

SCHLAPPI ENGINEERING

A touch controlled distortion unit ranging from subtle tone control to total sonic obliteration. It consists of a low pass filter, VCA and distortion section with 8 touch points, voltage control over drive, resonance, and frequency, along with a plethora of feedback paths allowing it to operate as a hands-on performance instrument with or without any input.

TOUCH POINTS

8 brass balls connected to sensitive points in the circuit and voltage control points. Touch more than one at a time.

IN 1

Insert audio here. If no cable is inserted this feeds a second distortion output into the filter.

IN 2

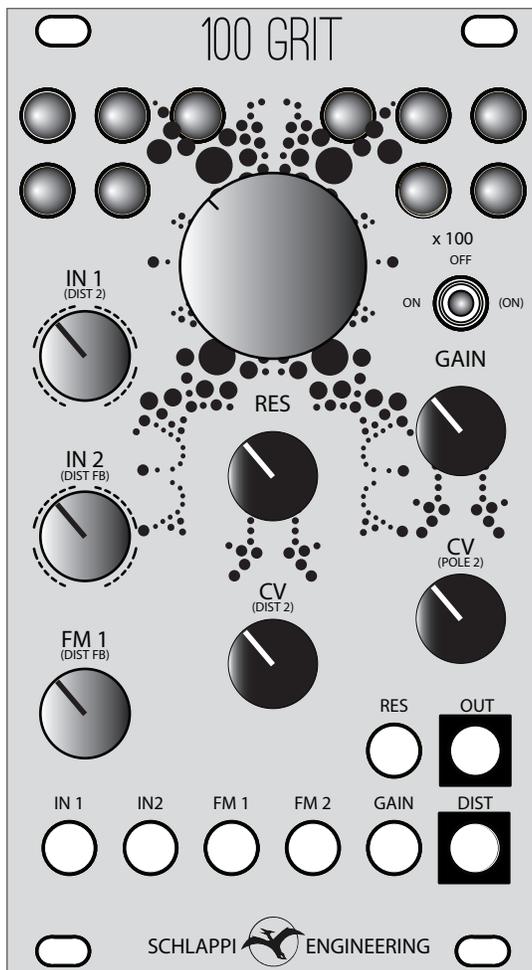
Second input. If no cable is inserted this feeds the distortion output back into the input

FM 1

Voltage control over filter cutoff frequency. If no cable is inserted this feeds the distortion output into the frequency control.

FM 2

Exponential voltage control over filter cutoff frequency. Roughly scaled to volts per octave but will not track in tune



FREQUENCY

Filter cutoff control

x100 SWITCH

Gain x 100 for extreme distortion

GAIN

VCA gain going into distortion section. If no CV is applied this needs to be up to get audio out of either output.

GAIN CV

CV over gain

OUT

Output from VCA by default. Switchable to filter output with header on rear.

DIST

Distortion output

RES

Filter resonance control

RES CV

CV control over resonance. If no cable is inserted this feeds the second distortion into the resonance control.

PATCHES TO START WITH

VCF/VCA

KNOB POSITIONS	IN 1	75% CW
	RES	25% CW
	GAIN	75% CW
	FREQUENCY	75% CW
	ALL OTHERS	FULL CCW

- Input audio at IN1 jack, above 75% will add distortion
- Listen to the OUT
- GAIN will control volume, above 75% will add more distortion
- Insert an envelope to GAIN jack and turn up CV (under GAIN knob) for VCA
- Insert V/OCT CV to FM 2 to roughly track along with incoming signal
- Turn FREQUENCY and RES knobs to get a feel for the filter character
- Each unused input (IN2, FM1, RES CV) has a feedback path normalled to it



