

The *Board Chirper* is a distillation of modular circuitry into compact, low-voltage form.

Made of just two cross-coupled oscillators, a resonant filter and a handful of touch points, this simple arrangement contains a sonic world of surprising depth.

This overview conveys the technical aspects alongside the block diagram overleaf, but the best way to learn is to dive in and play!

Oscillators - The two Oscs are identical, mirrored on each side.

Think of the left as sound source and the right as modulation.

They are Triangle-Core designs, sweepable from Triangle to Square via the *Shape* controls, and cover Sub-to-Super rates (c.0.1Hz to 40kHz).

The *Modulation* depth controls cross-couple the oscillators and provide chaotic interplay when both are turned up.

Filter – The 12-dB/Oct State-Variable Filter covers the full audio range, with *Resonance* up to self-oscillation.

It can be swept from Low-Pass to High-Pass response via the *Blend* control.

Osc1 feeds the audio input via the *Drive* control - turn this down to balance the pure-sine self-oscillation from full resonance.

Osc2 modulates the filter *Cutoff* frequency via the *Fmod* control.

Output – After the output *Level* control, an output transformer provides electrical isolation from the outside world (important due to the use of touch points).

The output jack is Unbalanced Mono 1/4".

Touch Points – These connect to various circuit nodes via current-limiting resistors and allow experimental tactile influence of the circuit behaviours.

You need to bridge between two or more touch points and response depends on how dry your fingers are.

Labels on the underside give hints of the touch point functions.

The bottom corners and the central square connect to the +/0/- power lines.

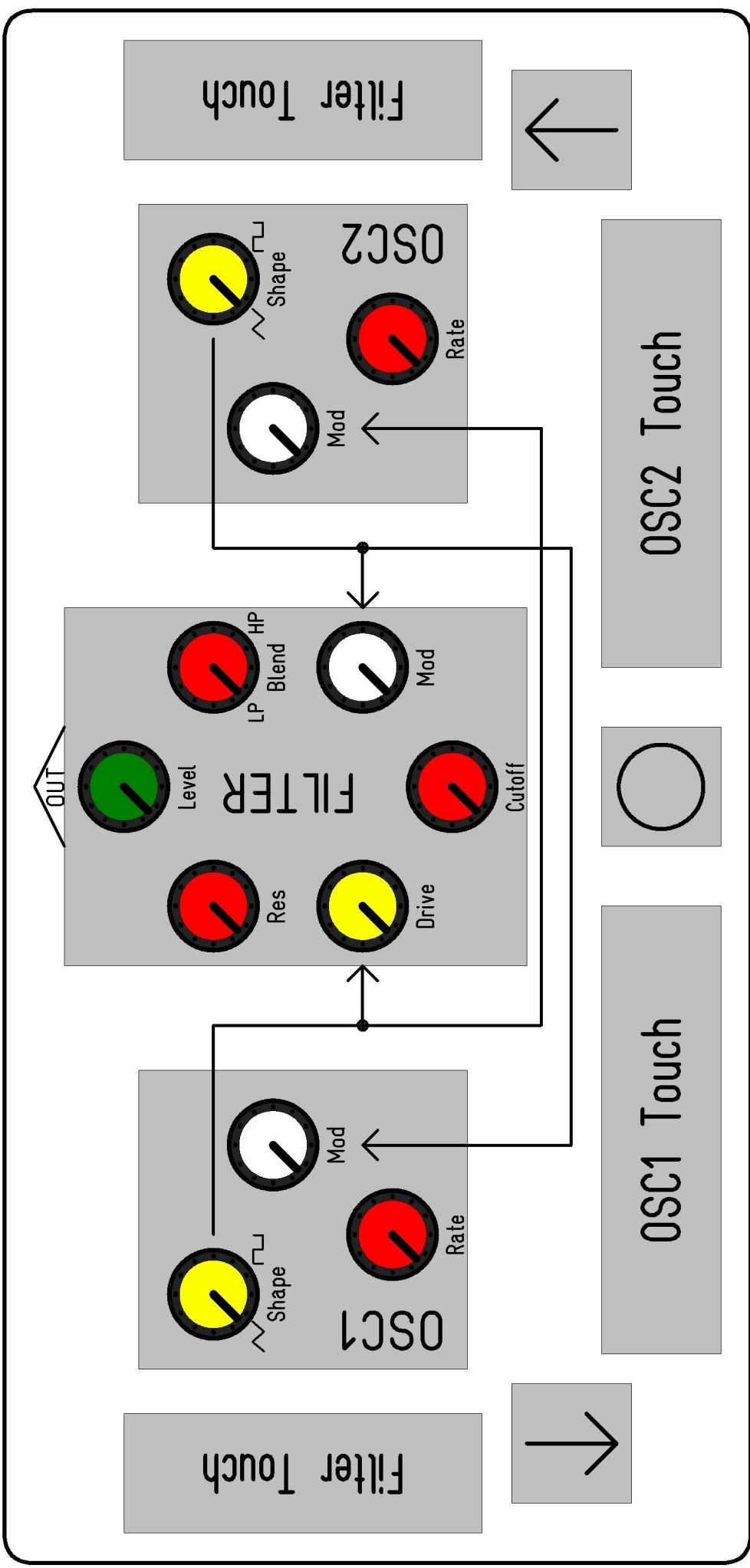
Notes – The Board Chirper runs from a 9V PP3 battery – *battery power only!*

Care should be taken to prevent short-circuiting the components on the underside, especially the battery connections - consider removing the battery when transporting.

Do not connect external signals to the circuit or touch points.

The board can be cleaned with a damp cloth when switched off.

Guarantee – The Board Chirper comes with a 1 year 'reasonable' warranty. If any mechanical or electronic 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 and I cover return shipping. Failures that are not covered by this guarantee may be fixed at standard rates.



BugBrand Board Chirper