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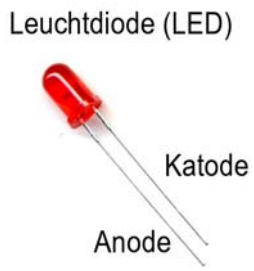
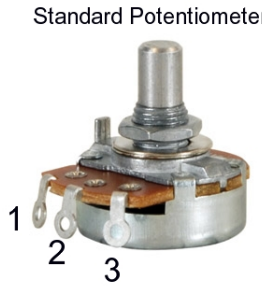
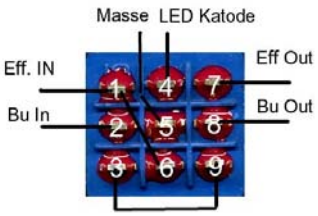
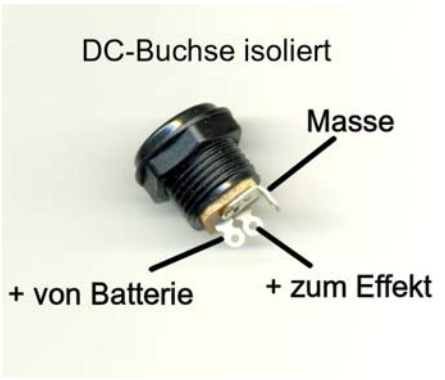
Manual for BluesBro

