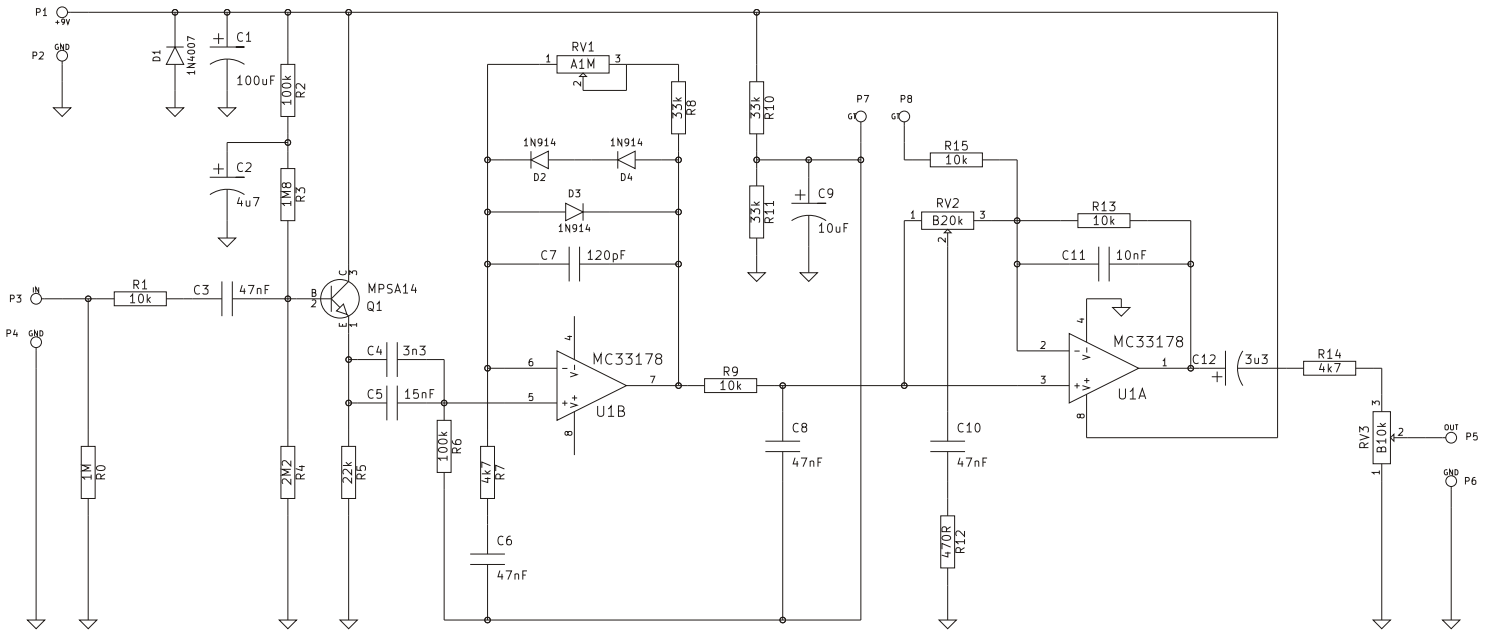
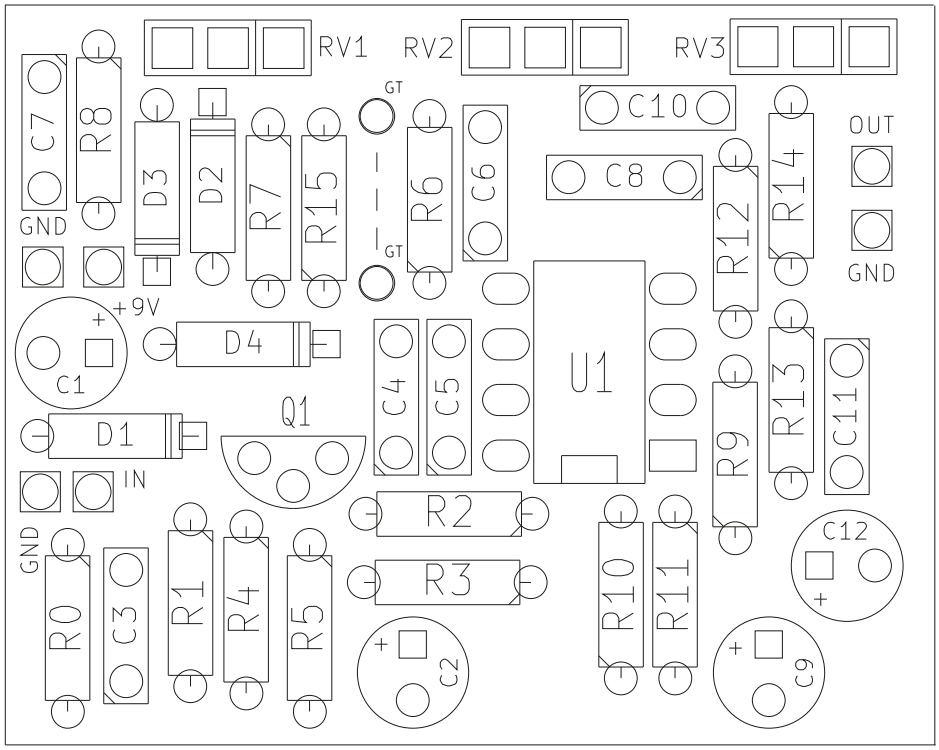
GT-OD schematic: **12.02.2019**

