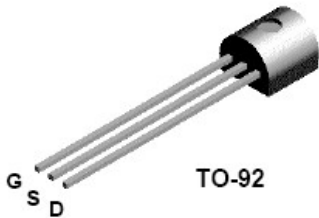

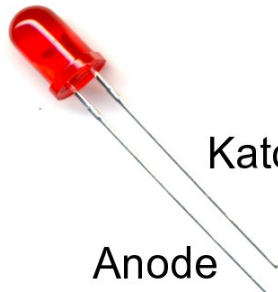


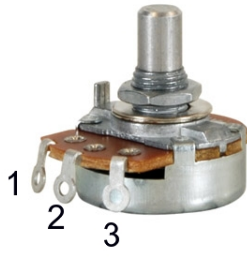


UK-electronic ©2016

Manual for SLO Clone











Page 2.....	Basics
Page 3..4.....	Bill of material
Page 4...5.....	Soldering the pcb
Page 6.....	External wiring at the enclosure
Page 7.....	Tips/ images
Page 8.....	Circuit
Page 9.....	Wiring
Page 10.....	Drill template, Template,

Some connection of important components

<p>J201 J202</p>  <p>TO-92</p>	 <p>TO-92</p> <p>2N7000</p>	<p>Leuchtdiode (LED)</p>  <p>Katode</p> <p>Anode</p>
 <p>TIP</p> <p>GND</p>	 <p>Ring</p> <p>Tip</p> <p>Masse</p>	<p>Standard Potentiometer</p>  <p>1</p> <p>2</p> <p>3</p>

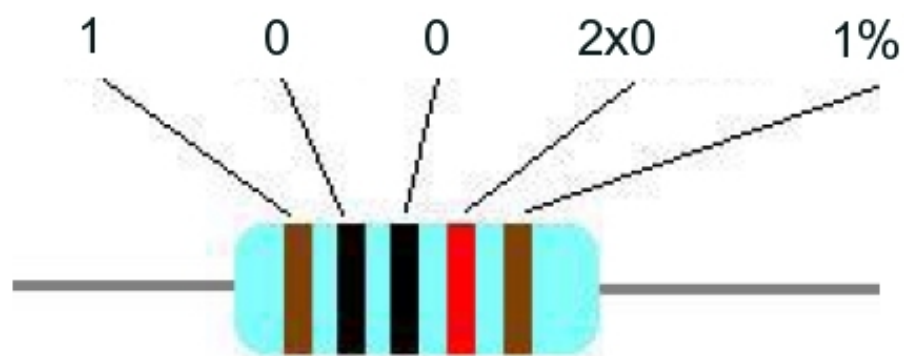
Color table for resistors MF207 FTE52 1% and a example

Resistor color code

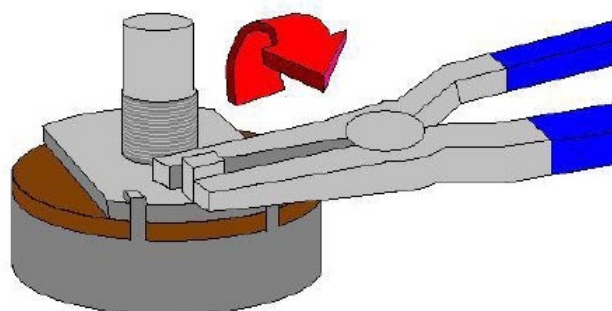
									
0	1	2	3	4	5	6	7	8	9

Example: Resistor MF207 10K 1%

Value: 10000 Ohm = 10KOhm



Breaking nose at the potentiometer
Nase am Poti mit einer Flachzange abbrechen



Bill of material

Quantity	Description	Mechanic
1	PCB „SLO-100 Clone“	
1	Audio jack mono 6,35mm	
1	Audio jack stereo 6,35mm	
1	3PDT Switch	
1	Pot 25K-AW (log)	
1	Pot 100K-BW (lin)	
1	Pot 250K-AW (log)	
1	Pot 1M-AW (log)	
2	Pot 1M-BW (lin)	
1	DC-jack isolated 5,5/2,1mm	
1	Battery connector (clip)	
1	Some colored wire	
2	Heat shrink 4.8mm	
2	LED bezel Chrome 3mm LED	

Integrated circuit/transistors/diodes

1	Diode BAT41 (line cathode)
2	Si-Diode 1N4148 (line cathode)
1	LED red 3mm Low Current (short leg cathode)
2	Mosfet 2N7000 TO92
4	JFET J201 TO92

