The Lightningbolt is actually ROG's Supreaux Deux design. It is simulating a Supro amp's tone.

SCHEMATIC

Set trimmers to get 12V on each drain

C12=2.2n – 10n
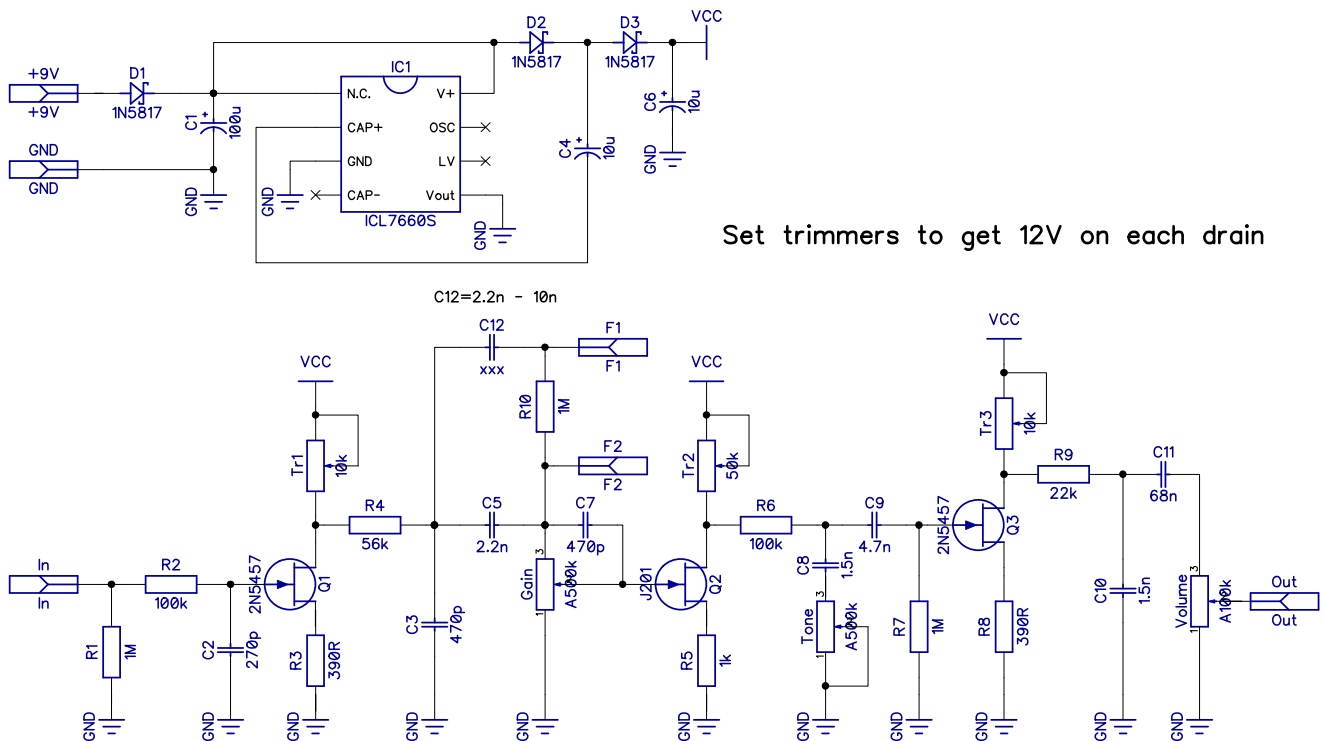
| BOM							
Resistors		Capacitors		Semiconductors		Others	
R1	1M	C1	100u	D1	1N5817	Gain	A500k
R2	100k	C2	270p	D2	1N5817	Tone	A500k
R3	390R	C3	470p	D3	1N5817	Volume	A100k
R4	56k	C4	10u	Q1	J201/J202	Tr1	10k
R5	1k	C5	2.2n	Q2	J201/J202	Tr2	50k
R6	100k	C6	10u	Q3	J201/J202	Tr3	10k
R7	1M	C7	470p	IC1	ICL7660S	Fat	SPDT
R8	390R	C8	1.5n				
R9	22k	C9	4.7n				
R10	1M	C10	1.5n				
		C11	68n				
		C12	2.2n - 10n				

