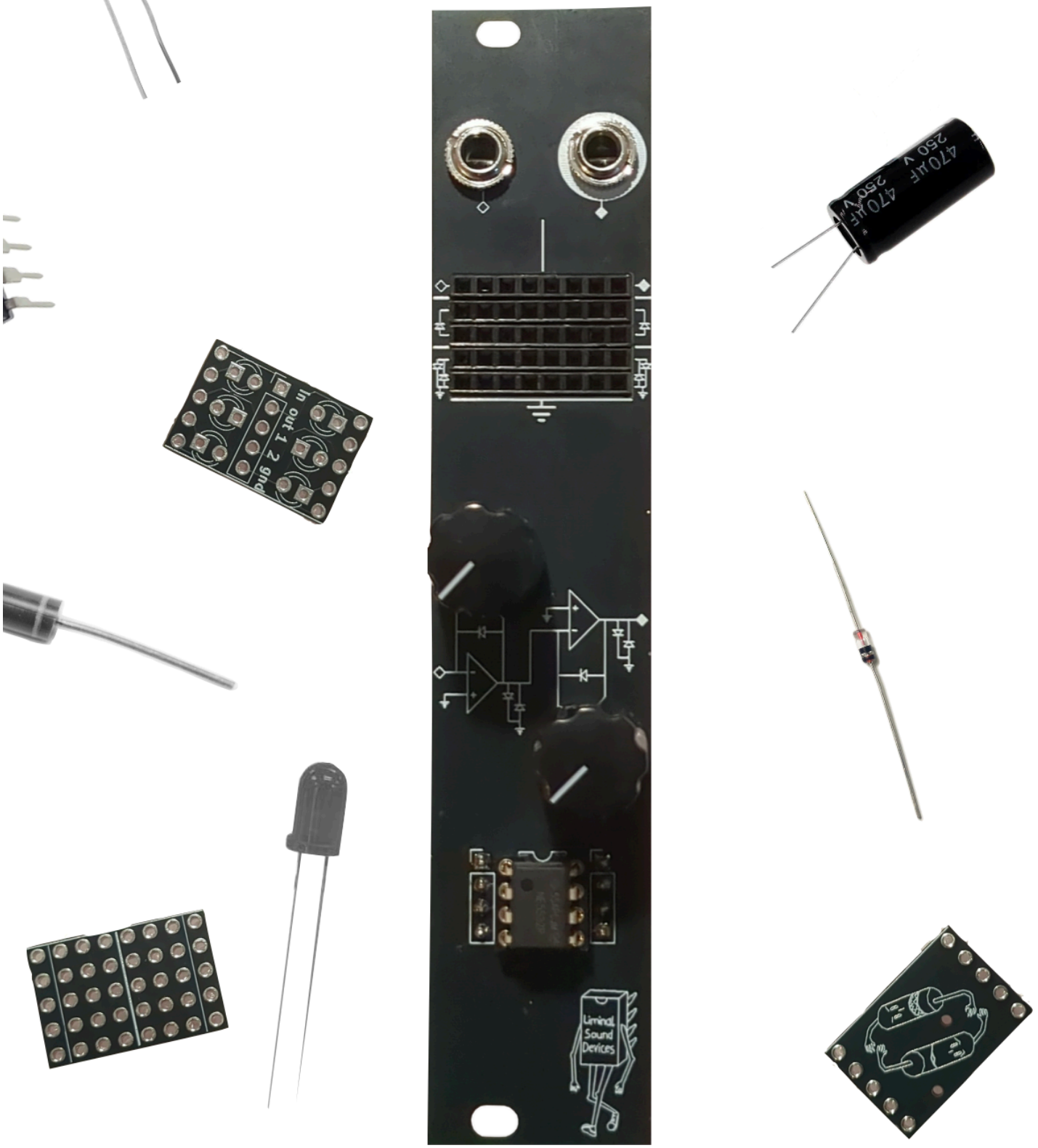
CLIPPER



LiminalSoundDevices

CLIPPER

Customiseable Clipping Distortion Unit

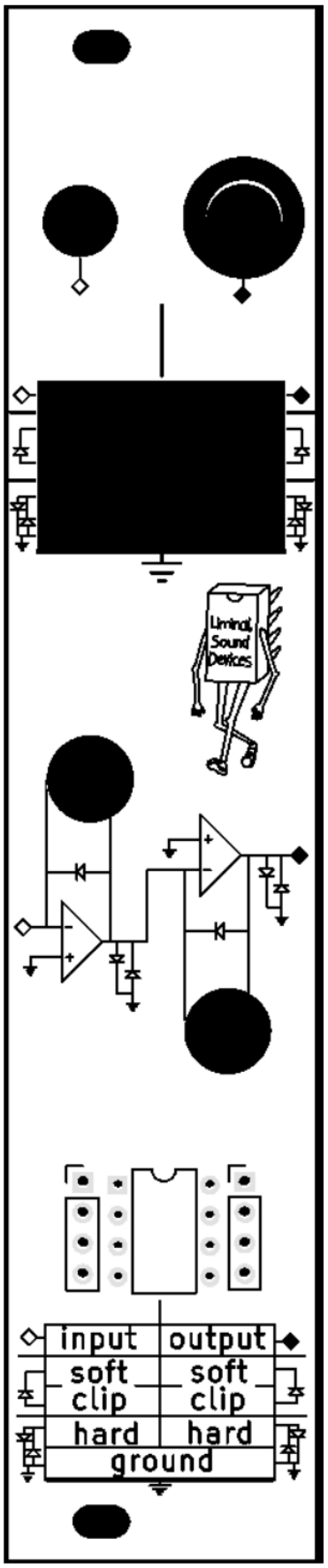
Explore all types of Clipping and Feedback

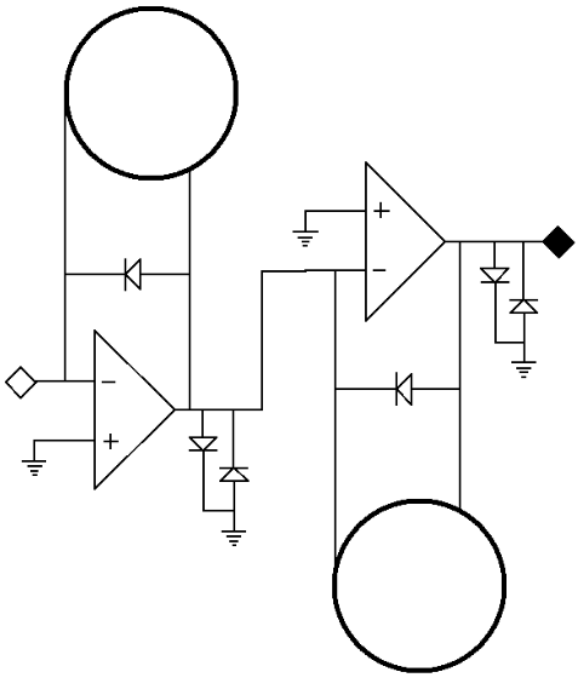
Experiment on the Bread-board and hear what a single component can change in sound!