Resistors

1	Resistor 1K (brown/black/black/brown/brown)
1	Resistor 1K8 (brown/gray/black/brown/brown)
1	Resistor 2K (red/black/black/brown/brown)
1	Resistor 2K2 (red/red/black/brown/brown)
1	Resistor 10K (brown/black/black/red/brown)
1	Resistor 24K (red/yellow/black/red/brown)
2	Resistor 33K (orange/orange/black/red/brown)
1	Resistor 39K (orange/white/black/red/brown)
2	Resistor 43K (yellow/orange/black/red/brown)
8	Resistor 47K (yellow/violet/black/red/brown)
1	Resistor 56K (green/blue/black/red/brown)
1	Resistor 68K (blue/gray/black/red/brown)
3	Resistor 100K (brown/black/black/orange/brown)
1	Resistor 1M (braun/black/black/yellow/brown)
1	Copal trimpot 20K (203)
1	Copal trimpot 50K (503)

Capacitors

2	ceramic capacitor 100pF (101)
2	ceramic capacitor 470pF (471)
1	Foil capacitor 470pF/100V
1	ceramic capacitor 4,7nF (402)
2	Foil capacitor 1nF/100V
1	Foil capacitor 2,2nF/100V
1	Foil capacitor 4,7nF/100V
3	Foil capacitor 22nF/100V
1	Foil capacitor 33nF/100V
1	Foil capacitor 47nF/100V
1	Foil capacitor 220nF/100V
1	Foil capacitor 470nF/100V
1	Foil capacitor 1μF/63V
1	Elektrolytic capacitor radial 2,2μF
2	Elektrolytic capacitor radial 22μF
2	Elektrolytic capacitor radial 100μF

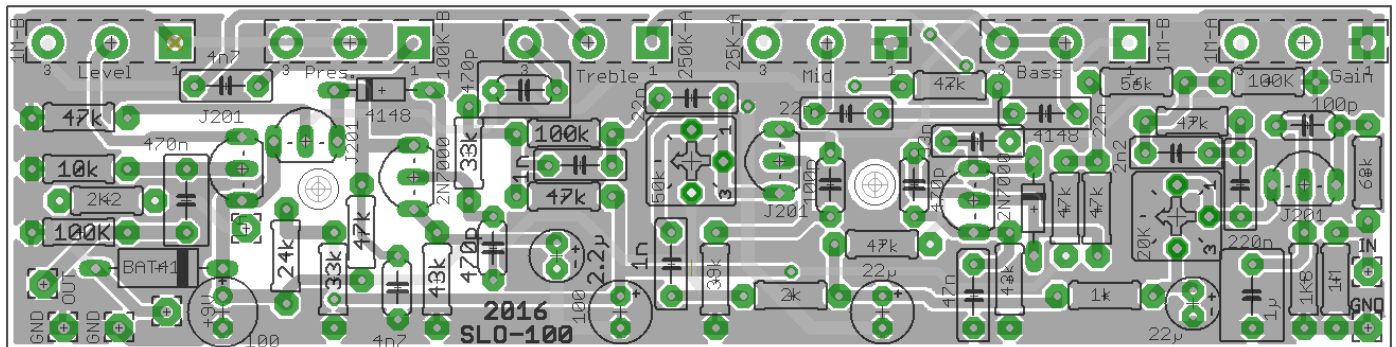
Soldering the PCB

First, the circuit board is assembled using the assembly plan shown below.

You start first with the lowest components to soldering, that as the first resistors, the diode and finally the capacitors Transistors and the two trimmers.

Attention! Contrary to silkscreen print is a BAT41 for 5817 and soldered resistor 100K instead of 1M over the BAT41.

Then you should definitely redo a visually examine the circuit side (Bottom) on any solder bridges.

