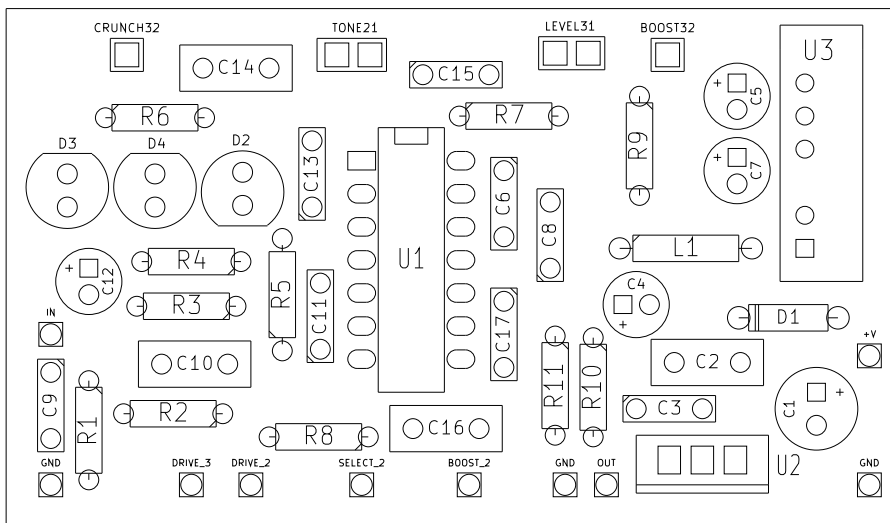
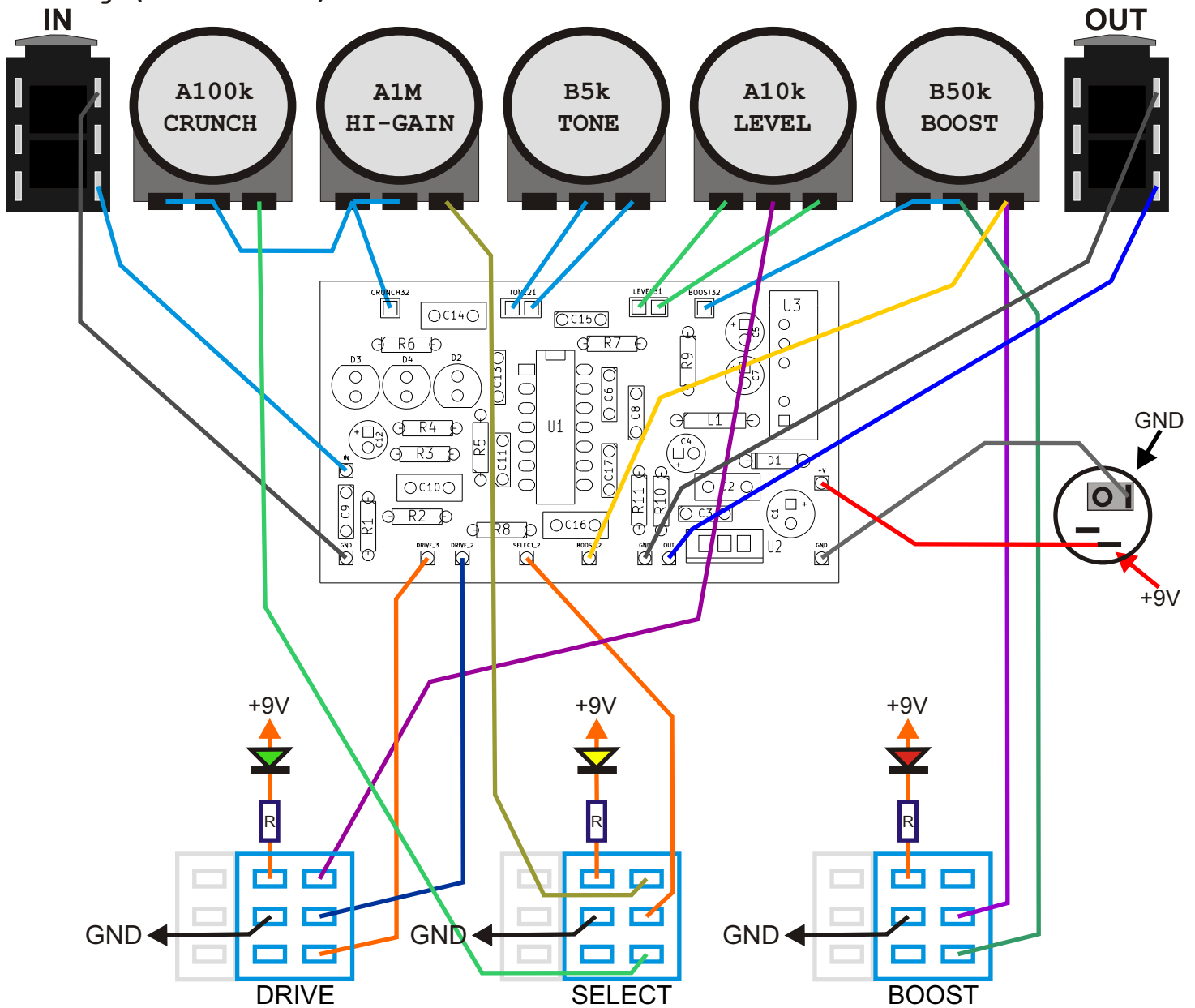