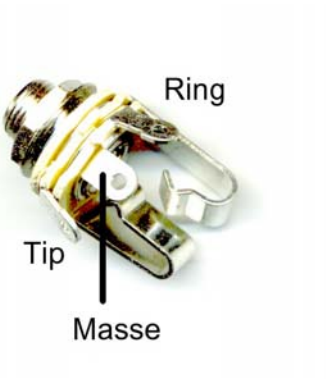
Some allocations of important elements

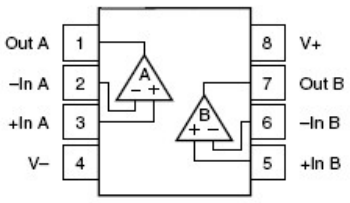






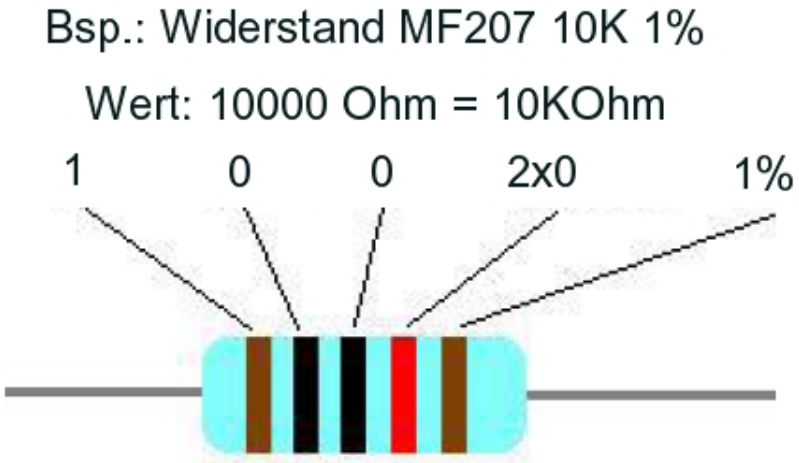




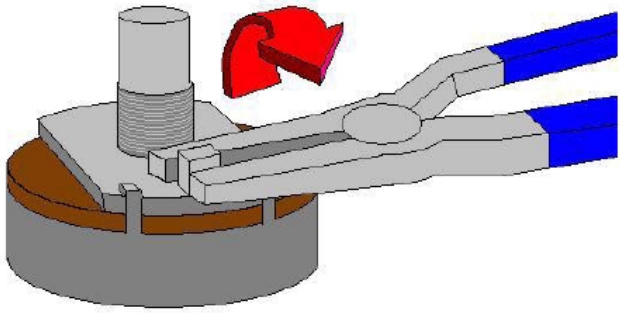


Bases of building and the assembly

Color chart of resistances MF207 FTE52 1% and example F



Nase am Poti mit einer Flachzange abbrechen

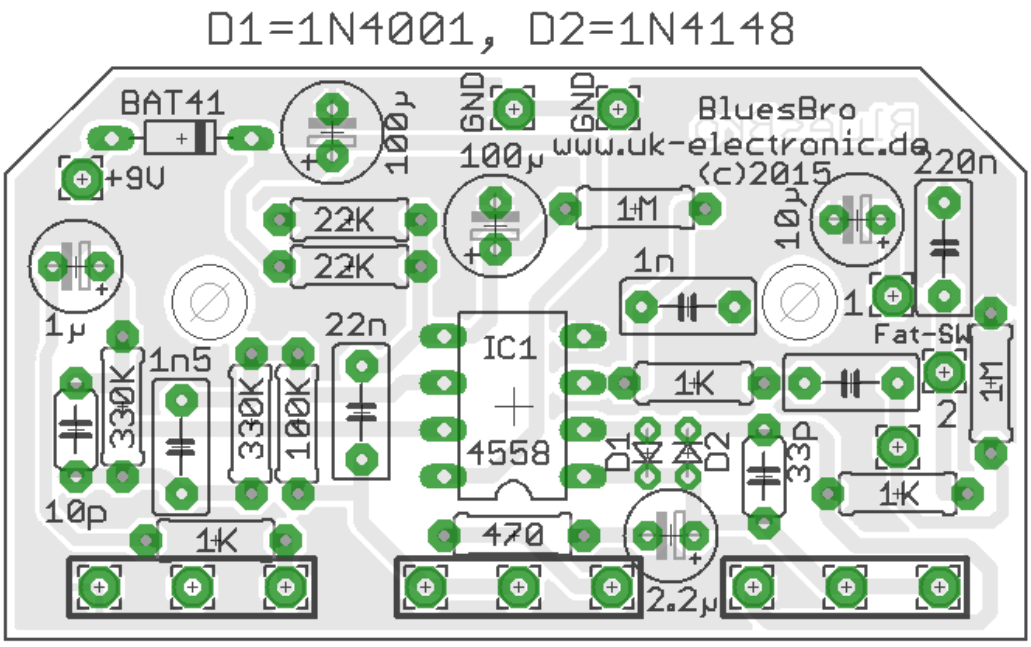


Materialliste / bill of material

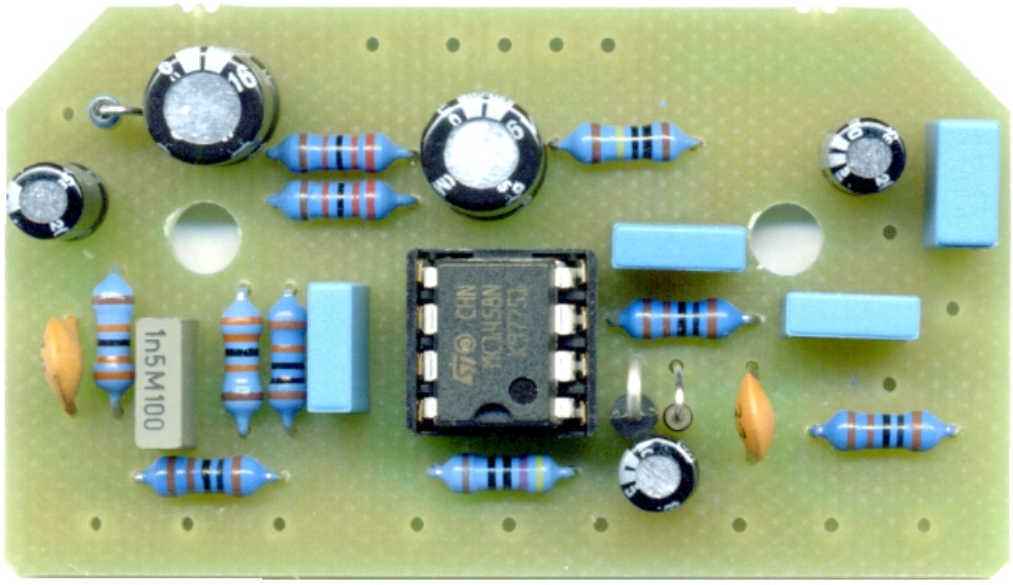
Quantitiy	Label
	Mechanic
1	PCB „BluesBro“
1	Monojack NYS229 ¼“
1	Stereojack NYS230 ¼“
1	3PDT Switch
1	SPDT Switch LC244
1	Pot 100K-A (logarithmic) - Level
1	Pot 250K-A (logarithmic) - Drive
1	Pot 10K-B (linear) Tone
1	DC-jack iso 5,5/2,1mm
1	Batteryclip
1	Any color wire
1	LED bezel for 3mm chrome
2	Self adhesive spacers 4,8mm
2	Steel washer 10,5mm (Audio jacks)
3	Steel washer 7.4mm (Potentiometer)
2	Cable strap
	IC’s/diodes
1	MC1458 + LC14 Socket
1	Schottky Diode BAT41 (Ring Katode)
1	1N4001 (Ring Katode)
1	1N4148 (Ring Katode)
1	LED red 3mm (Low Current) short leg kathode
	Widerstände
1	Resistor 470R (yellow/violet/black/black/brown)
3	Resistor 1K (brown/black/black/brown/brown)
1	Resistor 2K2 (red/red/black/brown/brown)
2	Resistor 22K (red/red/black/red/brown)
1	Resistor100K (brown/black/black/orange/brown)
2	Resistor 330K (orange/orange/black/orange/brown)
2	Resistor 1M (brown/black/black/yellow/brown)
	Kondensatoren
1	Ceramic capacitor 10pF (10)
1	Ceramic capacitor 33pF (33)
1	Capacitor 0,001µF= 1nF MKT
1	Capacitor 0,0015µF=1n5 MKT
2	Capacitor 0,022µF=22nF MKT
1	Capacitor 0,22µF= 220nF MKT
1	Electrolytic capacitor radially 1µF/ 50V
1	Electrolytic capacitor radially 2,2µF/ 50V
1	Electrolytic capacitor radially 10µF/ 25V
2	Electrolytic capacitor radially 100µF/ 16V