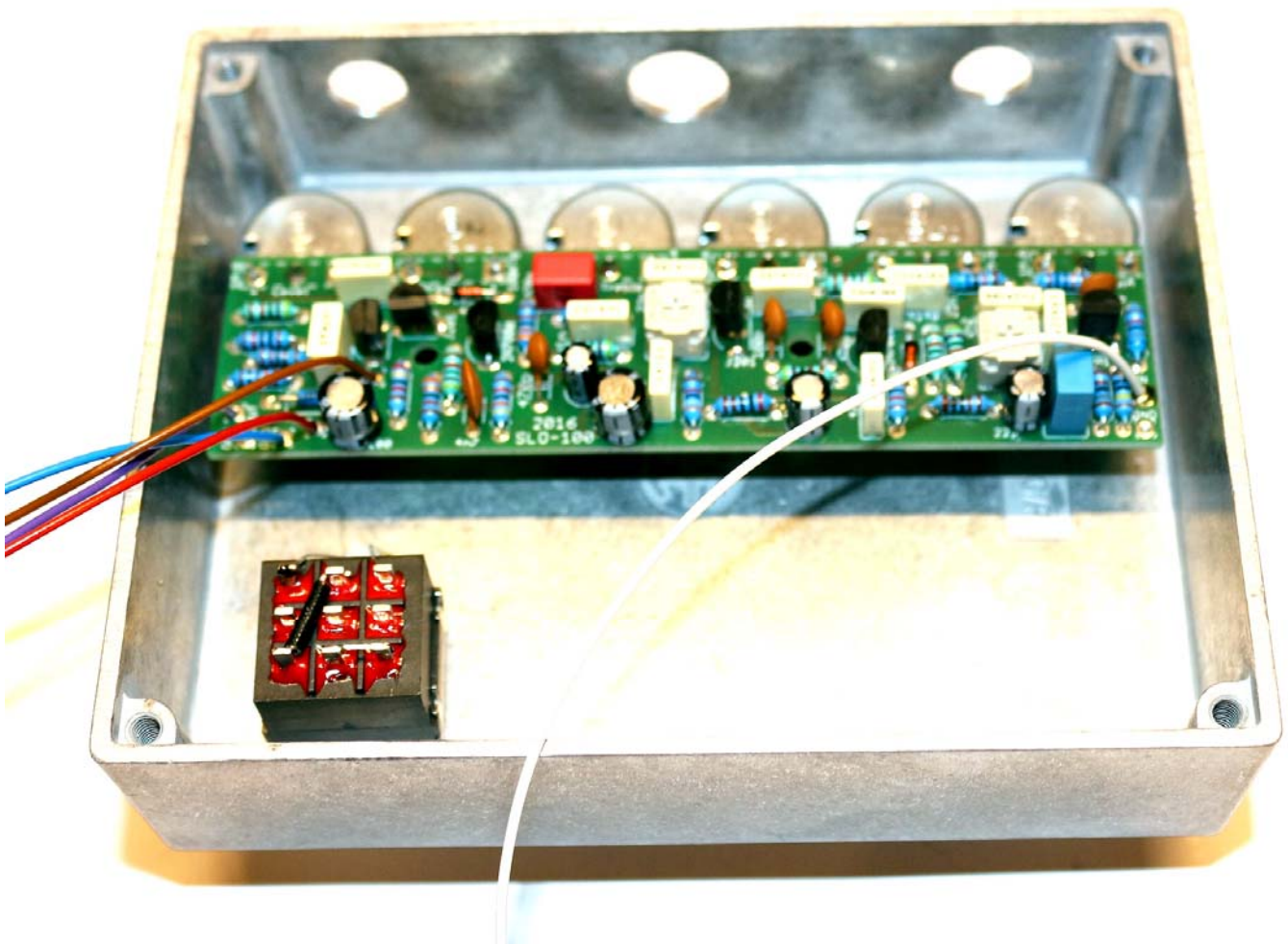


If the board with the components soldered, wires are still in the points GND, Out, + 9V, and in LA soldered for the LED. (Soldering point right of the BAT41).

After much back and forth for the purpose of execution of the potentiometer, I have decided to take angled. These are then bent according to the picture. (Poti put on a flat surface and turn with slight pressure. The solder lugs are then straightened 90 ° to the enclosure.



The easiest way to mount the potentiometers is only the middle pin of a potentiometer fixed solder to the potentiometers and the board afterwards still be able to align the enclosure.



If the board in the enclosure and the Pots tightened nuts, the remaining pins of the potentiometers are firmly soldered.

Thereafter, the input jack (stereo) and the DC power jack is installed. The best way to solder previously 2 wires for the ground and a wire for receipt equal to turn out. The entrance and the black wire of the battery clip should be insulated with shrink tubing to avoid that there is contact with the potentiometer body (ground). Although the distance is enough, but better safe. The black wire of the battery clip is threaded under the pcb by, shrink tube over it and solder → if the socket in the housing.

A wire of the earth connection is threaded under the board, and the tip of the jack. The second earth connection goes to the DC jack.



The rest will simply be performed according wiring diagram to the corresponding points of the switch .



Clean work, in particular the execution of the solder should have top priority to generally excluded a priori placement and soldering defects.

Since there is a through-hole printed circuit board, it is not always easy to change an incorrectly placed component.