Attachable Preset Cards & DIY Cards

Easy IC swapping via Socket on the front panel

High Gain Amplifier also usable for low input Signals





The basic function of CLIPPER is quite simple. Two amplifier stages amplifing the input signal with a high gain setting of around 30x each. This is a range where low input signals like e-guitar, piezos, mics can be pushed to modular level, while modular signals will easily go into heavy distortion. Without anything additionally plugged in its frontpanel pinsockets, this is basically what you get: a decent amp with lots of gain. The front-panel Breadboard allows you to easily test all types of clipping and feedback. It features dedicated breakout points for classic soft- and hard-clipping spots, as well as the main inputs and outputs.







Printed on the frontpanel is a small circuit with symbols, on the side of the pin sockets are corresponding symbols indicating diode directions and position. Also all kind of other electrical components can be placed in the pin sockets, for example LEDs, Capacitors, Transistors, JFETs, LDRs, Resistors and even other chips(really strange).





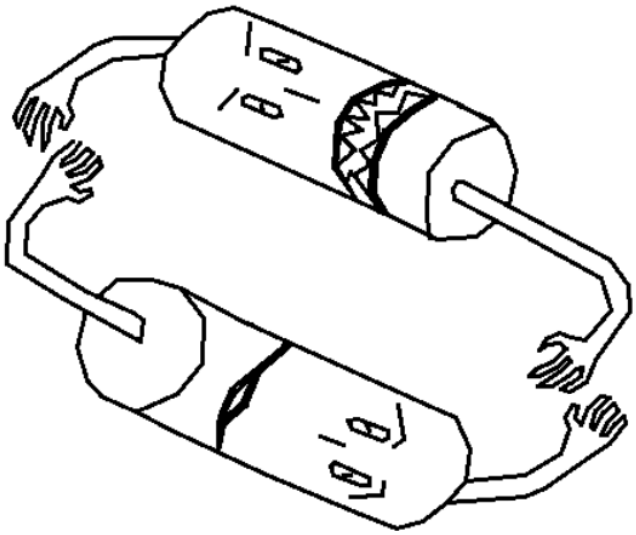
While the main circuit does its job you can experiment completely free and try swapping, adding, touching and removing different components between different spots of the circuit itself. It is safe for the module and your eurorack system, but maybe not for your ears!



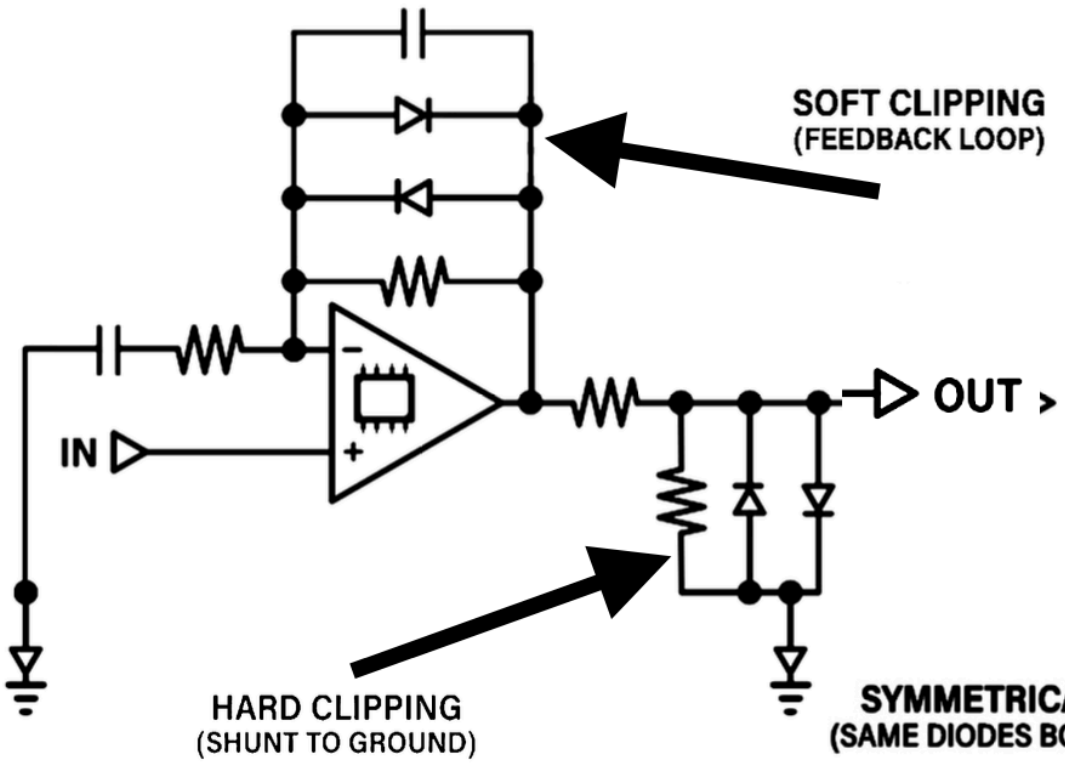
COMPONENTS MATTER!!!

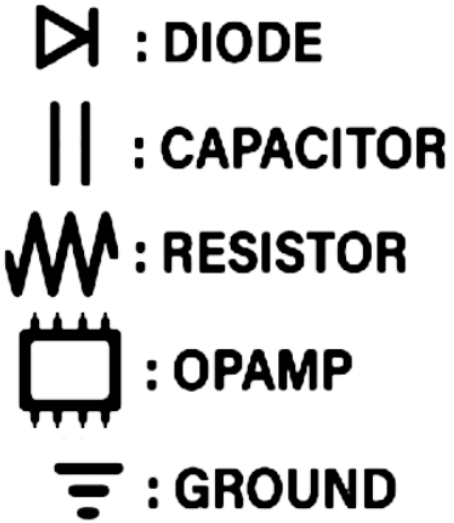
We want to clarify that components make a lot of difference in sound and so want to emphasize you to experiment with different ones.

