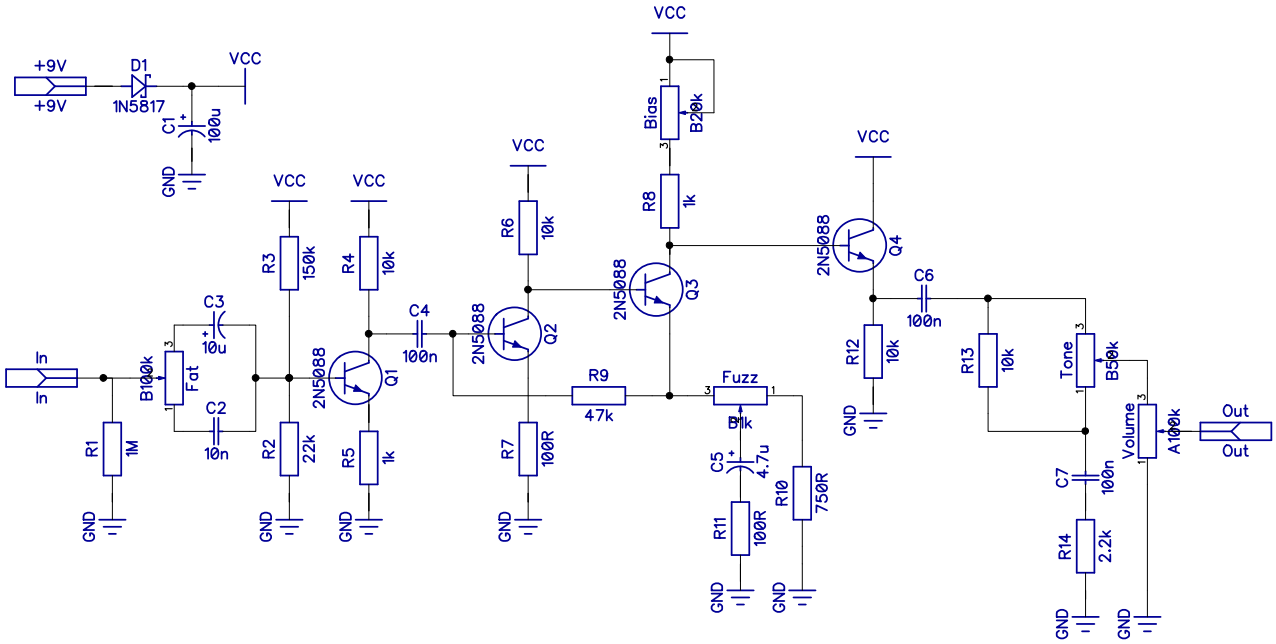
Ankh

Based on Basic Audio Scarab Deluxe
PCB artwork ©2015 drdFX
Release date: 2015.08.19.

The Ankh is a nice fuzz with readily available Si transistors. Tons of gain, versatile controls and a sound that does not get lost in the mix make this pedal outstanding.

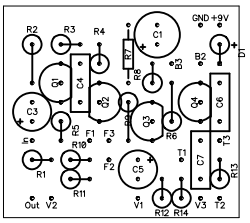
SCHEMATIC

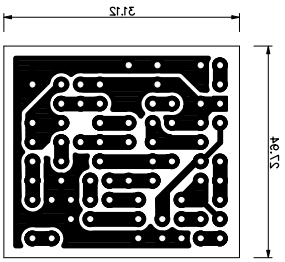


LAYOUT

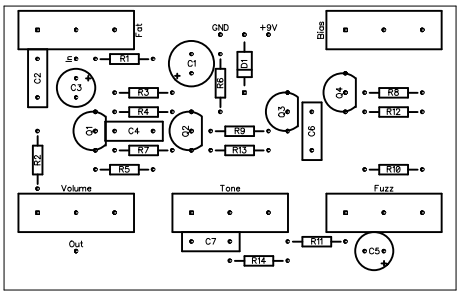
Print out the PCB design without any resizing options and make sure you switch off the “fit to page” option. The design is free for personal/home use and you also may build one or two for your friends, but the PCB layout is my artwork, therefore protected by copyright and is not permitted to be used for commercial purposes.