The adjustment is relatively simple. Either you simply do it by ear or to set the two drain voltages of the two J201 (Q1, Q3) one after the voltage values, which are indicated in the circuit diagram.

Notes on mechanical construction

The little noses at the potentiometers are easily broken off with pliers (See Fig. 2 page). As knobs you should use with a max. diameter of 16mm for 6.4mm shaft.

The holes of the jacks sit 10mm that the DC socket 12mm from the bottom of the enclosure.

Drill diameters:

Potentiometers : 7.5mm

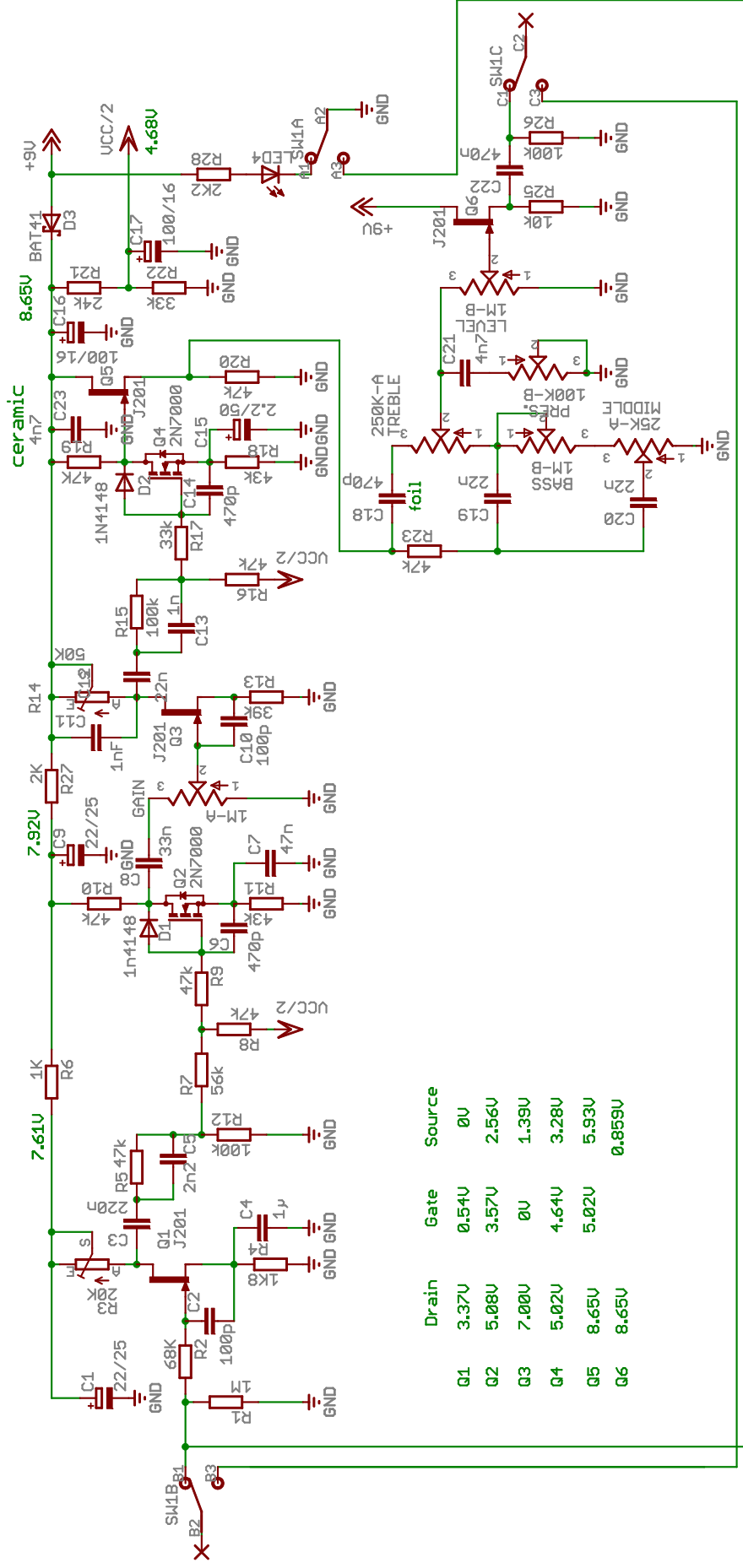
Audio jacks : 9,5mm

3PDT-Switch: 12mm

DC-jack: 12mm

LED bezel: 6mm

As enclosure use a 29830 by eddystone. This is a little bit larger as a standard 1590BB or GEH090.



