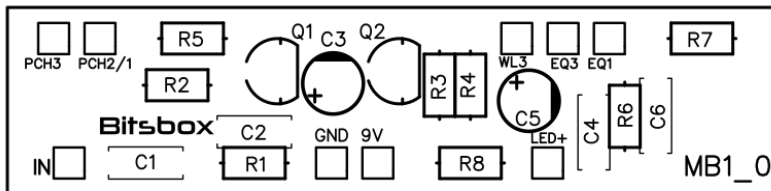


**Overview**

Based on the Woolly Mammoth fuzz pedal. Designed for bass but equally popular with guitar players, it preserves the very deep low frequencies like no other distortion pedal.

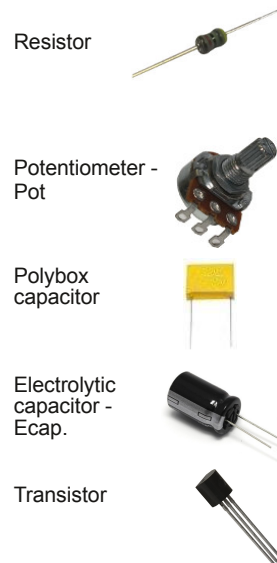
The kit consists of the PCB, electronics pack and hardware pack, each of which are available separately. It is intended for assembly into one of the Hammond 1590B range of enclosures, or equivalent - that choice, and that of the control knobs are left to the builder.

**PCB Layout**

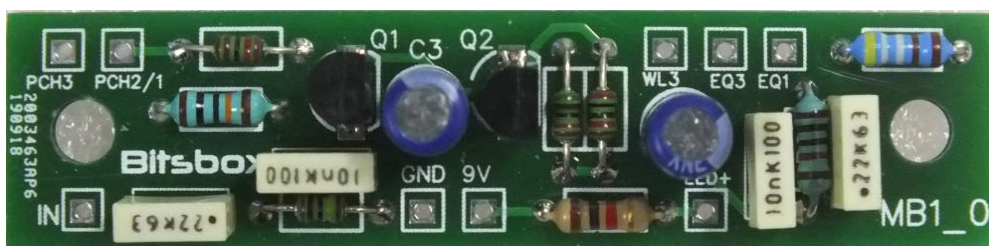


**Electronics Pack Parts List**

Name	Designator	Part Code	Quantity
Mamm-Box PCB		PCB015	1
1M resistor	R1	MR251M	1
100k resistor	R2	MR25100K	1
51k resistor	R3	MR2551K	1
20k resistor	R4	MR2520K	1
2.2k resistor	R5	MR252K2	1
10k resistor	R6	MR2510K	1
4.99k resistor	R7	MR604K99	1
1k resistor	R8	CR251K	1
10k linear pot	VR1(output), VR2(eq)	VR145	2
500k linear pot	VR3(pinch)	VR164	1
2.2k linear pot	VR4(wool)	VR238	1
220nF Polybox	C1, C6	PY220N	2
10nF Polybox	C2, C4	PY10N	2
100uF 16V Ecap	C3, C5	EC100U16S	2
2N3904 Transistor	Q1, Q2	QD018	2



**PCB Assembly**



The PCB should be assembled according to the above layout, matching components to their designators. A suggested sequence is resistors followed by capacitors and the transistor. Make sure that the polarised parts such as electrolytic capacitors and transistor are fitted with the correct orientation as indicated on the board. Resistors and polybox capacitors can be fitted either way round.

Lengths of 7/0.2 wire (provided in the hardware pack) should be fitted to the 9 connection points (square solder pads enclosed in a square box). Wire colours are unimportant.

