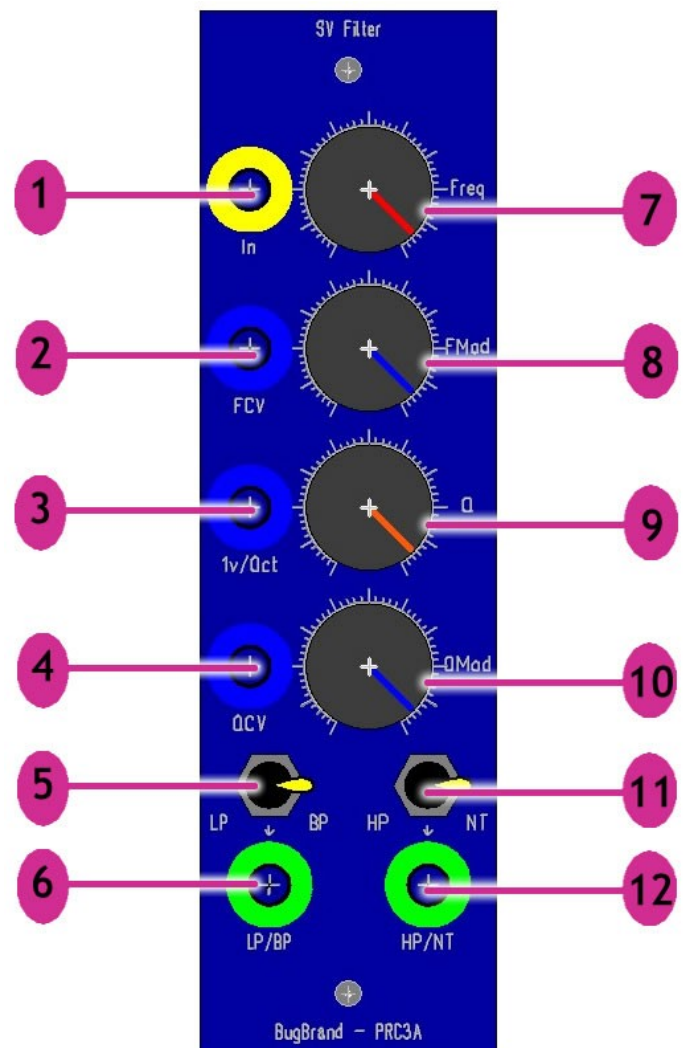# PRC3A – SV Filter
Rev1 – Jan2010

Overview:
The PRC3A is a compact State Variable (12db/Oct) Voltage Controlled Filter offering four responses.

Controls:
1. **Audio Input** – DC-coupled input for the signal to be processed (typical +/-5v).
2. **Frequency CV1** – Frequency Modulation input with depth control (FMod).
3. **Frequency CV2** – Full range (unattenuated) Frequency Modulation.
4. **Q CV** – Input for Resonance Modulation with depth control (QMod).
5. **Output1 Response** – Switchable from LoPass to BandPass response.
6. **Output1**
7. **Frequency Control** – Manual Cutoff control covering the full audio range.
8. **Frequency Modulation Depth** – To adjust the depth of modulation from the FCV input.
9. **Q Control** – Manual Resonance control – the design does *not* self-oscillate!
10. **Q Modulation Depth** – To adjust the depth of resonance modulation from the QCV input.
11. **Output2 Response** - Switchable from HiPass to Notch response
12. **Output2**

Notes
- The Notch response is derived by internally adding together the LoPass & HiPass responses. It is most effective when used with a low value of resonance.
- You can 'ring' the filter by inputting a clock signal to the Input socket (or a similar lo-freq square wave) and turning the Resonance control to full. The 'pitch' of the ring can then be adjusted with the Frequency controls.
- The 1v/Oct response is only rough – there are no trimmer adjustments due to the lack of self-oscillation.

Specifications
Current Draw: +ve 20mA, -ve 20mA (max)
Module Width: 1 Frac-Width (1.5")