Assembly of the printed circuit board

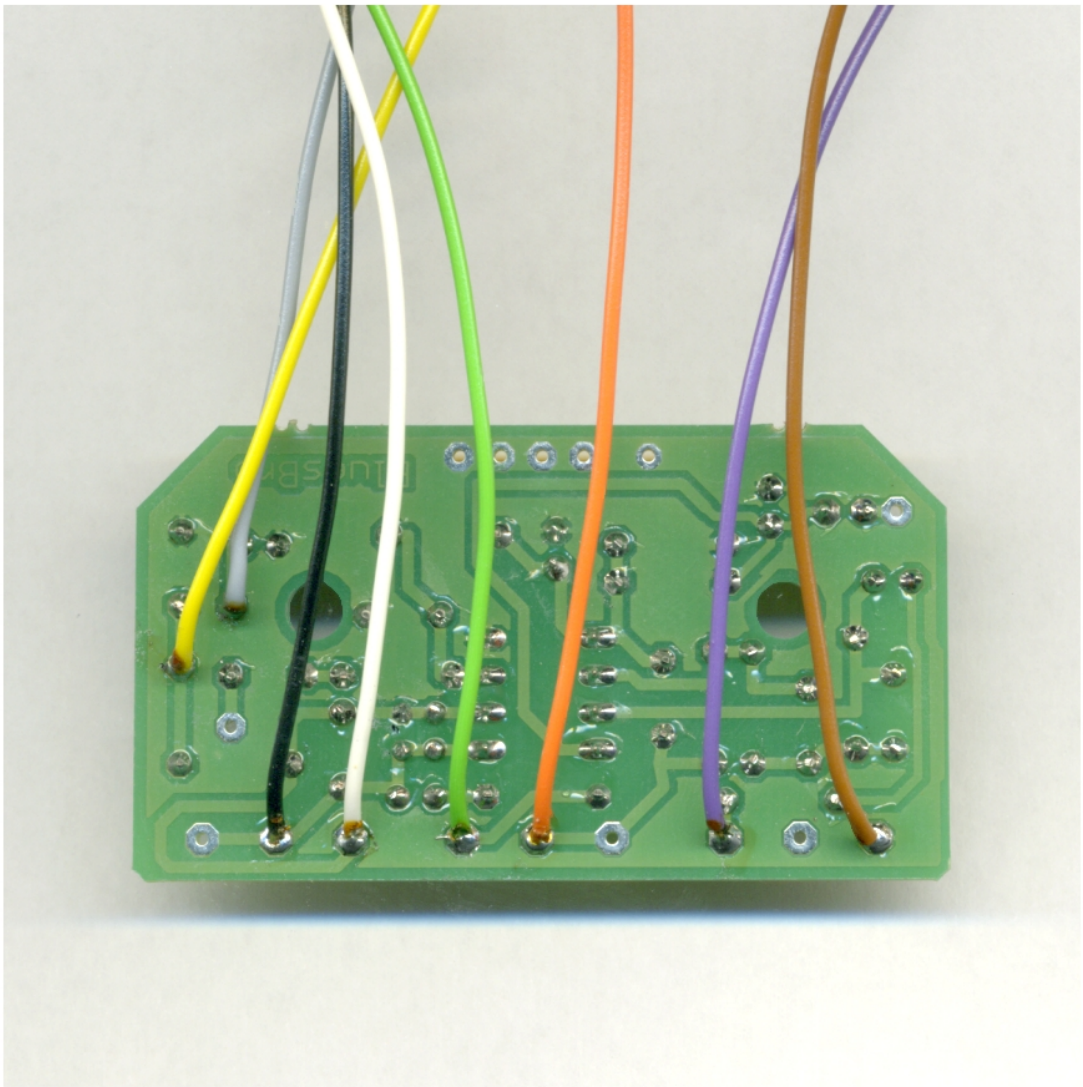
As the first the printed circuit board is equipped on the basis the bill of material illustrated down. For this one should begin with the lowest elements, the resistors, diodes, capacitors and the socket with the IC.



The whole should look then in such a way.

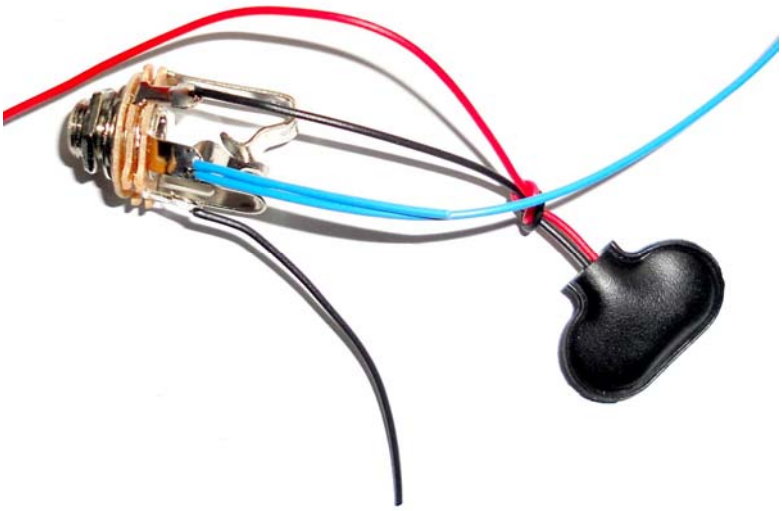


At the last then solders approx. 5-8 cm long wires into the drillings (from the solder side) for the potentiometers. (The colors are freely selected!) Clean work, in particular the execution of the soldered connections should possess highest priority, in order to generally exclude assembly and soldering errors.

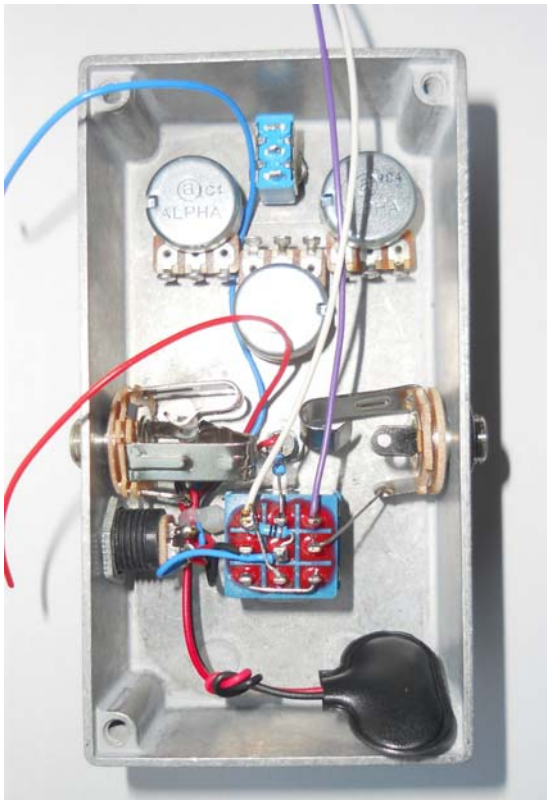


Mechanical structure and wiring

If the printed circuit board is equipped goes it to the assembly of the mechanical components in the enclosure and the external wiring. Provided that enclosure is already preparatory with all drillings. The input jack should as in the picture before that begins to be before-wired, since one solders in the inserted condition badly to the jack comes.