NOTES
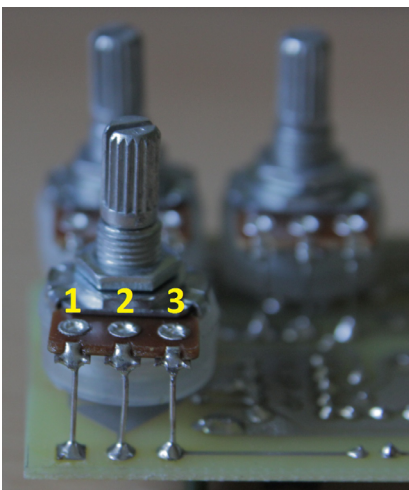
The pots are board mounted to the bottom of the board. The square pads mark the lug 1, for the numbering of the lugs see the picture. The switch is connected with wires and goes beneath the PCB. Make sure you leave enough space between the board and the switch to avoid shorting the circuit. I usually cut back the switch lugs and put a thicker double sided foam tape under the switch.
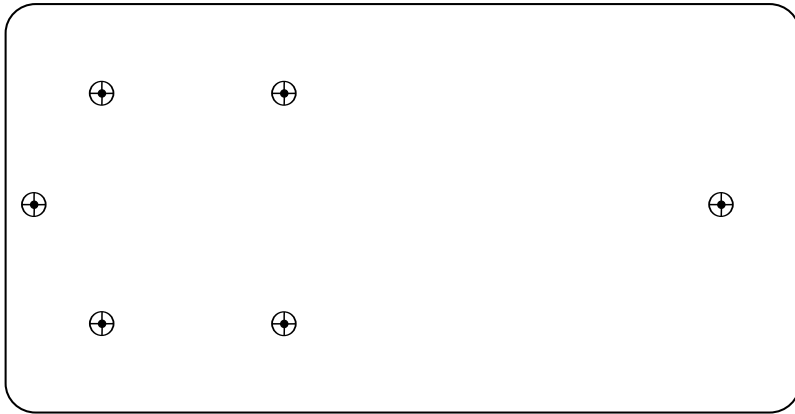
Print out the PCB design without any resizing options and make sure you switch off the "fit to page" option. The design is free for personal/home use and you also may build one or two for your friends, but the PCB layout is my artwork, therefore protected by copyright and is not permitted to be used for commercial purposes.
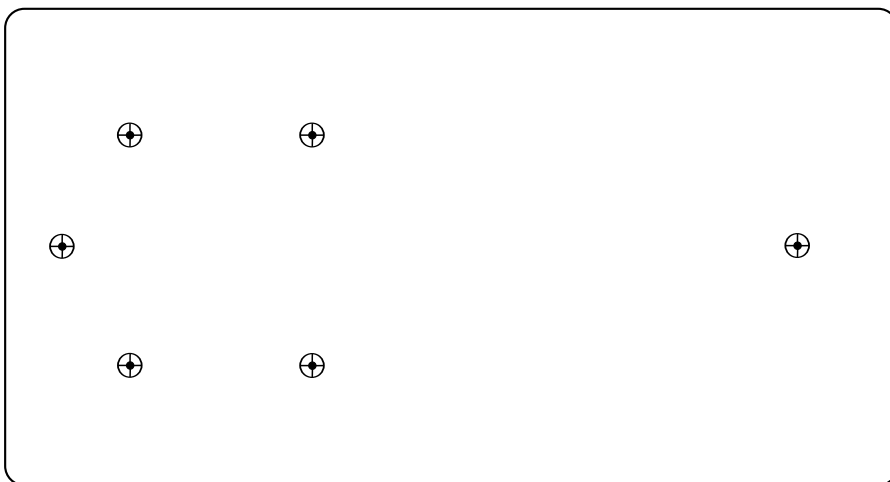
1590B
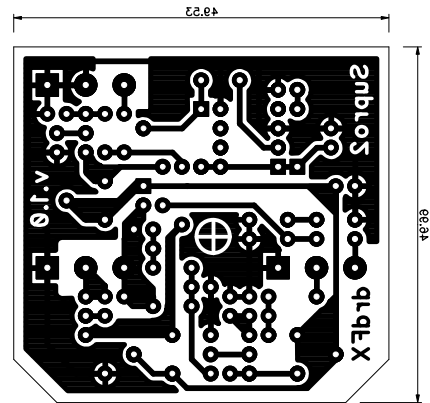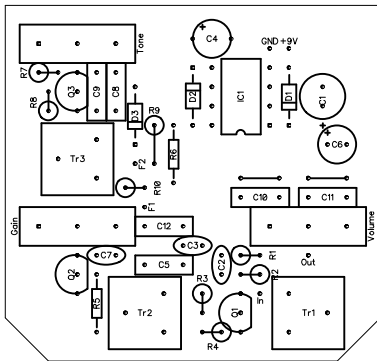
DRILLING TEMPLATES

Here are three templates for the top of the box for the various box sizes. The design fits in both 1590B and 125B, however if you are less experienced you may find the 125B enclosure easier to work with.

1590B

125B