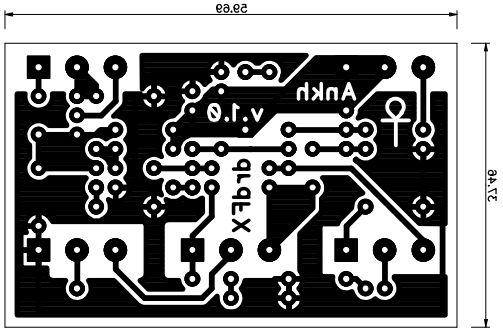
1590A layout





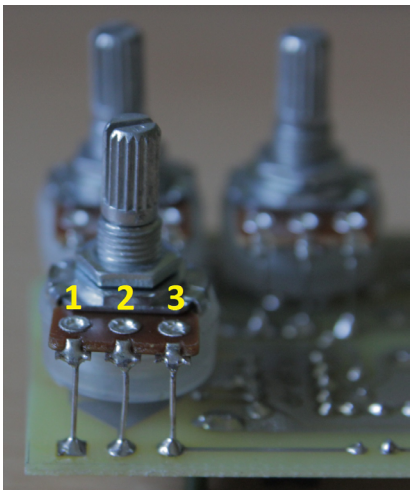
125B layout





BOM							
Resistors		Capacitors		Semiconductors		Others	
R1	1M	C1	100u	D1	1N5817	Volume	A100k
R2	22k	C2	10n	Q1	2N5088	Fat	B100k
R3	150k	C3	10u	Q2	2N5088	Fuzz	B1k
R4	10k	C4	100n	Q3	2N5088	Bias	B20k
R5	1k	C5	4.7u	Q4	2N5088	Tone	B50k
R6	10k	C6	100n				
R7	100R	C7	100n				
R8	1k						
R9	47k						
R10	750R						
R11	100R						
R12	10k						
R13	10k						
R14	2.2k						

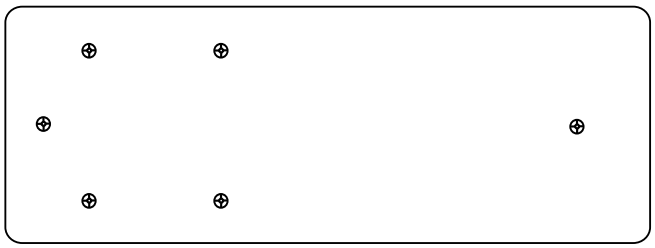
NOTES



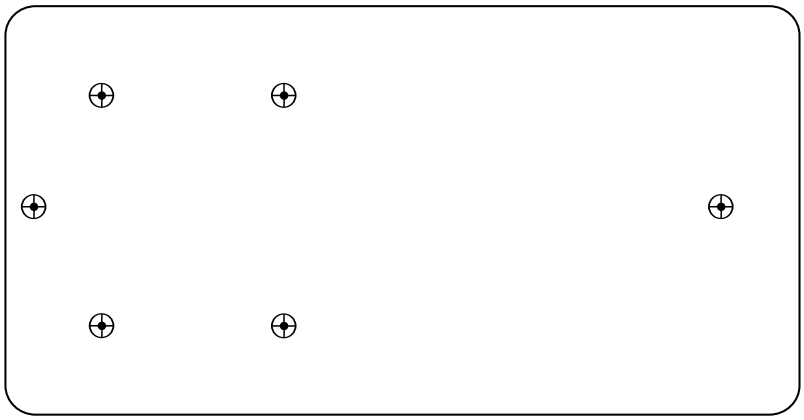
The pots are board mounted to the bottom of the board. The square pads mark the lug 1, for the numbering of the lugs see the picture.
Since the part number is quite low it is possible to build the effect into a 1590A box too, but then the five pots will not fit. In that version I have omitted the Fat control and the 10nF C2 cap and used the 10uF C3 cap only since I've found that most of the time I'm using the effect with the Fat pot maxed out anyway.

DRILLING TEMPLATES

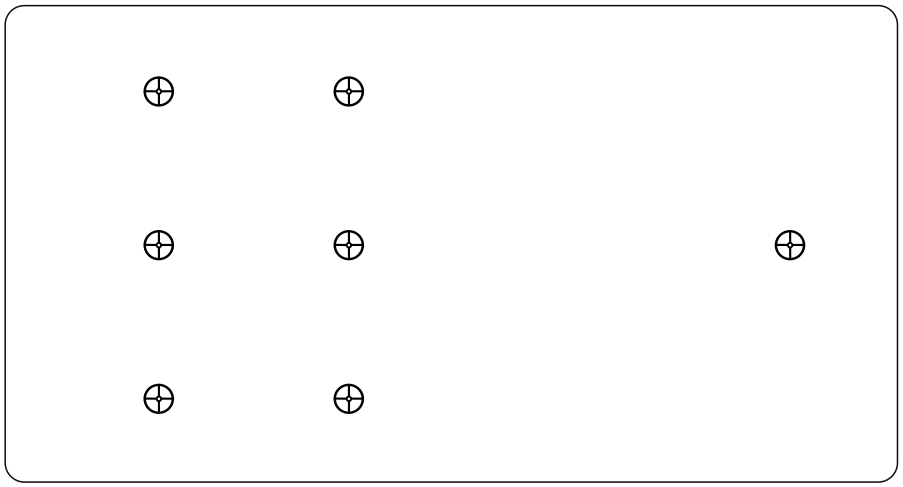
Here are three templates for the top of the box for the various box sizes. The 5-pot version fits only in a 125B box, the sixth hole marked is for the LED. The 4-pot version fits in a 1590A box. Alternatively you can build the 4-pot version in a 1590B box too of course if you prefer that size.



1590A with 4 pots



1590B with 4 pots



125B with 6 pots