Next one sets the DC jack, the two audio jacks, the switch and the potentiometers into the enclosure. One makes the wiring in the enclosure on the basis the wiring diagram.
Note! In the photo the ground connection (blue) is not correct.

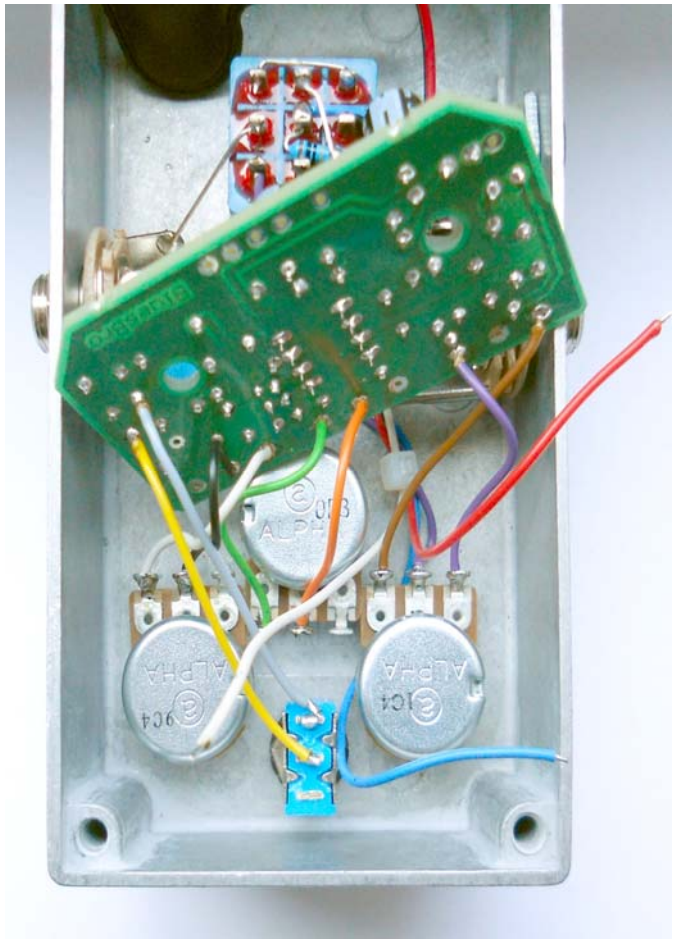


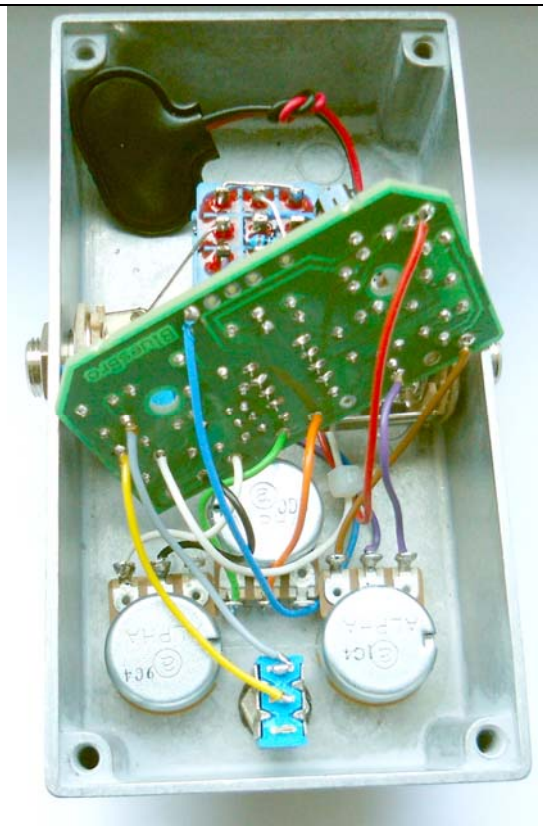
The wires from the enclosure (effect input, effect output, +Ub, ground and LED anode are shortened accordingly and soldered from downside to the printed circuit board. The LED inclusive. Version is inserted in such a way, which points the short leg (kathode) to the switch. Then one can solder the kathode without extension equal to the switch. The anode is shortened and extended with a bit braid. If everything is soldered, the printed circuit board is only stuck with the help of the two spacers on the back of the two potentiometers.

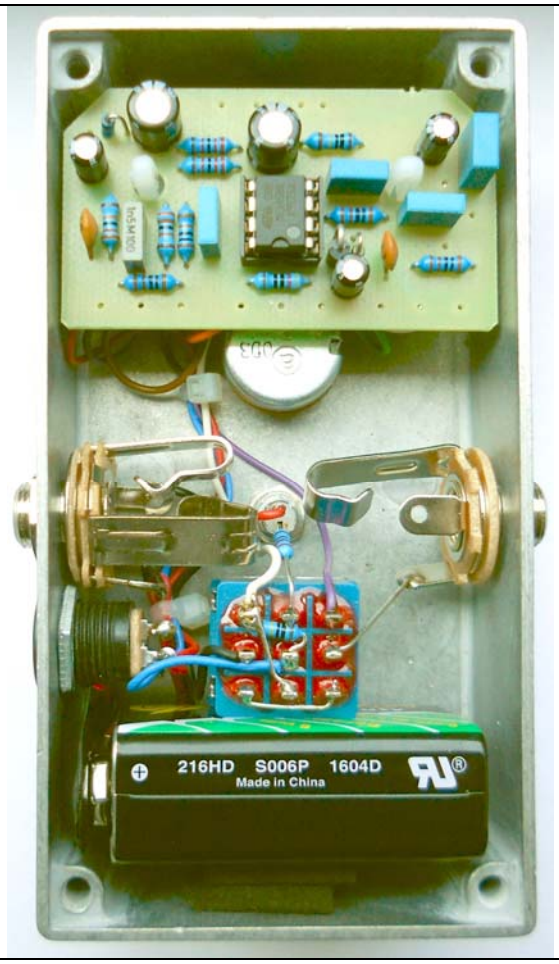
References to the mechanical structure :

