



## Transistor Drum 2

808 snare drum for modular synthesizers

Information and building instructions

*last modified 16.03.2019*

Chapter 1: Important things to avoid mistakes during construction

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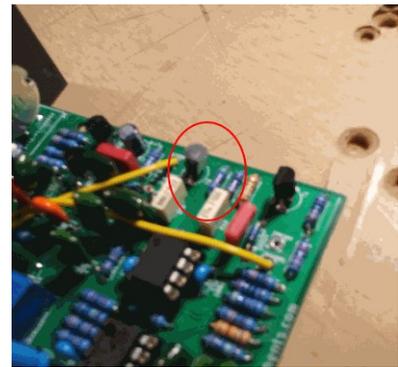
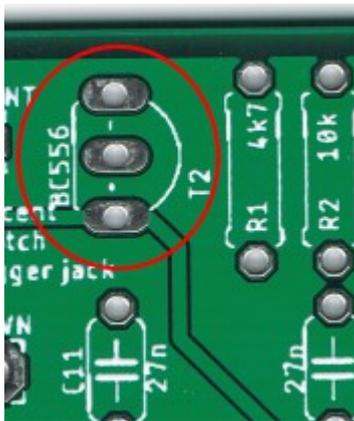
Chapter 6: Links

# 1. Important things to avoid mistakes during construction:

A:

The footprint for the bc556 transistor is printed upside down.

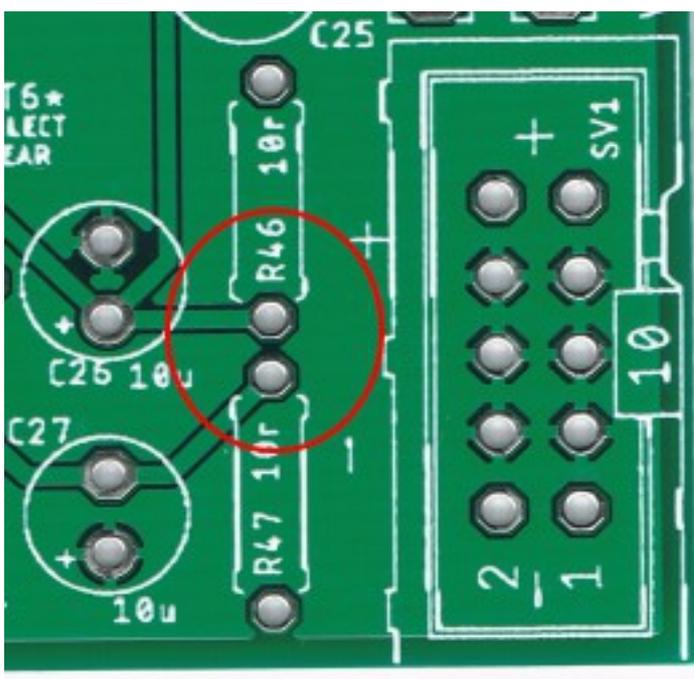
Simply install it with the flat side to the round mark.



B:

The noise cancelling resistors from the power rails are pretty close together,

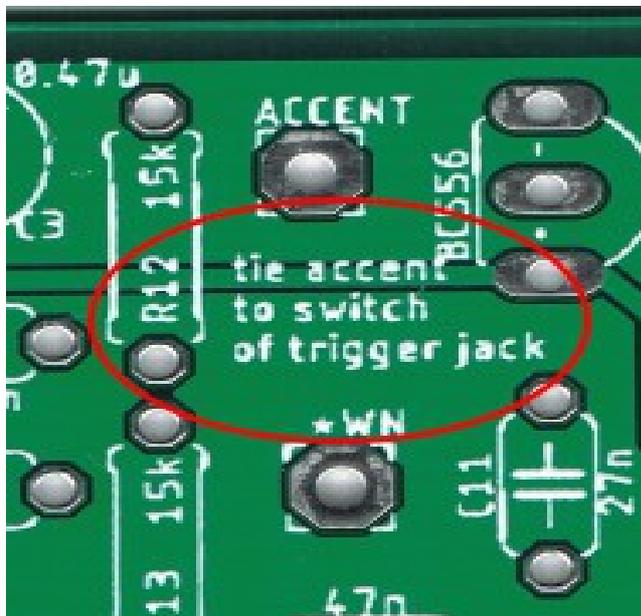
make shure that there is no electrical contact between them.