YES I CAN CHANGE A LOT!!!

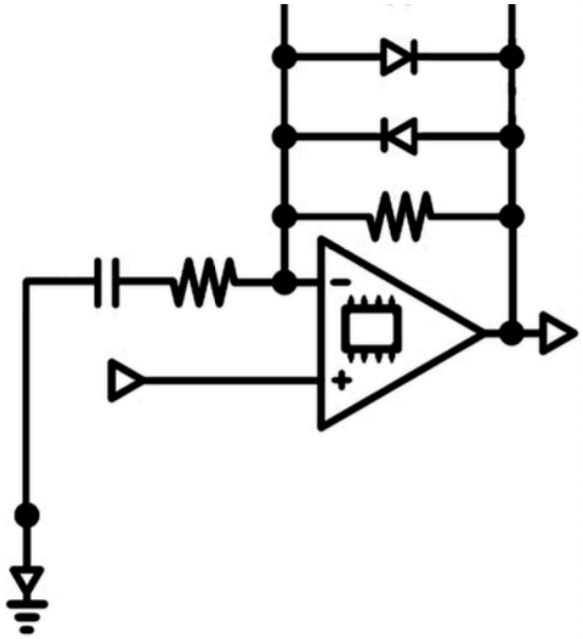


The Pedal Community is highly aware about this and carefully do part selction. Eurorack is a weird market that sells high valuable products but sometimes spares at the most important.

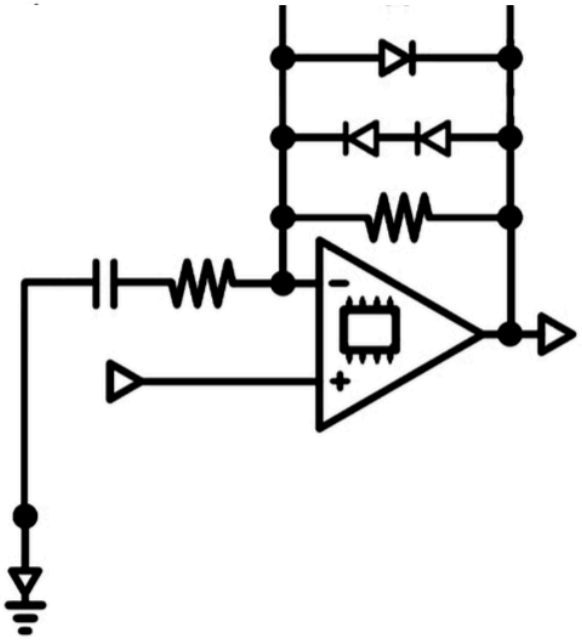




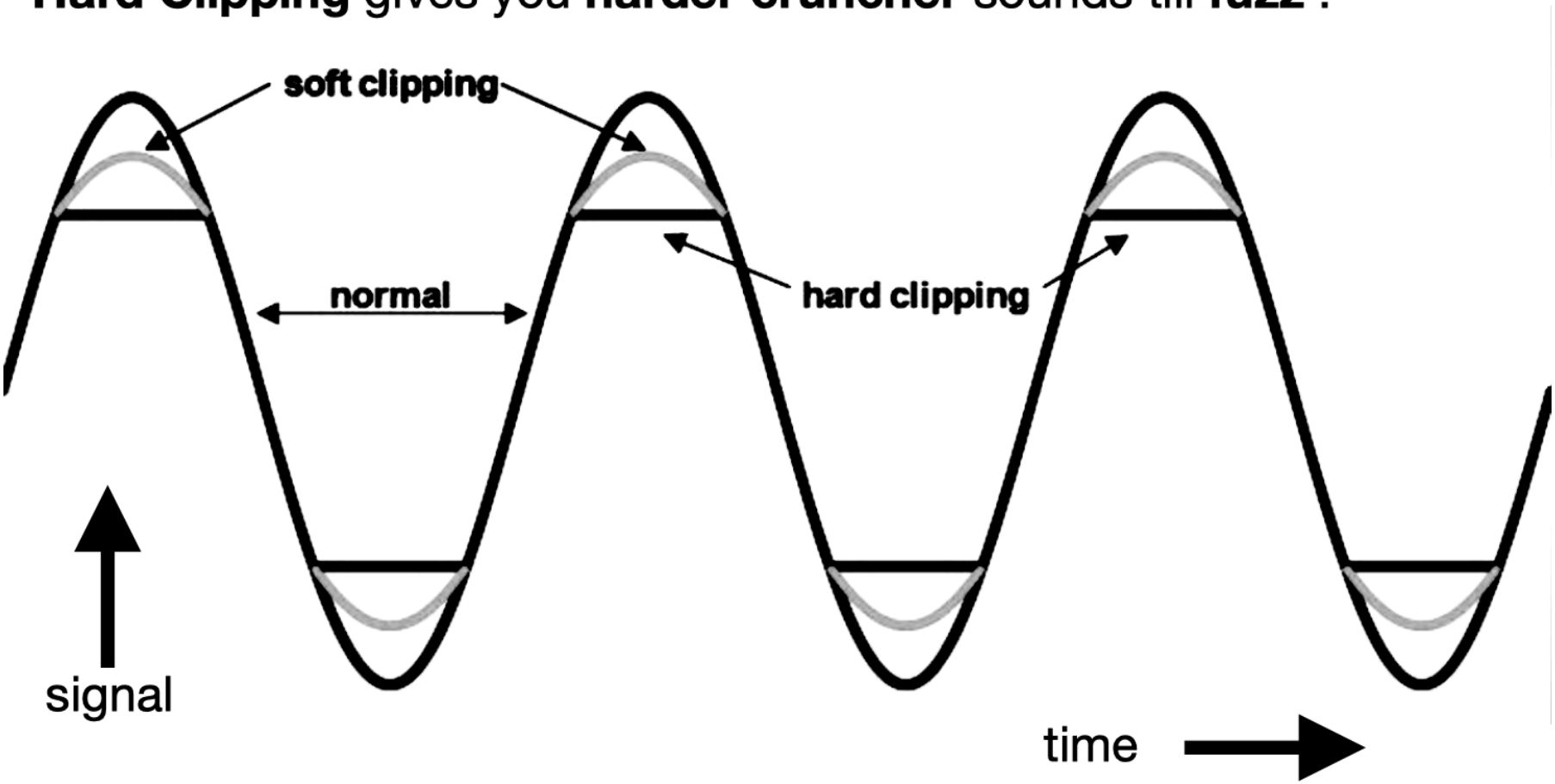
SYMMETRICAL CLIPPING
(SAME DIODES BOTH DIRECTIONS)