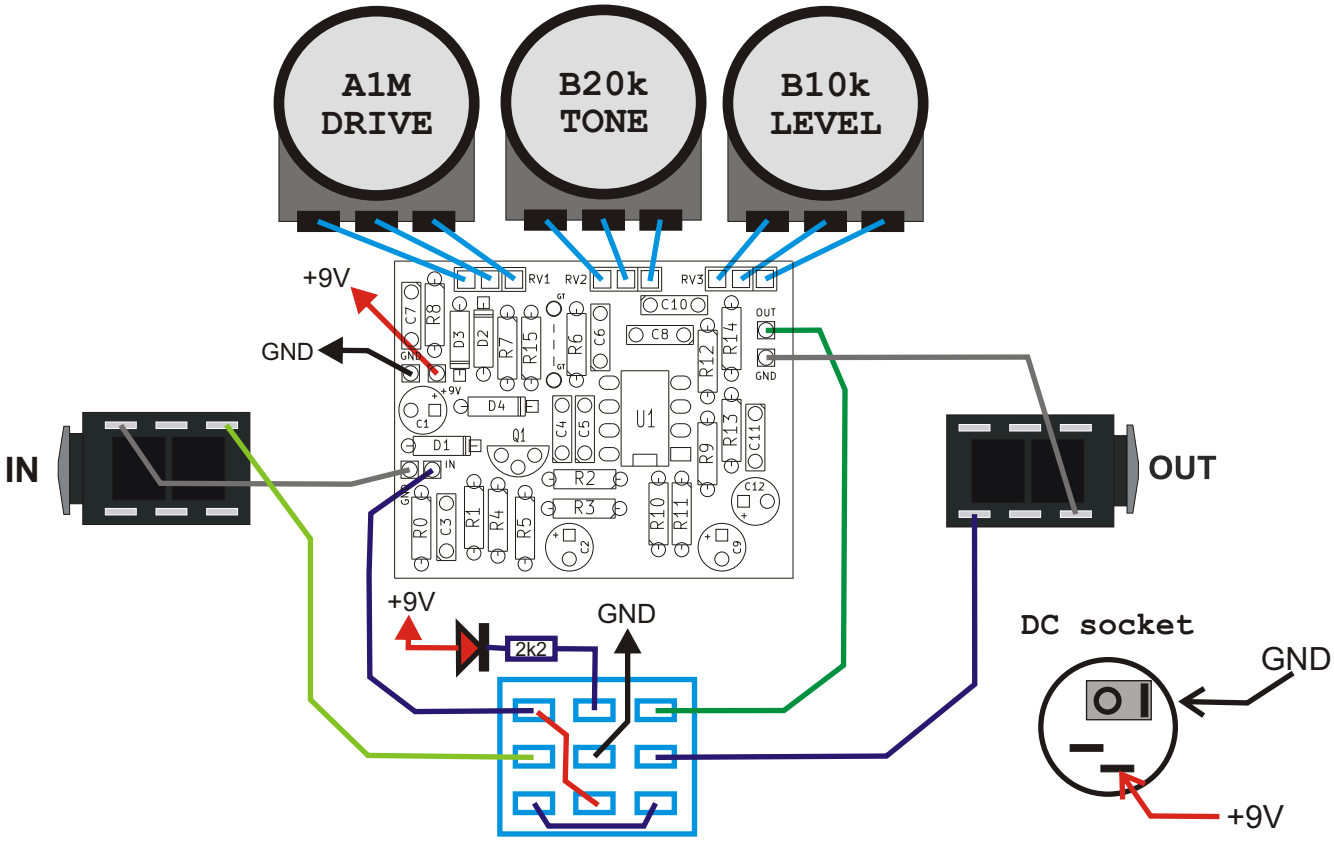


PCB parts placement diagram:



R0	1M	C1	100u
R1	10k	C2	4u7
R2	100k	C3	47n
R3	1M8	C4	3n3
R4	2M2	C5	15n
R5	22k	C6	47n
R6	100k	C7	120p
R7	4k7	C8	47n
R8	33k	C9	10u
R9	10k	C10	47n
R10	33k	C11	10n
R11	33k	C12	3u3
R12	470R		
R13	10k	D1	1N400X
R14	4k7	D2	1N914
R15	10k	D3	1N914
RV1	A1M	D4	1N914
RV2	B20k	Q1	MPSA14
RV3	B10k	U1	MC33178
GT	jumper		

Wiring (bottom view):



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

Bill of materials:

Resistors:

470R	1pcs.	"R12"
2k2	1pcs.	"LED"
4k7	2pcs.	"R7 R14"
10k	4pcs.	"R1 R9 R13 R15"
22k	1pcs.	"R5"
33k	3pcs.	"R8 R10 R11"
100k	2pcs.	"R2 R6"
1M	1pcs.	"R0"
1M8	1pcs.	"R3"
2M2	1pcs.	"R4"

Potentiometers:

A1M	1pcs.	"DRIVE"
B10k	1pcs.	"LEVEL"
B20k	1pcs.	"TONE"

Capacitors:

120p	1pcs.	"C7"
3n3	1pcs.	"C4"
10n	1pcs.	"C11"
15n	1pcs.	"C5"
47n	4pcs.	"C3 C6 C8 C10"

Electrolytic capacitors:

3u3	1pcs.	"C12"
4u7	1pcs.	"C2"
10u	1pcs.	"C9"
100u	1pcs.	"C1"

Other:

Knobs	3pcs.
Footswitch 3PDT	1pcs.
DC socket 5.5/2.1	1pcs.
JACK socket	2pcs.

Semiconductors:

MC33178	1pcs.	"U1"
MPSA14	1pcs.	"Q1"
1N400X	1pcs.	"D1"
1N914	3pcs.	"D2 D3 D4"
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