a trigger. Play with the PW of the clock signal.

7. Once you get a good combination of pot settings going, write it down for future use. Also, switch to the other voltage ranges and listen to the effect - it may be very cool.
8. You'll find that most of the time, you may have between four and eight pots total adjusted. While a pattern is playing, you can often vary things quite nicely by intermittently turning a pot set to 0 to some other setting and back. Same goes with a pot that's maxed out in the program - you can easily return to the original position once you've twiddled it during a sequence.
9. Try running the same VCO through two different EG/VCF/VCF chains, each controlled by different outputs of the gate bus. This can create some great sequences even though they're derived from the same voltage output. If you have a mixer, run the triangle or sine output of a VCO straight in and mix it in and out - you'll find the effect is very pleasing as the two outputs interact - one may be intermittent due to the gate bus, while the other is smooth and flowing. You can do the same with a more harmonic waveform, but you may want to run that through a filter.
10. If you're controlling a VCO from output A, try controlling the cutoff of its filter with a different output (can be quite funky, especially with high resonance).
11. With a set of "golden" pot settings, try different patterns. You can program them manually, but I find sometimes different manipulations can provide inspiring variation to the pattern as well: Try flipping these switches *briefly*: Random/Pattern, 8X2/16X1, Invert B. This shuffles the bits and provides new illumination to the same pot settings. Sometimes I'll have a nice setup on the pots going for weeks, but never have anything sound the same through them. While you're programming the pots, you might want to flip the pattern around. One pattern may sound like ass, but the next may jump out and grab you.
12. Once you have a cool pattern going, slow it down and speed it up - you'll hear all kinds of variation and hopefully inspiration from what you're listening to.
13. If you find a cool pattern with the random flipping mentioning above, stop things, and program that pattern in with the pattern switches. You can then deviate from that pattern using the switch flipping, but always segue back to the original by punching the Load button.
14. Force yourself to go to the 4V range and experiment there - it's a more difficult range to program in, but sometimes the most fantastic patterns will emerge there. Usually, you may find you have no more than four pots programmed (depending, of course, on the bit density of the pattern).

15. This helps me: while you're programming, always keep in the back of your mind how you would use what you're listening to.

16. Very, very important: Always remember the gate bus is every bit as important as the voltage pattern itself, *if not more so*. In nearly all of the pieces I've created with the Klee, I've always been amazed by how bland or even atonal the straight sequences can sound when running a VCO continuously with the voltage outputs compared to how it sounds with the gate bus calling the shots via EGs. The gate bus is the director of the Klee sequence. It does this by syncopating the notes, exposing certain notes at certain times, shining a light on only portions of the pattern at the right time. Have you ever seen Julia Roberts without makeup and then with makeup? That makeup is the gate bus of Julia Roberts' face.

17. **A digital, or even analog, delay and reverb are the Klee's best friends!!**