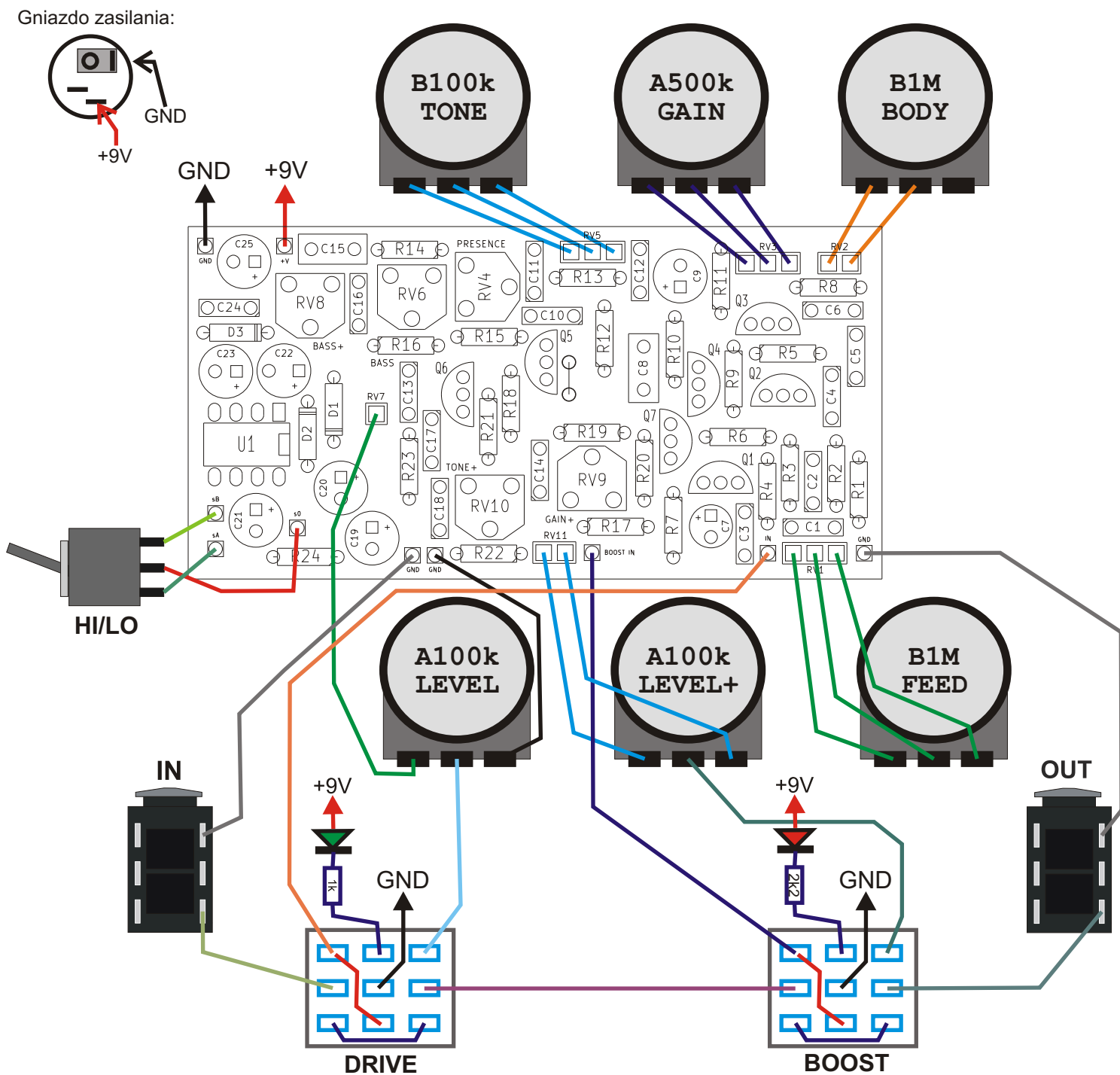


3. Połączenia wewnątrz obudowy (widok od spodu).



Use metal enclosure connected to ground. Set trim pots to get sound you like.
Power supply: 9V DC

Bill of materials:

Resistors:

100R 1pcs. "R11"
1k 5pcs. "R6 R7 R10 R21 LED"
2k2 1pcs. "LED"
3k3 1pcs. "R16"
10k 5pcs. "R1 R8 R19 R23 R24"
39k 1pcs. "R13"
43k 1pcs. "R14"
47k 2pcs. "R4 R12"
470k 3pcs. "R5 R9 R18"
1M 6pcs. "R2 R3 R15 R17 R20 R22"

Potentiometers:

B1M 2pcs. "RV1 RV2"
A500k 1pcs. "RV3"
B100k 1pcs. "RV5"
A100k 2pcs. "RV7 RV11"

Trimpots:

5k 1pcs. "RV9"
100k 4pcs. "RV4 RV6 RV8 RV10"

Capacitors:

470p 2pcs. "C3 C6"
1n 1pcs. "C1"
3n3 2pcs. "C2 C10"
8n2 1pcs. "C12"
10n 2pcs. "C16 C24"
47n 2pcs. "C4 C18"
100n 5pcs. "C5 C11 C13 C14 C17"
1u 2pcs. "C8 C15"

Electrolytic capacitors:

10u 1pcs. "C7"
47u 7pcs. "C9 C19 C20 C21 C22 C23 C25"

Semiconductors:

1N400X 3pcs. "D1 D2 D3"
J201 7pcs. "Q1 Q2 Q3 Q4 Q5 Q6 Q7"
ICL7660S 1pcs. "U1"
LED 2pcs.

Other:

Knobs 6pcs.
Footswitch 3PDT 2pcs.
Jack socket 2pcs.
Dc socket 5.5/2.1 1pcs.
Switch MTS102 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:

$$471 = 47 \times 10^1 \text{ pF} = 470 \text{ pF}$$

$$472 = 47 \times 10^2 \text{ pF} = 4700 \text{ pF} = 4,7 \text{ nF}$$

$$473 = 47 \times 10^3 \text{ pF} = 47000 \text{ pF} = 47 \text{ nF}$$

$$474 = 47 \times 10^4 \text{ pF} = 470000 \text{ pF} = 470 \text{ nF}$$

$$100 \text{ pF} = 100 \text{ p} = 100 = 101$$

$$220 \text{ pF} = 220 \text{ p} = 220 = 221$$

$$4,7 \text{ nF} = 4 \text{ n}7 = 0.0047 = 472$$

$$10 \text{ nF} = 10 \text{ n} = 0.01 = 103$$

$$100 \text{ nF} = 100 \text{ n} = 0.1 = 104$$

$$220 \text{ nF} = 220 \text{ n} = 0.22 = 224$$

$$470 \text{ nF} = 470 \text{ n} = 0.47 = 474$$

$$1000 \text{ nF} = 1 \mu\text{F} = 1 \mu = 105$$