**Component Identification Tips**

**Resistors** - Use the resistance setting on your multimeter.

**Potentiometers** - Marked with the value together with a 'B' prefix for linear taper.

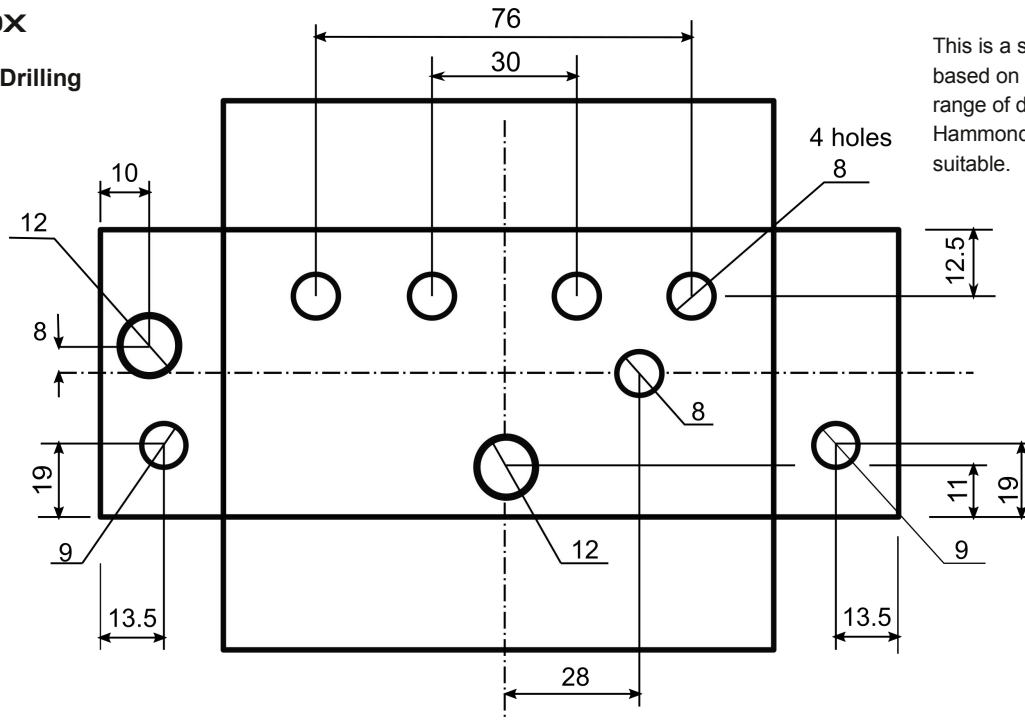
**Electrolytic Capacitor** - Marked with the value. The longer lead indicates the positive side and a stripe on the body indicates the negative side. Look for + on the PCB indicating the +ve pin and/or a solid coloured area indicating the -ve.

**Polybox Capacitors** - Marked with the part value..

**Transistor** - Marked with their type reference. A flat face indicates orientation and should align with the flat shown on the PCB.

# Bitsbox

## Enclosure Drilling



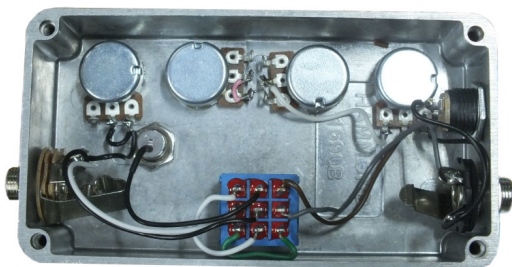
This is a suggested drilling detail based on the Hammond 1590B range of diecast enclosures - the Hammond 27134PSLA is also suitable.

## Hardware Installation and Wiring

The hardware kit contains the following:

- DC Jack Socket (CN306)
- Stereo Input Jack Socket (CN141)
- Mono Output Jack Socket (CN140)
- 3PDT Footswitch (SW108)
- Chrome LED Bezel (HW042)
- 5mm Red LED (OP002)
- PP3 Battery Clip (BAT043)
- 7/0.2 Wire Bundle (CN112)
- 5 x Cable Ties (HW046)
- Heatshrink sleeving 1.6mm (HW031)
- 2 x Self Adhesive PCB Standoffs (HW185)

1. Referring to the picture below and the wiring schematic, fit the DC connector (right), stereo input jack (left), mono output jack (right), footswitch, LED bezel and potentiometers to the drilled enclosure. Note the orientation of the potentiometers - this allows space for a PP3 battery in the centre.

