Grone 2 Dark Drone machine Pedal Version

Blocks description
Drone VCO :

Generates sound based on equations converted to analog signals , there are sixteen equations
selected by algorithm up pot. Four leds indicate equation number in binary mode. Three Pots modify numbers used by the equation, A0 , A1 and A2 , fourth pot Sample Rate controls
pitch and speed of the oscillation. There’s an expression jack input, EXP2 for controlling sampling rate.

NOISE GENERATOR : White noise with noise level pot.

Voltage Controlled Filter: MS20 resonant low pass filter , with CUT frequency pot control , RESONANCE ,
MODULATION 1 amount pot , Expression jack input 1 controls filter cuttoff.

LFO1 : Low frequency oscillator routed to MOD1 from VCF , RATE and WAVEFORM shape Pots.
Waveforms are : ramp up, ramp down, square, triangle, sine , sweep, random levels, random slopes

FUZZ Section :
gain stage that affects input signal , with controls for input gain and level .

Effects Section:
Consists of a chorused reverb with delay , adding octave up or down component , with freeze function
Pots controls:
1-Blend controls mix of effects over final output signal
2-Octave blends mix a pitched signal to the input of the reverb
3-Octave -1 +1 controls tuning of pitch component
4-Repeat controls feedback of delay component
5-Balance controls mixture from reverb and delay.
6-Pitch controls the sampling rate of the whole effects section , modifying delay time and reverb decay.

Footswitches:

1- Synth : mutes or enables the drone VCO and noise generator

2-Filter : Bypass for the VCF

3-Fuzz : Bypass for the fuzz that processes the input signal.

4-reverb : Bypass for the reverb/delay section

5-Freeze : toggles freeze function for reverb section

Jacks :
Input, Expression 1 input (VCF) Expression 2 (VCO sample rate) , Output