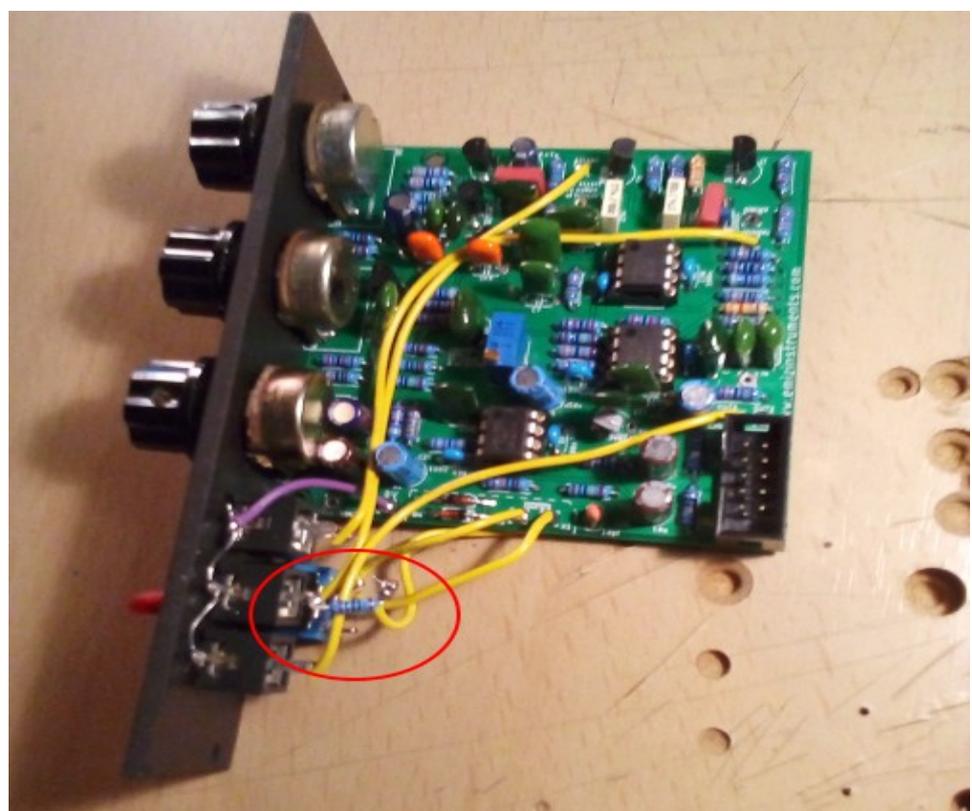
C:

I slept while I wrote this term, it must read correctly:

Tie switch of accent jack to +12V.

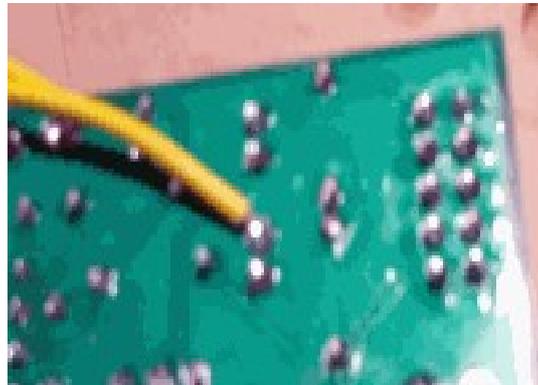
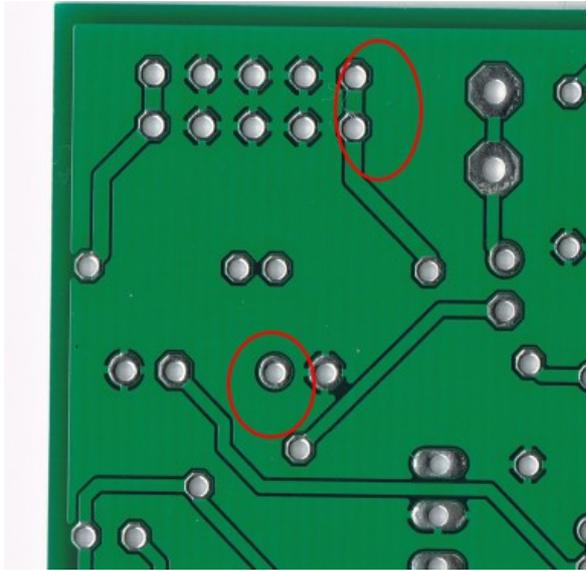