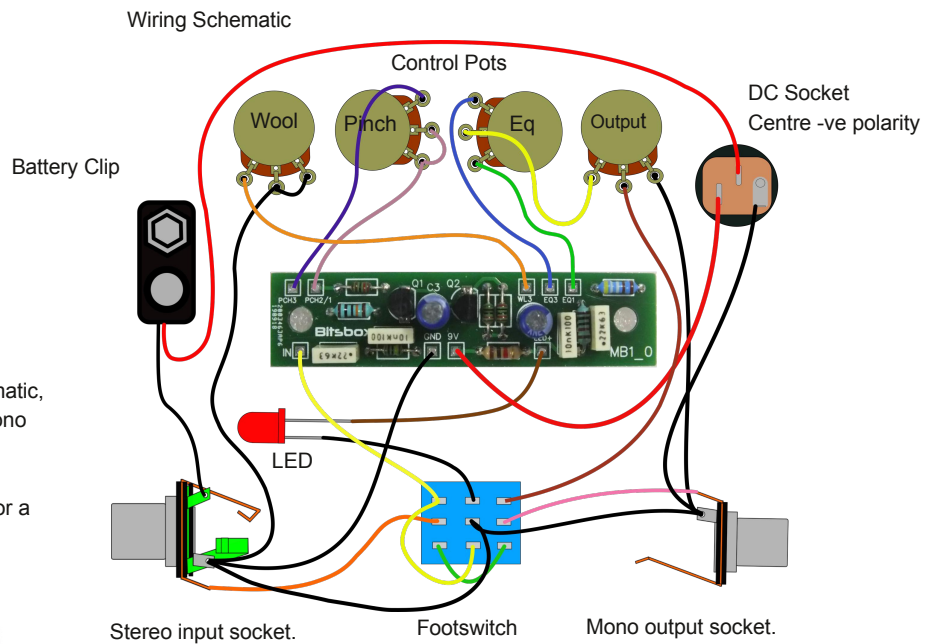


2. Fit the LED to the bezel using the plastic insulator/retainer.

Note that the LED has one long leg (+ve) and one short (-ve).

3. Before fitting the PCB assembly, fit the wiring that does not connect to the PCB - see the wiring schematic (above) for reference.

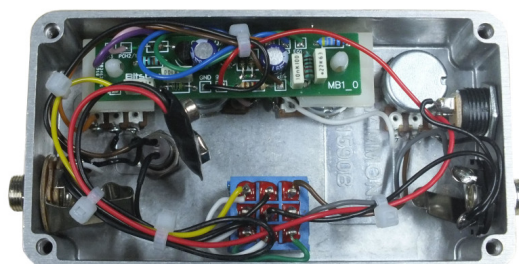
Add heatshrink sleeving over the connection to the short leg of the LED.

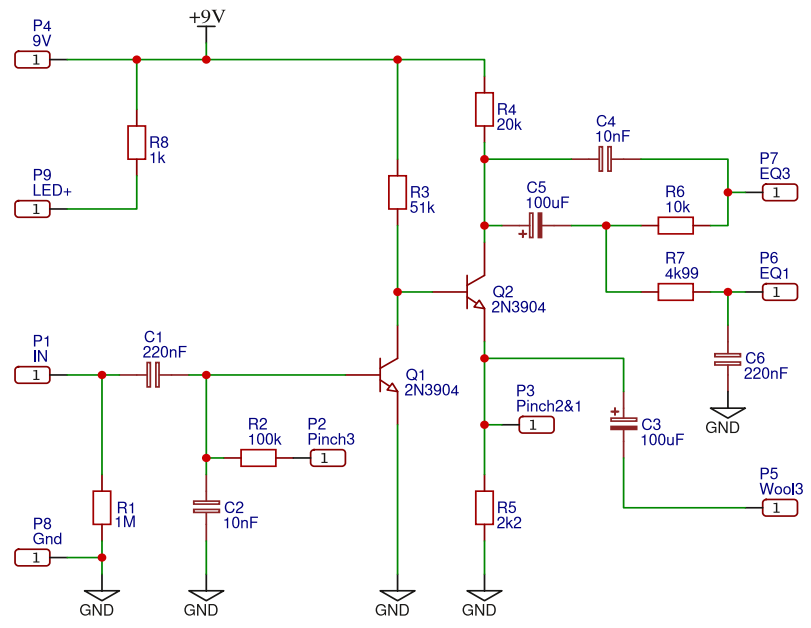


4. Connect the wiring from the PCB, as shown above, adding heatshrink sleeving to the connection with the longer leg of the LED. Fit the PCB assembly in position by fitting two self adhesive standoffs through the holes in the PCB, remove the backing paper and press to the back of the "wool" and "Eq" potentiometers.

Tidy the wiring using cable ties to complete.

The exterior can be finished off with your choice of graphics and control knobs.





TITLE:	WM_cct	REV:	1.0
	Company: Bitsbox	Sheet:	1/1
	Date: 2019-09-10	Drawn By:	rdent