

5730 tips and suggestions

Some amps don't like the DC component on the output of the effect. Installing a 0.1 to 1 uF capacitor in series with the wire to the output jack will block the DC.

With only a guitar as input, it isn't so unusual the 5730 gates before the note rings all the way out and it can take a fairly strong pluck to get it to open. This isn't such a problem when its operating at a line-level, out at the end of a string of effects where it is working to silence noise/hiss. The best way to get around the "insensitivity" of the unit is to boost the guitar signal so you're more in the range of Threshold adjustment.

A way to change the 5730 for more sensitivity is to remove R13 and install a high resistance trimpot (I've used 5Meg here), from the V+ to Ground with the middle, wiper going to pin 8 of IC3B like R13 was. This will then give you an adjustment of a 'minimum' threshold. It's so low and such a critical setting though that it comes and goes and may need tweaking often. I also have a mod that involves adding a 4049U IC as a gain stage between the input buffer and the J2 closed circuit jack.

Popping can be the mechanical snap-action of the footswitch vibrating and making a transient via a ceramic disc capacitor or a solder joint that didn't flow or has some rosin in the joint. A 0.1uF parallel connected with resistor R19 can help reduce a click from the electronic bypass switching transient. I haven't tried this, but I suspect that the addition of a 1M between an opened, point C to the node IC3pin1-R19-R18 might help reduce any transient click.

DC voltage tests.

Test for DC voltages on the IC pins. The pins count up in a ccw direction from the notch or pin1 designator. Measure with the black probe on a ground/common point (G1) and the red probe on the IC pin on the top side of the board.

Points labeled V+ should measure 7 to 8 VDC (volts, DC); Vref, 3.5 to 4 VDC.

The V+ voltage goes into pin 7 of ICs 1 and 2; pin 11 of IC3.

The Vref voltage goes to pins 2, 5, 9, and 13 of IC3; pin 3 of IC2.

This same Vref reading should be found on pins 3 and 6 of IC1, pin 6 of IC2 and pin 4 of IC3.

Pin 10 of IC3 is normally at the Vref reading, but as the input signal is sensed, its drops towards zero. When this happens, pin 12 varies from Vref towards V+ and when the cancel switch is "open" pin 3 of IC3 varies from Vref towards 0V. "Closing" the cancel switch forces pin 3 of IC3 to zero.

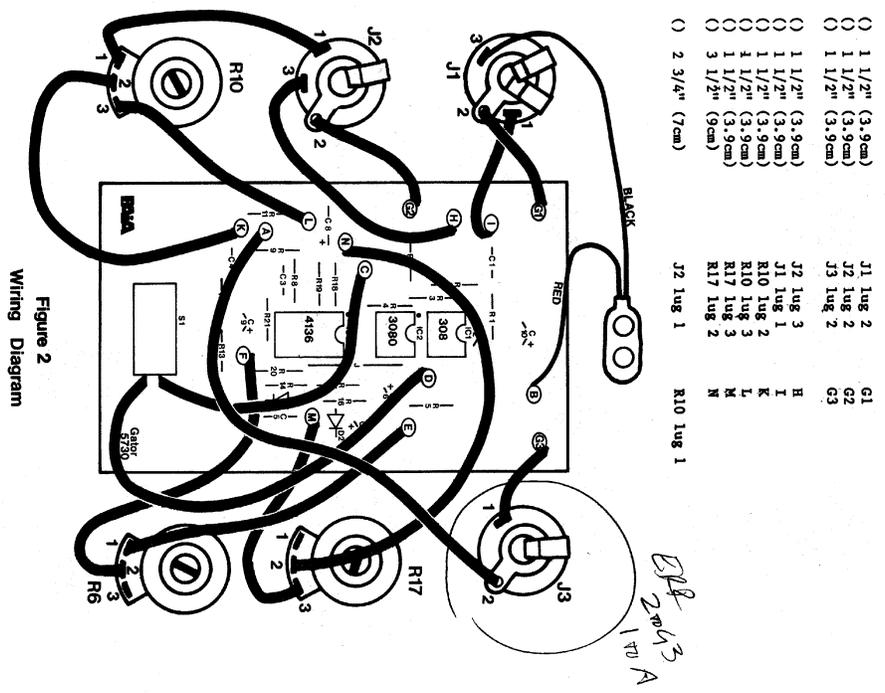


Figure 2
Wiring Diagram