PCB parts placement diagram:



R1 1M	BOOST B50k	C1 47u	D1 5819
R2 1M	CRUNCH A100k	C2 330n	D2 RED LED
R3 47k	HI-GAIN A1M	C3 100n	D3 RED LED
R4 47R	LEVEL A10k	C4 1u	D4 RED LED
R5 2k	TONE B5k	C5 1u	
R6 4k7		C6 47n	U1 LF347
R7 22k		C7 1u	U2 7805
R8 22k		C8 47n	U3 A0512S2WR2
R9 22k		C9 330p	
R10 100R		C10 220n	
R11 1k		C11 33n	
L1 10uH		C12 2u2	
		C13 330p	
		C14 470n	
		C15 68n	
		C16 470n	
		C17 22p	

Wiring (bottom view):



Use metal enclosure connected to ground.

Power supply: 9V DC

Bill of materials:

Resistors:

470R 1pcs. "GREEN LED"
 510R 1pcs. "YELLOW LED"
 2k2 1pcs. "RED LED"
 47R 1pcs. "R4"
 100R 1pcs. "R10"
 1k 1pcs. "R11"
 2k 1pcs. "R5"
 4k7 1pcs. "R6"
 22k 3pcs. "R7 R8 R9"
 47k 1pcs. "R3"
 1M 2pcs. "R1 R2"

Potentiometers:

B5k 1pcs. "TONE"
 A10k 1pcs. "LEVEL"
 B50k 1pcs. "BOOST"
 A100k 1pcs. "CRUNCH"
 A1M 1pcs. "HI-GAIN"

Capacitors:

22p 1pcs. "C17"
 330p 2pcs. "C9 C13"
 33n 1pcs. "C11"
 47n 2pcs. "C6 C8"
 68n 1pcs. "C15"
 100n 1pcs. "C3"
 220n 1pcs. "C10"
 330n 1pcs. "C2"
 470n 2pcs. "C14 C16"

Electrolytic capacitors:

1u 3pcs. "C4 C5 C7"
 2u2 1pcs. "C12"
 47u 1pcs. "C1"

Semiconductors:

1N5819 1pcs. "D1"
 7805 1pcs. "U2"
 LF347 1pcs. "U1"
 A0512S2WR2 1pcs. "U3"
 LED 5mm RED 3pcs.
 LED 3mm (RED/GRN/YEL) 3pcs.

Other:

Choke 10uH "L1" 1pcs.
 Knob 5pcs.
 Footswitch DPDT/3PDT 3pcs.
 Jack socket 2pcs.
 DC socket 5.5/2.1 1pcs.

Resistor color code:



$$390 \times 10\Omega = 3,9k\Omega$$

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 k Ω	
Green	5	5	5	100 k Ω	0,5%
Blue	6	6	6	1 M Ω	0,25%
Purple	7	7	7	10 M Ω	0,1%
Gray	8	8	8	100 M Ω	0,05%
White	9	9	9	1 G Ω	
Gold				0,1 Ω	5%
Silver				0,01 Ω	10%

Capacitors markings:

$$\begin{aligned}
 471 &= 47 \times 10^1 \text{ pF} = 470 \text{ pF} \\
 472 &= 47 \times 10^2 \text{ pF} = 4700 \text{ pF} = 4,7 \text{ nF} \\
 473 &= 47 \times 10^3 \text{ pF} = 47000 \text{ pF} = 47 \text{ nF} \\
 474 &= 47 \times 10^4 \text{ pF} = 470000 \text{ pF} = 470 \text{ nF}
 \end{aligned}$$

$$\begin{aligned}
 100 \text{ pF} &= 100 \text{ p} = 100 = 101 \\
 220 \text{ pF} &= 220 \text{ p} = 220 = 221 \\
 4,7 \text{ nF} &= 4 \text{ n}7 = 0.0047 = 472 \\
 10 \text{ nF} &= 10 \text{ n} = 0.01 = 103 \\
 100 \text{ nF} &= 100 \text{ n} = 0.1 = 104 \\
 220 \text{ nF} &= 220 \text{ n} = 0.22 = 224 \\
 470 \text{ nF} &= 470 \text{ n} = 0.47 = 474 \\
 1000 \text{ nF} &= 1 \mu\text{F} = 1 \mu = 105
 \end{aligned}$$