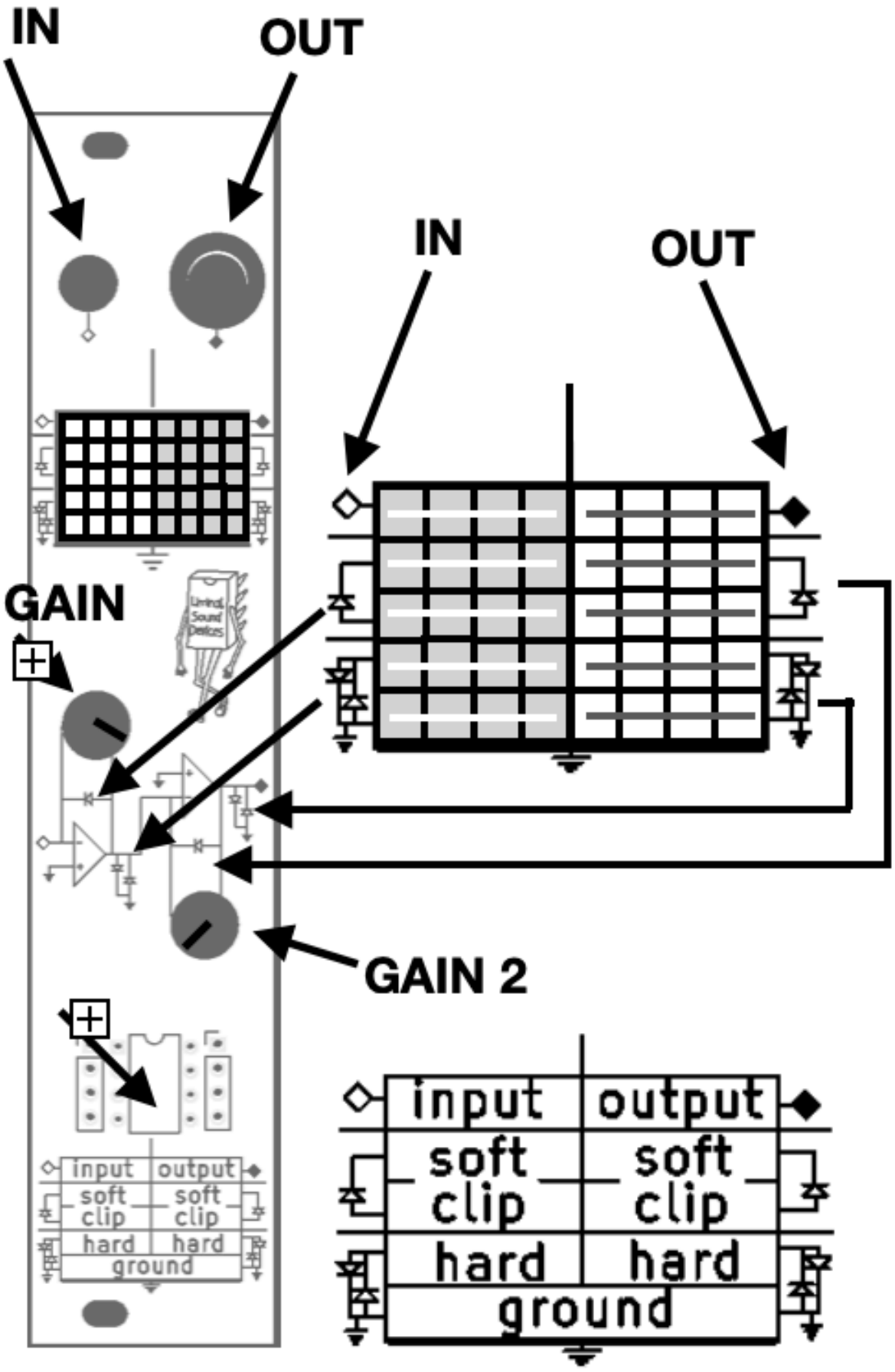


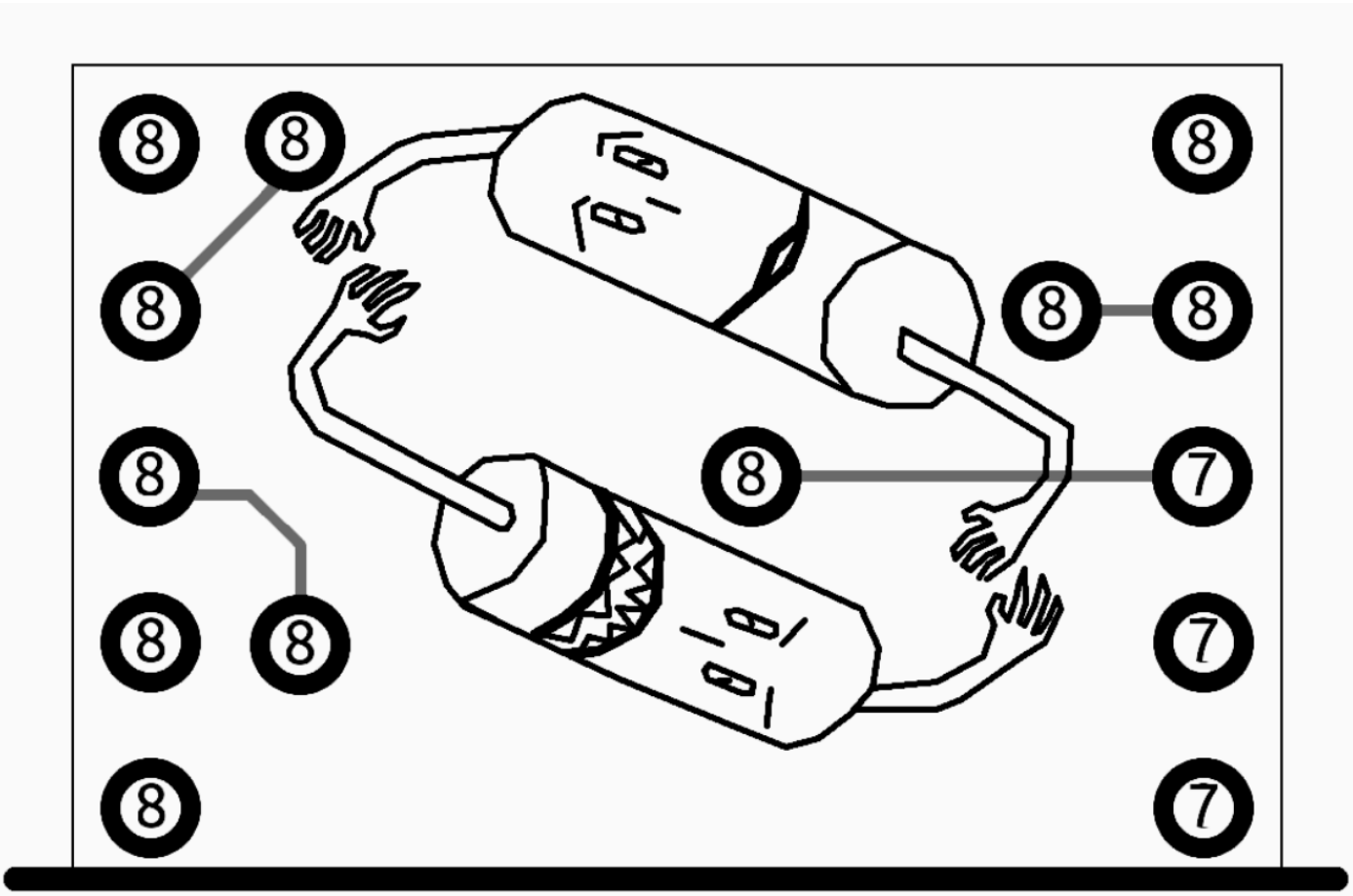
ASYMMETRICAL CLIPPING
(DIVERSE DIODES EACH DIRECTION)



Soft and **Hard Clipping** got their names from the way the original sine wave looks after it has been clipped.. As you can see the **Soft Clipping** has **softer edges** and the **Hard Clipping** has very **hard/ridged edges**. This you can also hear in sound. While **Soft