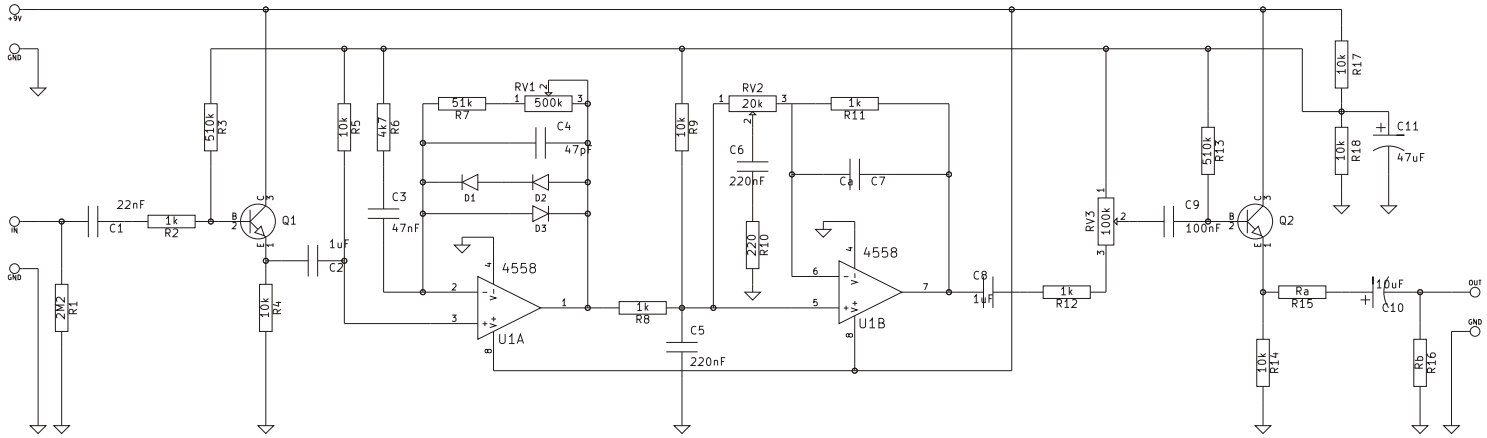
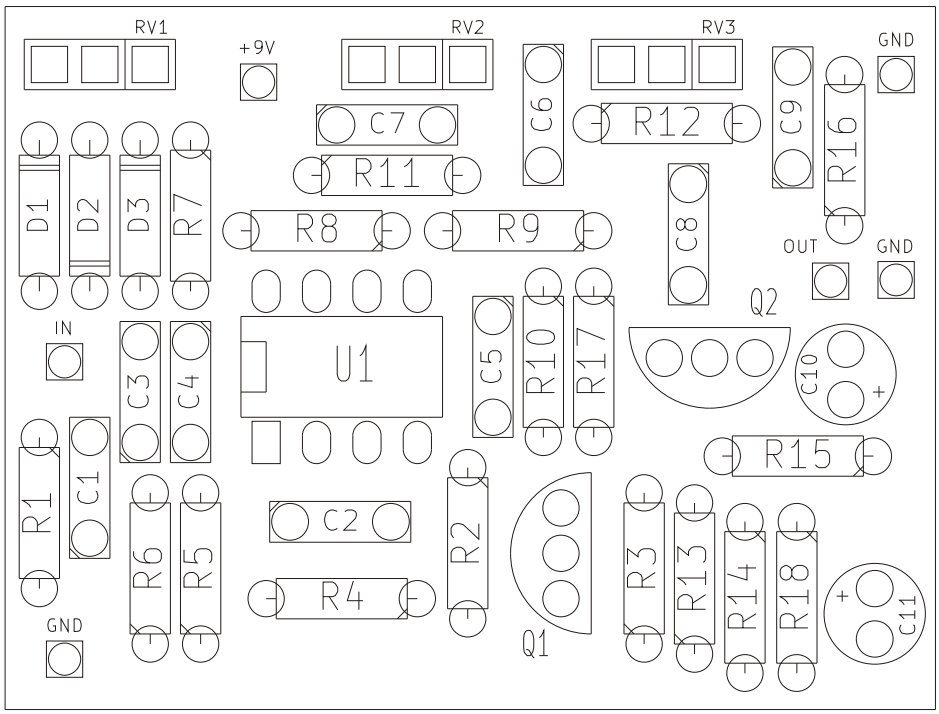
Tube Screamer schematic: **31.10.2019**