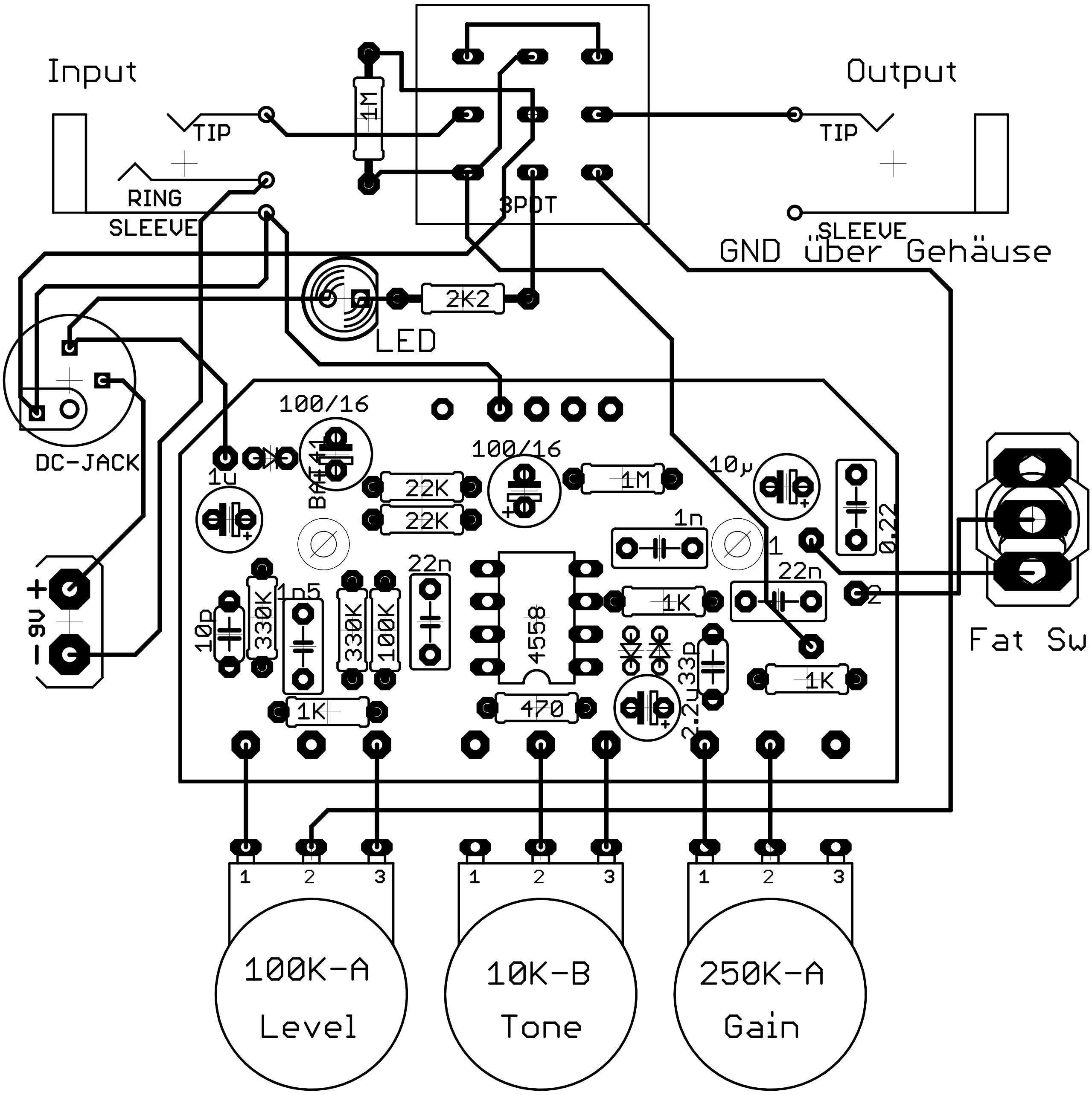
The small noses at the potentiometers are broken off simply with pliers (see fig.: Page 2). As knobs should use which with maximally 20mm if one itself the layout provided served. Otherwise to max 24mm. The drillings of the audi jacks sit 14mm of the lower surface of the enclosure, the DC jack 12.5mm of the lower surface with a distance from 18mm to the input jack. Für nicht vorgebohrte Gehäuse gelten folgende Maße:

Potentiometer : 7mm
Audio jacks: 9.5mm
3PDT-switch: 12mm
DC-jack: 13mm
LED bezel: 6mm