Clipping** gives **warm and softer Overdrive / Distortion** sound, **Hard Clipping** gives you **harder cruncher** sounds till **fuzz** .

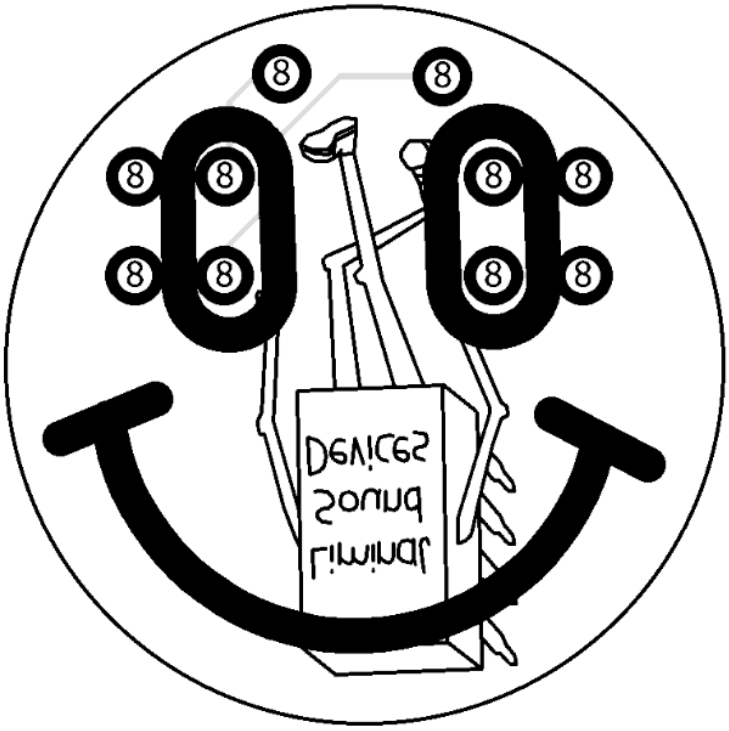



IN
OUT
GAIN
GAIN 2
input
output
soft clip
soft clip
hard
hard
ground



DIODE CLIPPER CARD

Two stages of Soft Clipping. Simple but good! Smooth Overdrive up to heavy crunch. Solder in your favorite Diodes and let them fight.