	Drain	Gate	Source
Q1	3.37V	0.54V	0V
Q2	5.08V	3.57V	2.56V
Q3	7.00V	0V	1.39V
Q4	5.02V	4.64V	3.28V
Q5	8.65V	5.02V	5.93V
Q6	8.65V	0.859V	0.859V

thanks to GTLab.net/ GuitarJFet.ru
mods by brymus, uk-electronic

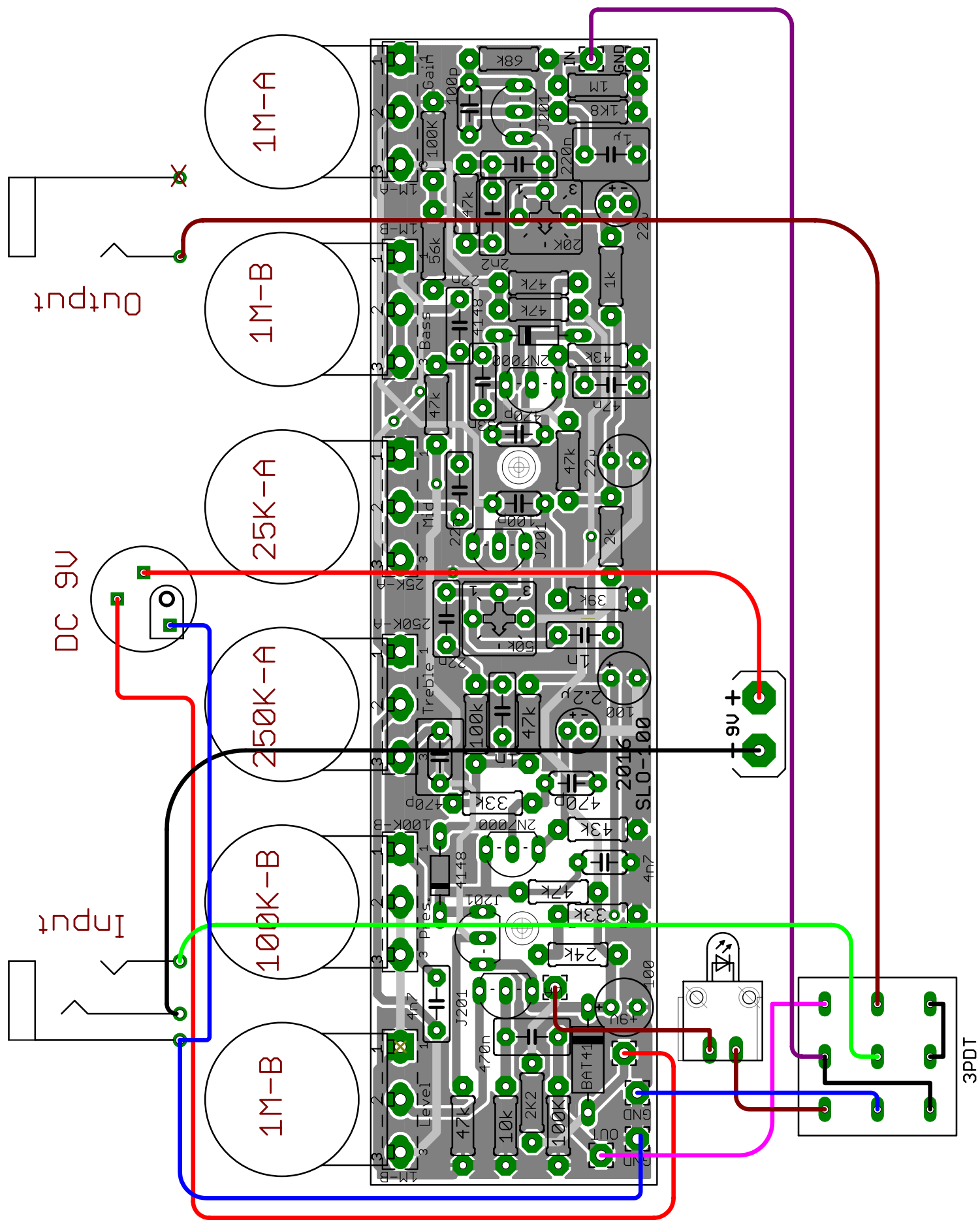
TITLE: SLO100

Document Number:

REV:

Date: 16.06.2016 10:50:21

Sheet: 1/1



Output

9V DC

Input



Gain Bass Mid High Pres. Level



soldano
SLO-100

MADE IN GERMANY