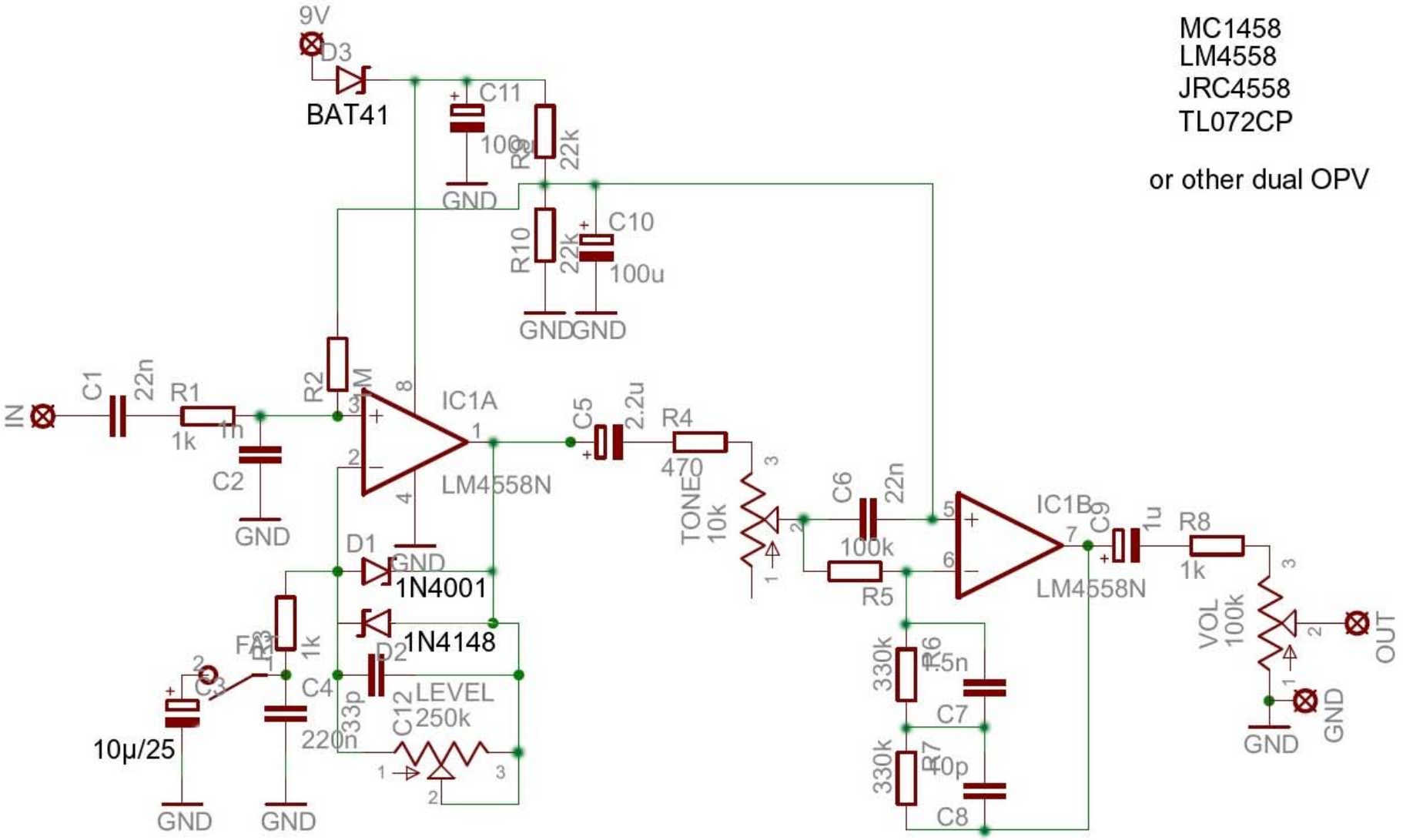


Input
Output
TIP
RING
SLEEVE
TIP
SLEEVE
1M
3PDT
GND über Gehäuse
2K2
LED
DC-JACK
+
9V
-
100/16
100/16
1u
BAT41
22K
22K
1M
10µ
1n
0,22
1
2
22n
22n
1n5
10p
330K
330K
100K
4558
1K
1K
33p
2,2u
1K
470
Fat Sw
1
2
3
1
2
3
1
2
3
100K-A
Level
10K-B
Tone
250K-A
Gain