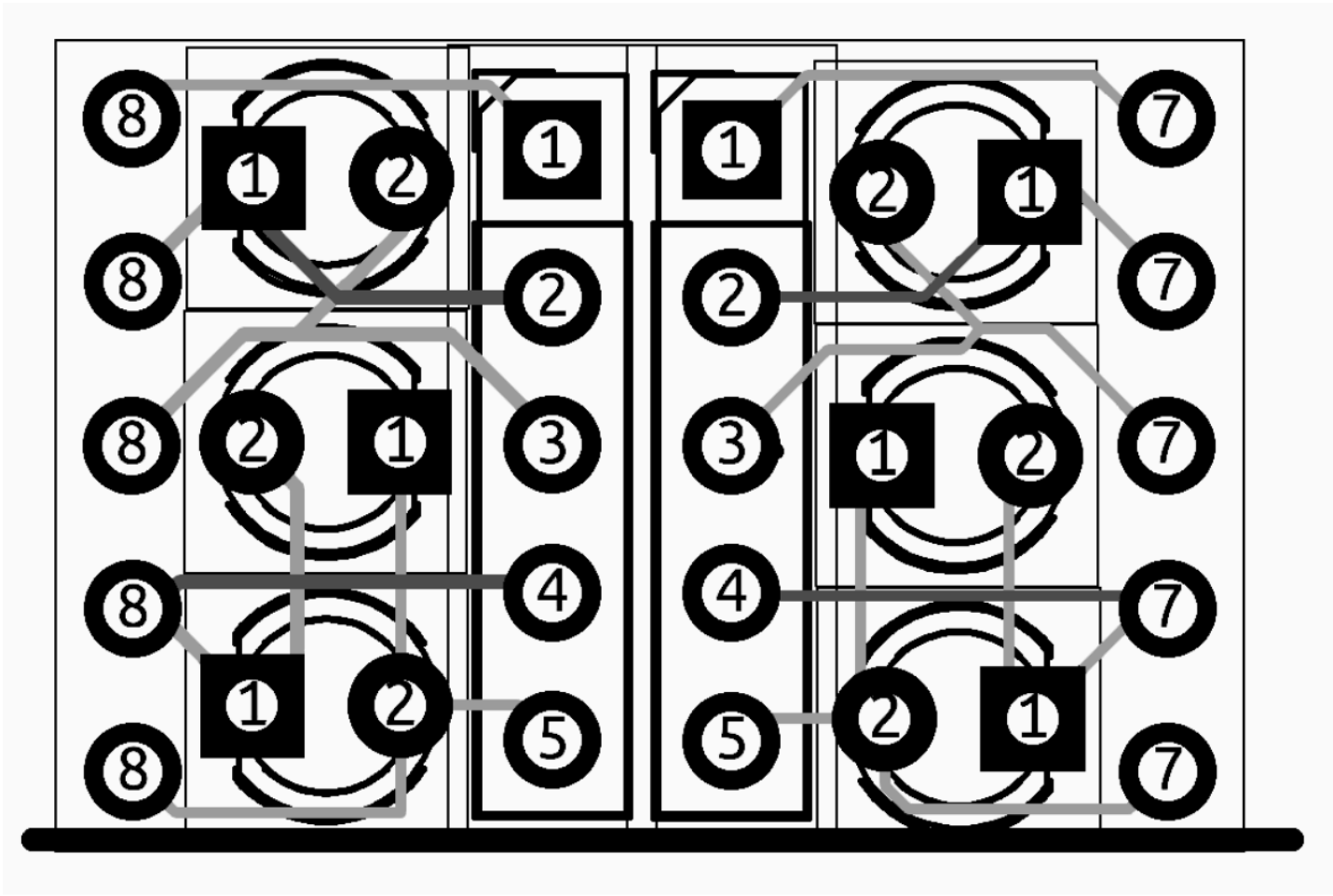
SMILEY CARD

Two stages of Red LED Soft Clipping. The threshold of LEDs is higher than most signal diodes, this usually gives less compression, stronger output volume, and better dynamics!

NOTE: Try it on different spots and also twist it for more fun!

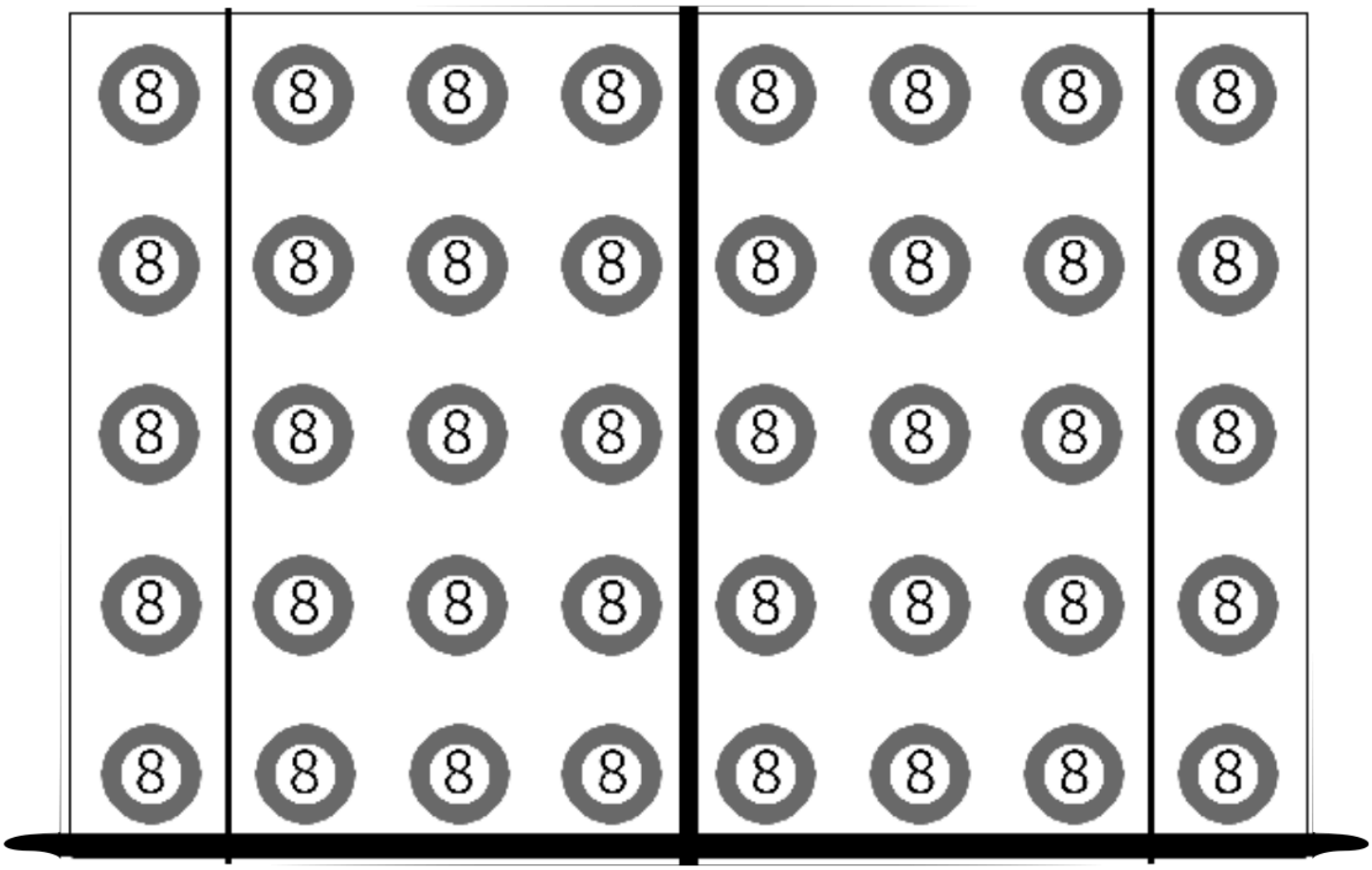
<u>Extra Feedback Solder Pads:</u>

Try different components like LEDs, Diodes, Capacitors and more!