DISTORTION

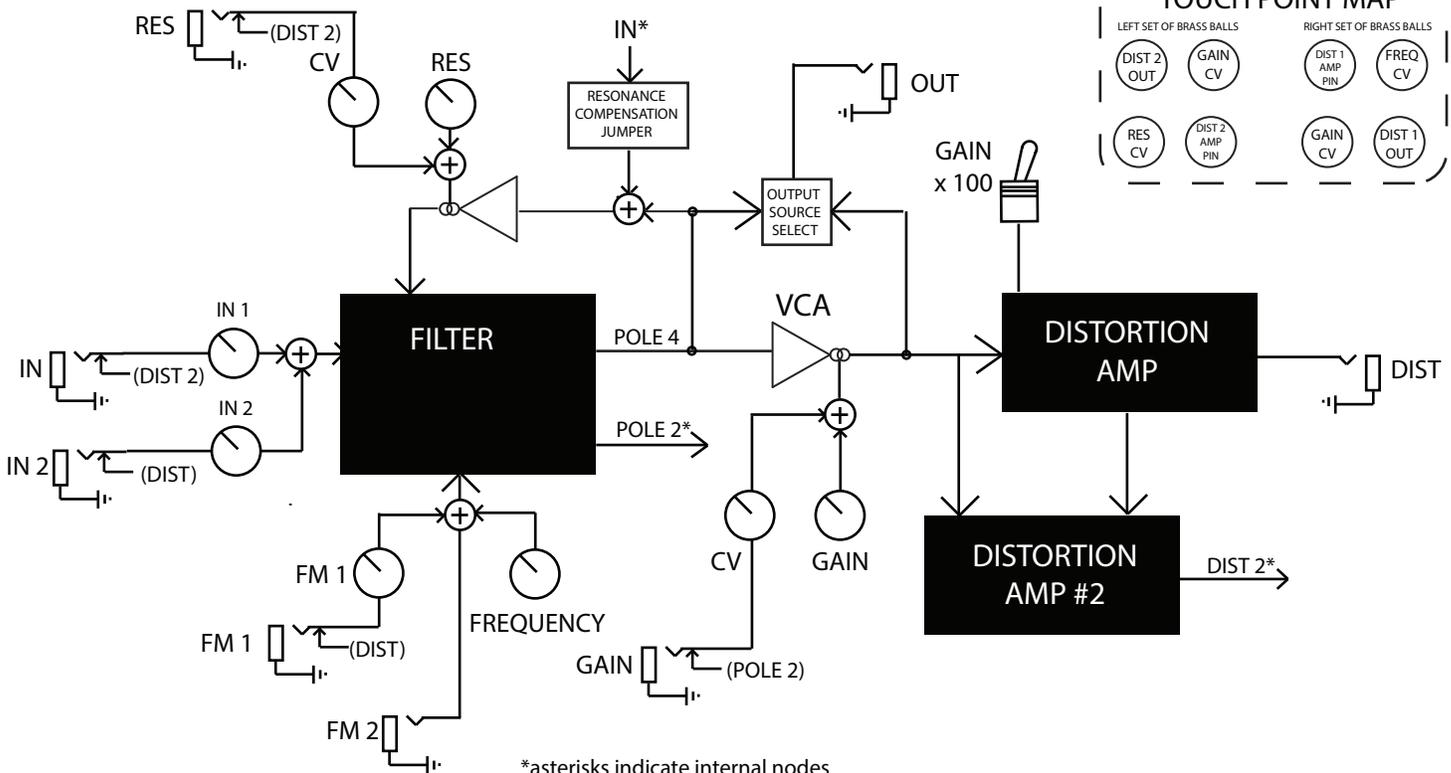
x100 SWITCH OFF (then ON)

- Continue from VCF/VCA patch
- Listen to the DIST output
- GAIN and GAIN CV will now control distortion amount
- Try keep RES full CCW but bring up RES CV for distorted resonance
- Flip x100 to ON or (ON) for full screaming distortion
- Try turning each knob one at a time to see how they affect the tone
- Experiment with touchpoints, touching two or more at a time

NOISE BOX

- No inputs
- Listen to the DIST output
- x100 switch ON
- Play all the touch points
- Explore all feedback paths

100 GRIT BLOCK DIAGRAM



*asterisks indicate internal nodes

(parentheses indicate connections normalled to unconnected inputs)

TOUCH POINT MAP