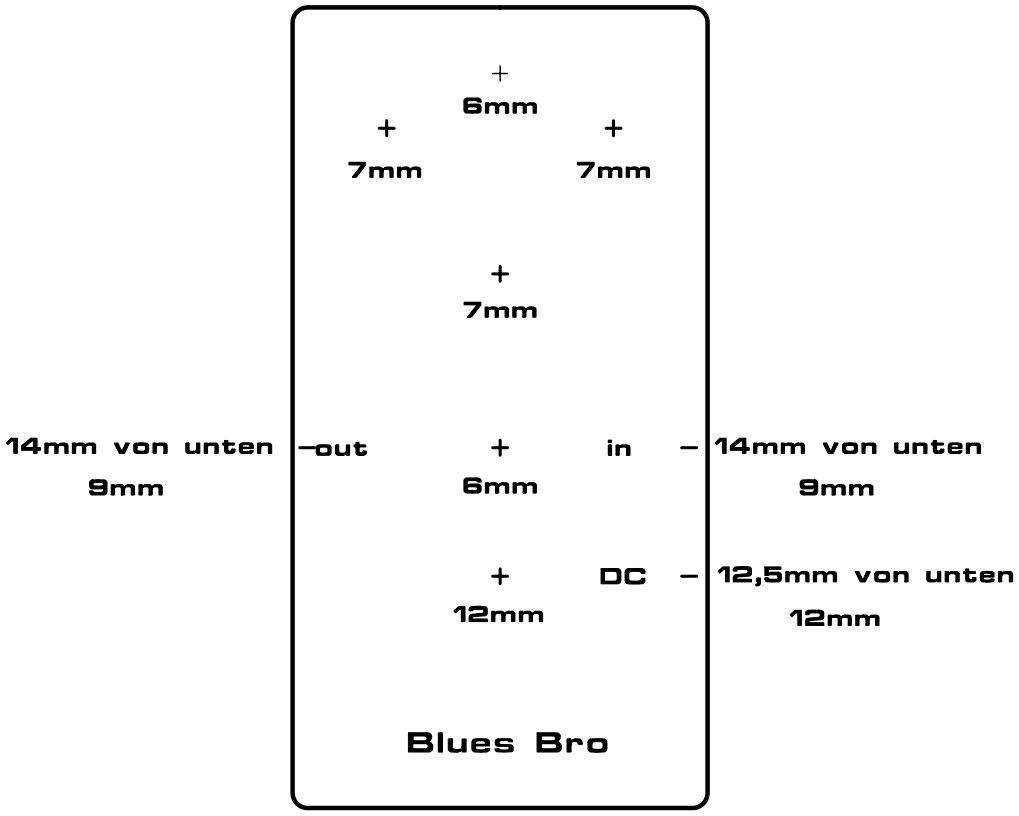
IC's

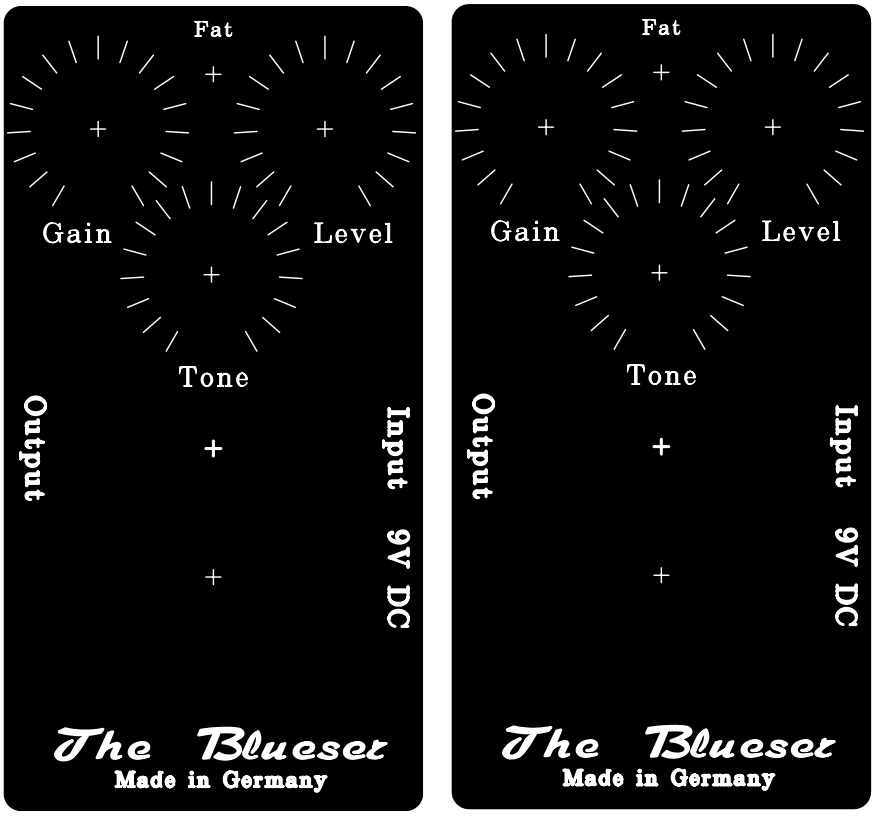
MC1458
LM4558
JRC4558
TL072CP

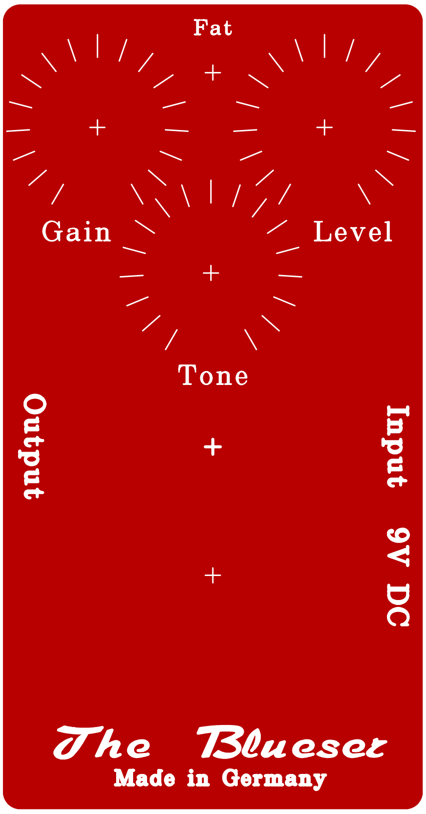
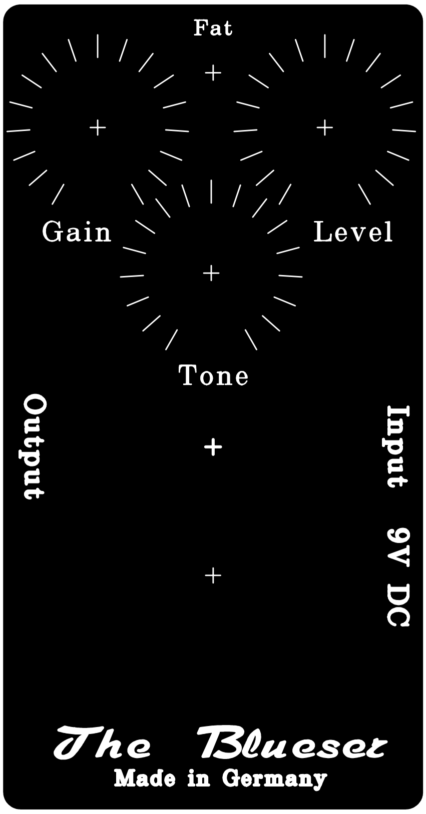
or other dual OPV