VU? CARD

This is a weird VU, maybe it is broken, but it distorts well :)
LED Soft Clipping and Hard Clipping on both stages.
Warm Overdrive and nice to watch!
STILL ALL PATCHPOINTS ONVAVAILABLE FOR FURTHER MODIFICATIONS!

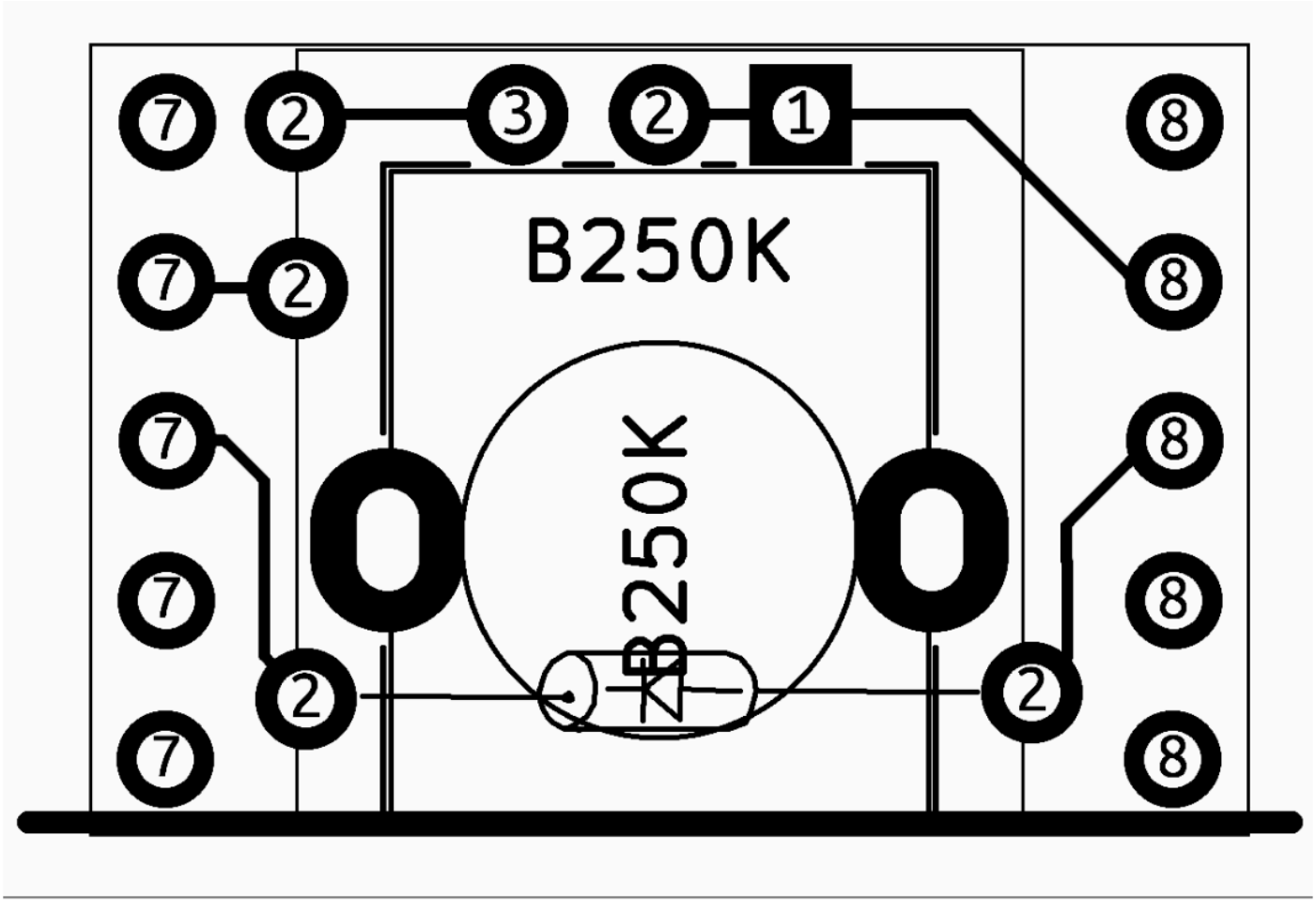


DIY CARD

Use Components that are laying around in your shelves or salvage some from old electronics.

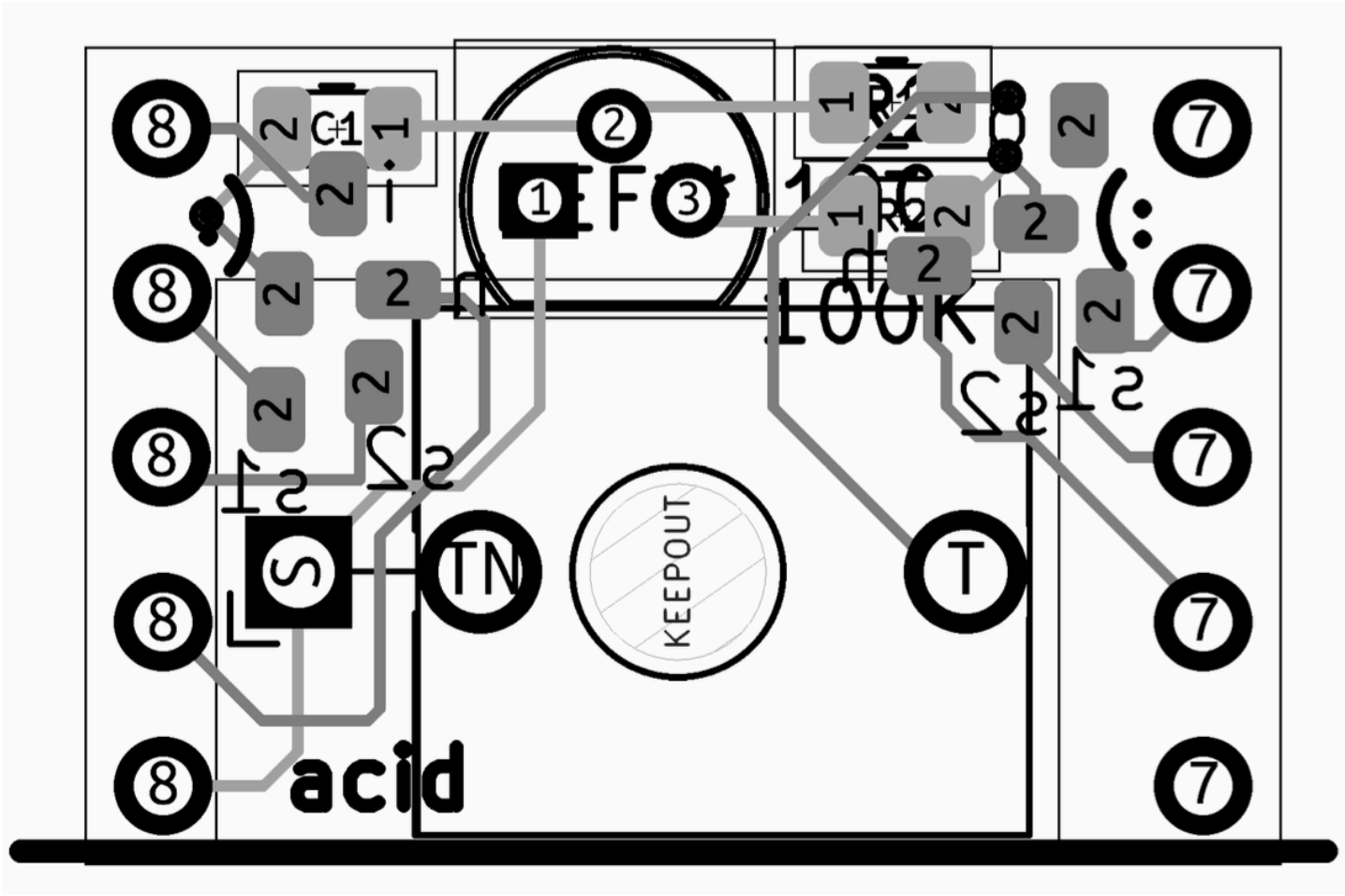
Customize your own cards and turn your last breadboard experiment into a fixed preset card.

