



BugBrand Weevil 20/25



To celebrate 20 years of BugBrand, 10 years since I last did a regular production, and the first cased version since 2008 – I present a celebration Weevil!

Stemming from a simple cymbal synthesiser sound generator, combined with circuit bending features, the Weevil has always been a deep source of chaotic sounds & experimental play.

Consider the block diagram overleaf:

On the left side is the **Weevil Core**.

Each of the three Squarewave Oscillators features a Rate dial and Range switch.

Osc1's pitch can be controlled by a LDR light sensor (turn Rate 1 down for best effect).

Osc2 & Osc3 can be synchronised to the rate of Osc1.

The oscillators are quasi-RingModulated together through two XOR gates.

The Balance dial sweeps between the two RingMods.

Each Osc has two touchpoints, with a further one for each RingMod.

Starve controls the whole Weevil Core – turn up for full power.

When starved, the oscillators fight one another, interacting chaotically.

The Stable switch smooths the behaviour, while the Starve LDR sensor allows light control of the starvation amount (again, turn down Starve for best effect).

On the right side is the **State-Variable Filter**.

The filter covers the whole audio range, with resonance up to self-oscillation, and with output response sweepable from Low-Pass to High-Pass.

The Drive control allows the input to be muted, either for pure oscillation or to jump signals in via the touchpoints.

The cutoff frequency can be modulated from Osc3.

Each filter node (Low/Band/High) has two touchpoints.

The other touchpoint pair is cutoff modulation and 0V connection.

Wrapping around these audio parts are two outputs: **Speaker & Master Line Out**.

The 1/4" unbalanced line out is transformer isolated, with level set from the Master control.

The Speaker allows acoustic play and provides an audio response distinctly different from that of the line out. Driving it hard alters the behaviour & will use more power.

Touchpoints work when you bridge between two or more of them.

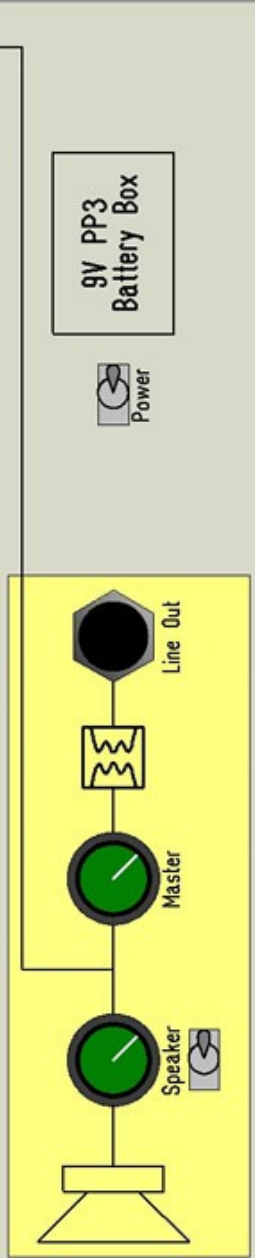
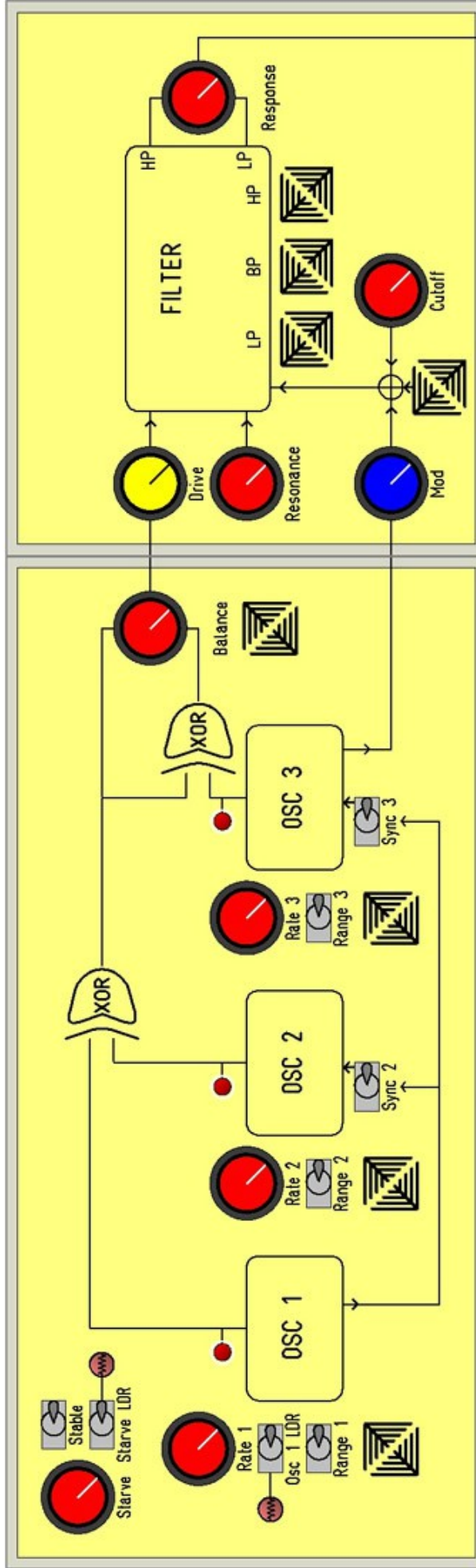
Their response will depend on your skin resistance and how hard you press.

Notes: Battery only! Use a small screwdriver to lift & pull out the battery draw to change.

Guarantee: The Weevil comes with a one year 'reasonable' warranty. If any electronic or mechanical failure occurs within the period, I will repair the fault free of charge. This excludes failure from maltreatment or modification, and any cosmetic degradation. Contact should first be made via email to discuss the problem. Shipping to return the device is paid by the user, while I cover the return shipping. Failures outside this guarantee may be fixed at standard rates.

Enjoy!

Tom Bugs – March 2025 – tom@bugbrand.co.uk – www.bugbrand.co.uk



Weevil 20/25

Block Diagram