BluesBro


6mm
7mm
7mm
7mm
14mm von unten
9mm
out
in
14mm von unten
9mm
6mm
DC
12,5mm von unten
12mm
12mm
Blues Bro


Fat
Gain
Level
Tone
Output
Input 9V DC
The Blueset
Made in Germany
Fat
Gain
Level
Tone
Output
Input 9V DC
The Blueset
Made in Germany


Fat
Gain
Level
Tone
Output
Input
9V DC
The Blueser
Made in Germany

Fat
Gain
Level
Tone
Output
Input
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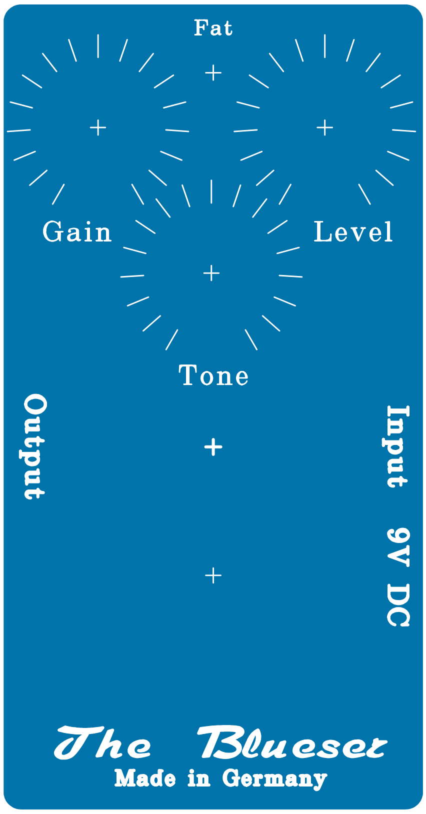
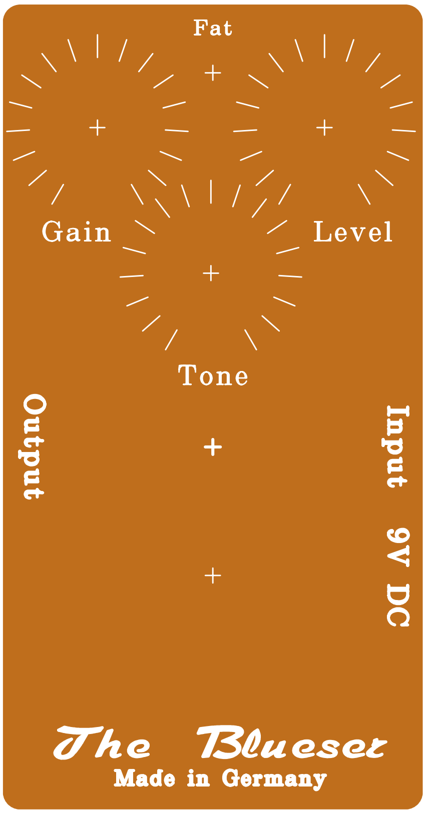
The Blueser
Made in Germany

Fat
Gain
Level
Tone
Output
Input
9V DC
The Blueser
Made in Germany

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Output
Input
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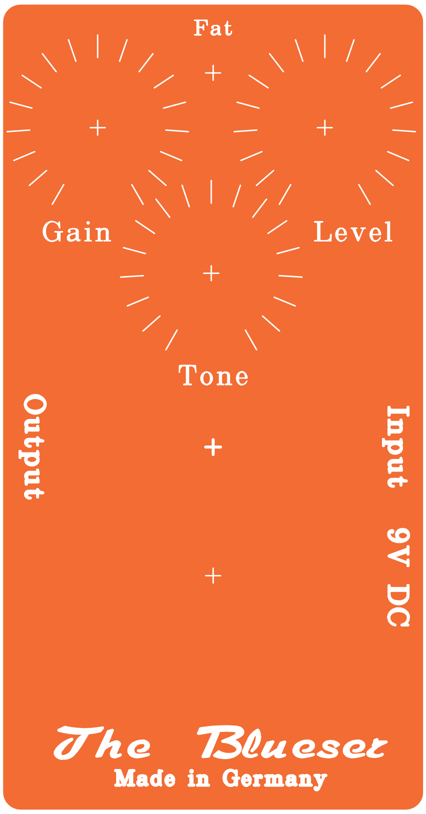
The Blueser
Made in Germany

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The Blueser
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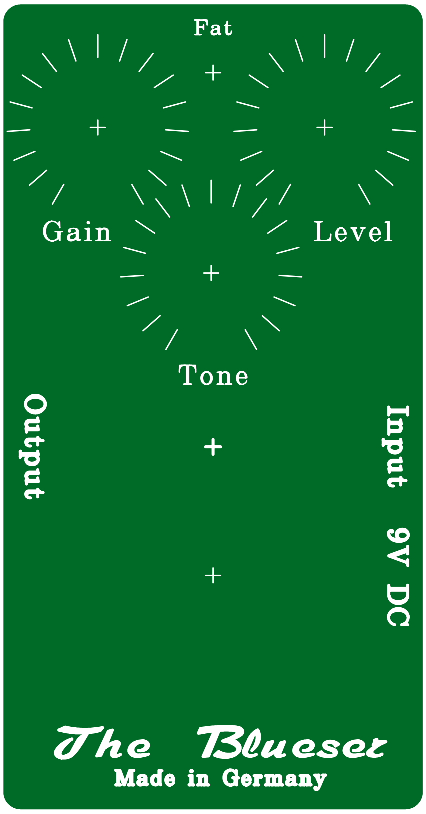
Fat
Gain
Level
Tone
Output
Input
9V DC
The Blueser
Made in Germany