ACTUALLY THE BEST CARD ;)



BIG KNOB CARD

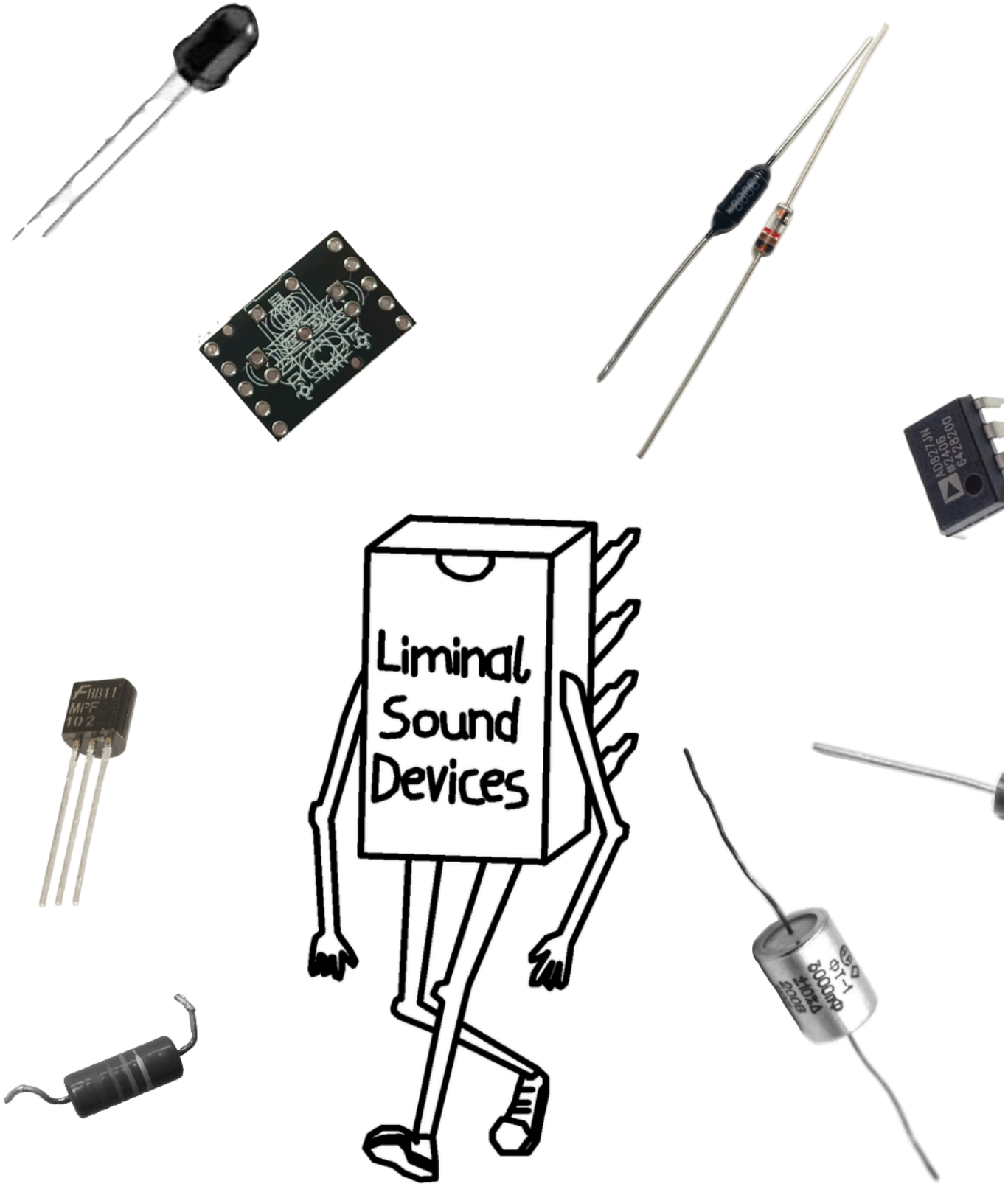
In case you thought two controls are not enough, here you go:
Get an extra Control Knob and modify your CLIPPER to a nasty Filter!
This one is unpredictable, can self oscillate in some settings and will play well togetherwith your drum modules!



JFET ACID CARD

Turn your CLIPPER into a voltage controllable ACID Filter. Super resonant, quirky and hard to tame, but there are so many sweet spots!

NOTE: Will self oscillate in some settings, so can be used as weird voltage controllable Oscillator as well.



www.liminalsound.de/vices