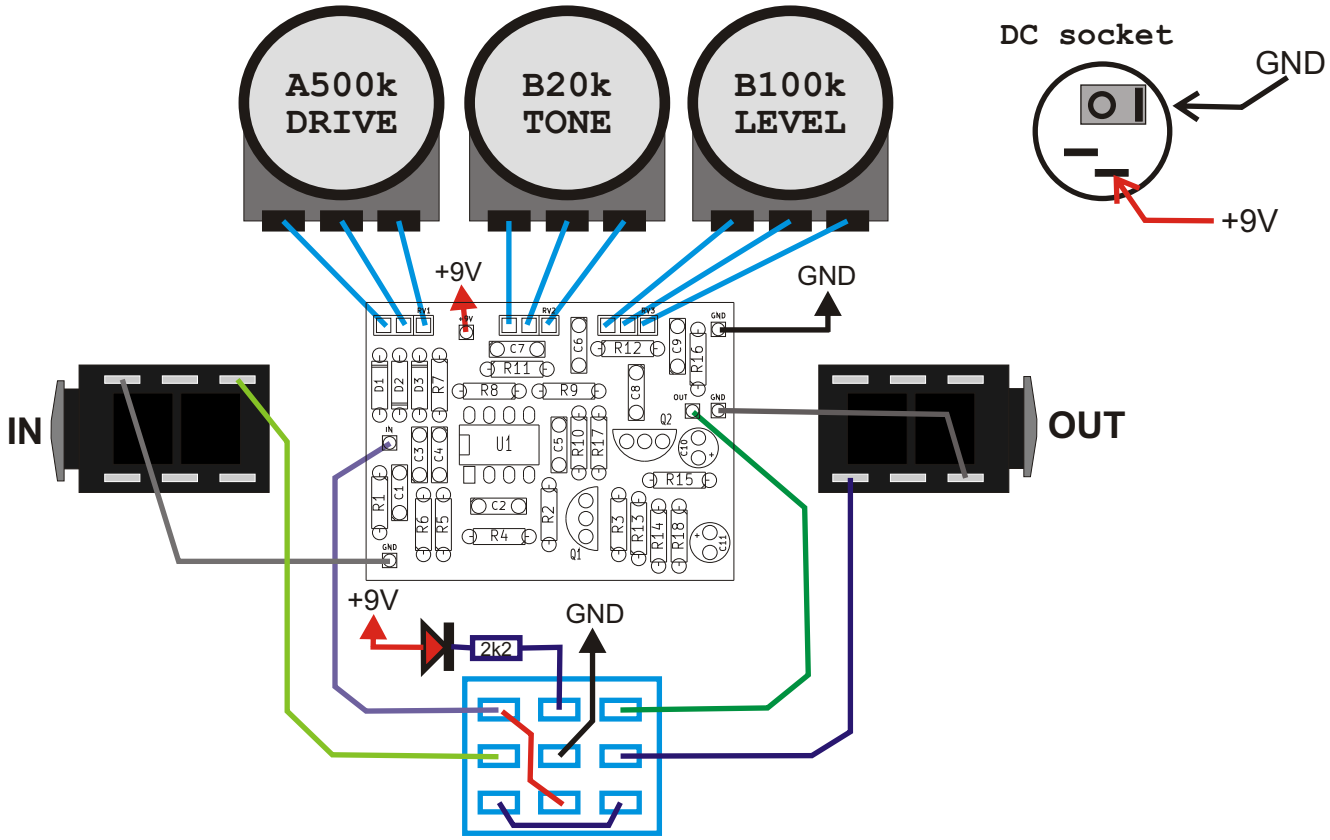


PCB parts placement diagram:



R1	2M2	C1	22n	D1	1N914
R2	1k	C2	1u	D2	1N914
R3	510k	C3	47n	D3	1N914
R	10k	C4	47p		
R5	10k	C5	220n	Q1	2N3904
R6	4k7	C6	220n	Q2	2N3904
R7	51k	C7	empty	U1	4558
R8	1k	C8	1u		
R9	10k	C9	100n	RV1	A500k
R10	220R	C10	10u	RV2	B20k
R11	1k	C11	47u	RV3	B100k
R12	1k				
R13	510k				
R14	10k				
R15*	470R TS9; 100R TS808				
R16*	100k TS9; 10k TS808				
R17	10k				
R18	10k				

Wiring (bottom view):



Use metal enclosure connected to ground.
Power supply: 9V DC

Bill of materials:

Resistors:
100R 1pcs. "R15*"
220R 1pcs. "R10"
470R 1pcs. "R15*"
1k 4pcs. "R2 R8 R11 R12"
2k2 1pcs. "LED"
4k7 1pcs. "R6"
10k 7pcs. "R4 R5 R9 R14 R16* R17 R18"
51k 1pcs. "R7"
100k 1pcs. "R16*"
510k 2pcs. "R3 R13"
2M2 1pcs. "R1"

Potentiometers:
A500k 1pcs. "GAIN"
B20k 1pcs. "TONE"
B100k 1pcs. "LEVEL"

Other:
Knobs 3szt.
Footswitch 3PDT 1szt.
DC socket 5.5/2.1 1szt.
JACK socket 2szt.

Capacitors:
47p 1pcs. "C4"
22n 1pcs. "C1"
47n 1pcs. "C3"
100n 1pcs. "C9"
220n 2pcs. "C5 C6"
1u 2pcs. "C2 C8"

Electrolytic capacitors:
10u 1pcs. "C10"
47u 1pcs. "C11"

Semiconductors:
2N3904 2pcs. "Q1 Q2"
4558 1pcs. "U1"
1N914 3pcs. "D1 D2 D3"
LED 1pcs.

Resistor color code:

390 x 10Ω = 3,9kΩ

Color	Band 1	Band 2	Band 3	Multiplier	Tolerance
Black	0	0	0	1 Ω	
Brown	1	1	1	10 Ω	1%
Red	2	2	2	100 Ω	2%
Orange	3	3	3	1k Ω	
Yellow	4	4	4	10 kΩ	
Green	5	5	5	100 kΩ	0,5%
Blue	6	6	6	1 MΩ	0,25%
Purple	7	7	7	10 MΩ	0,1%
Gray	8	8	8	100 MΩ	0,05%
White	9	9	9	1 GΩ	
Gold				0,1 Ω	5%
Silver				0,01 Ω	10%

Capacitors markings:

471 = 47 x 10^1 pF = 470pF
472 = 47 x 10^2 pF = 4700pF = 4,7nF
473 = 47 x 10^3 pF = 47000pF = 47nF
474 = 47 x 10^4 pF = 470000pF = 470nF

100pF	100p	100	101
220pF	220p	220	221
4,7nF	4n7	0.0047	472
10nF	10n	0.01	103
100nF	100n	0.1	104
220nF	220n	0.22	224
470nF	470n	0.47	474
1000nF	1uF	1u	105