use 470R resistor between +12V and switch of accent socket



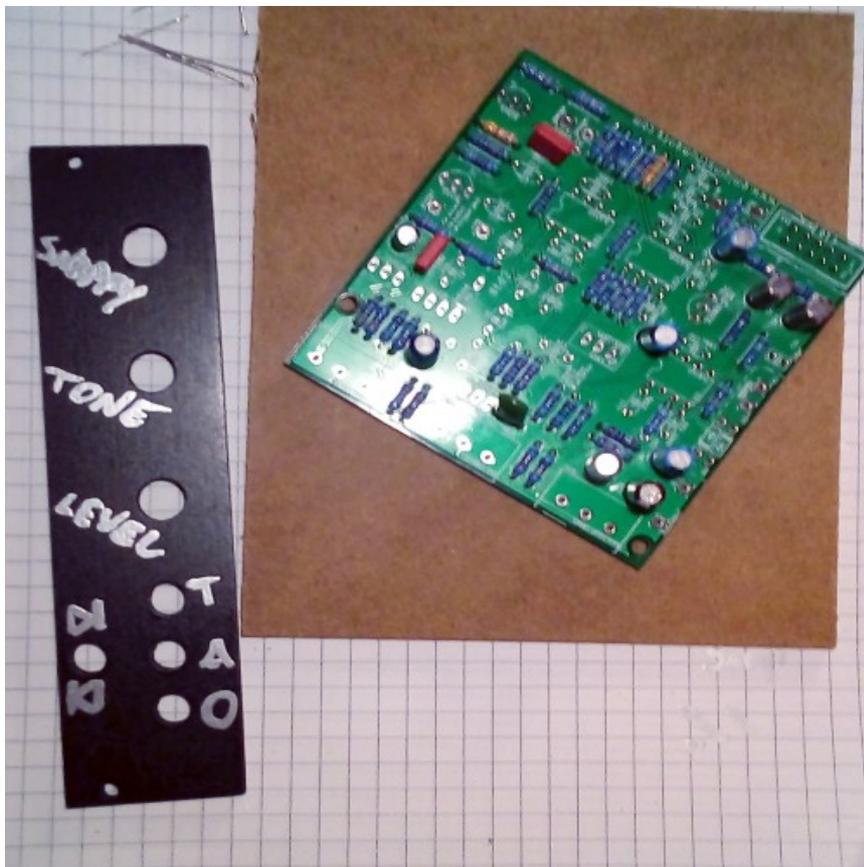
D:

12V point is not available, but you can solder a lug to one of these points.



2. Some suggestions for building.

Here's an example of how a simple panel can look.



### 3. Calibration procedure

A:

Solder a single pin header to the WN ( white noise ) port on the pcb.

B:

Connect alligator clip to the WN pin, and the other side to the positive terminal of your multimeter.

C:

Connect alligator cable between 0V and the negative terminal of your multimeter.

D:

Set the multimeter to AC

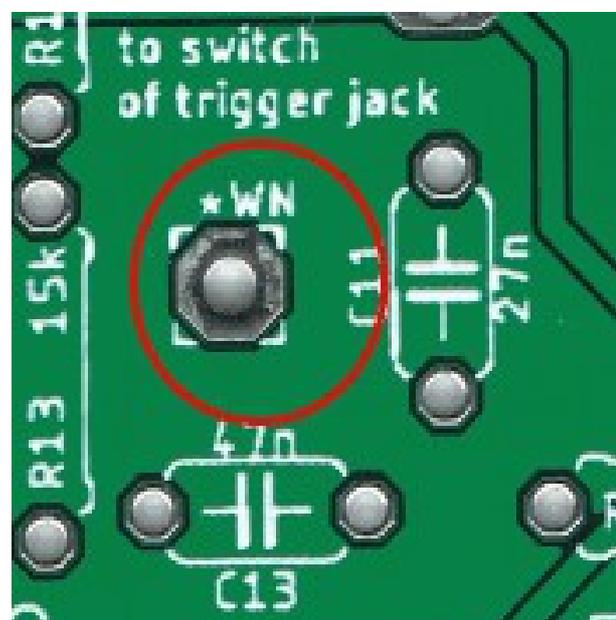
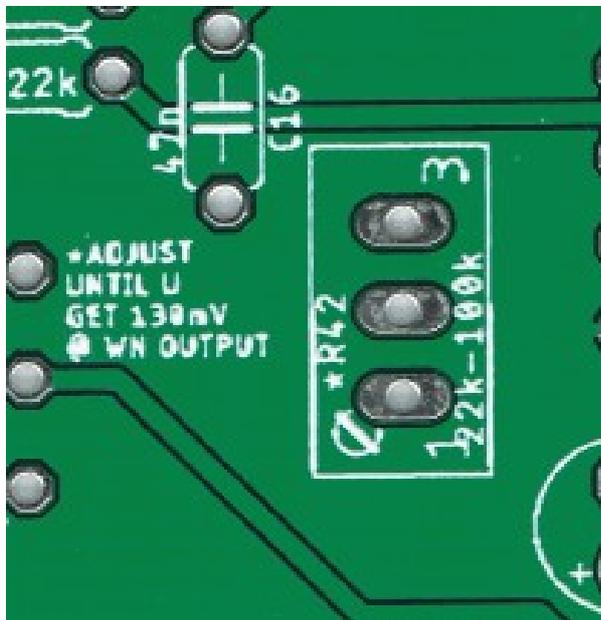
E:

Before you power on check everything twice for shorts.

F:

Adjust the 100k trimpot until you get 130mV @WN port.

Now you 're done.



**I have tested 20 transistors and only 3-4 have delivered really good noise.**

## 4. Optional features

### A: Clipping Diodes

You can use SPDT switch to turn the optional clipping diodes on and off, connect X1 to pin 2 and X2 to pin 3 of the SPDT.

It affects in a much mellower sound.

You may need to adjust the 1m\* resistor in feedbackpath of the output OP amp to get your desired output level.

Another option to raise the level is to lower the value of resistor r43.

### B: Pink Noise

Theres a port called PN on the board. It is a pinknoise output.

I completely copied the noise unit from the 808, in the original circuit the pinknoise was intended for the cowbell.

So theres some room for user modifications

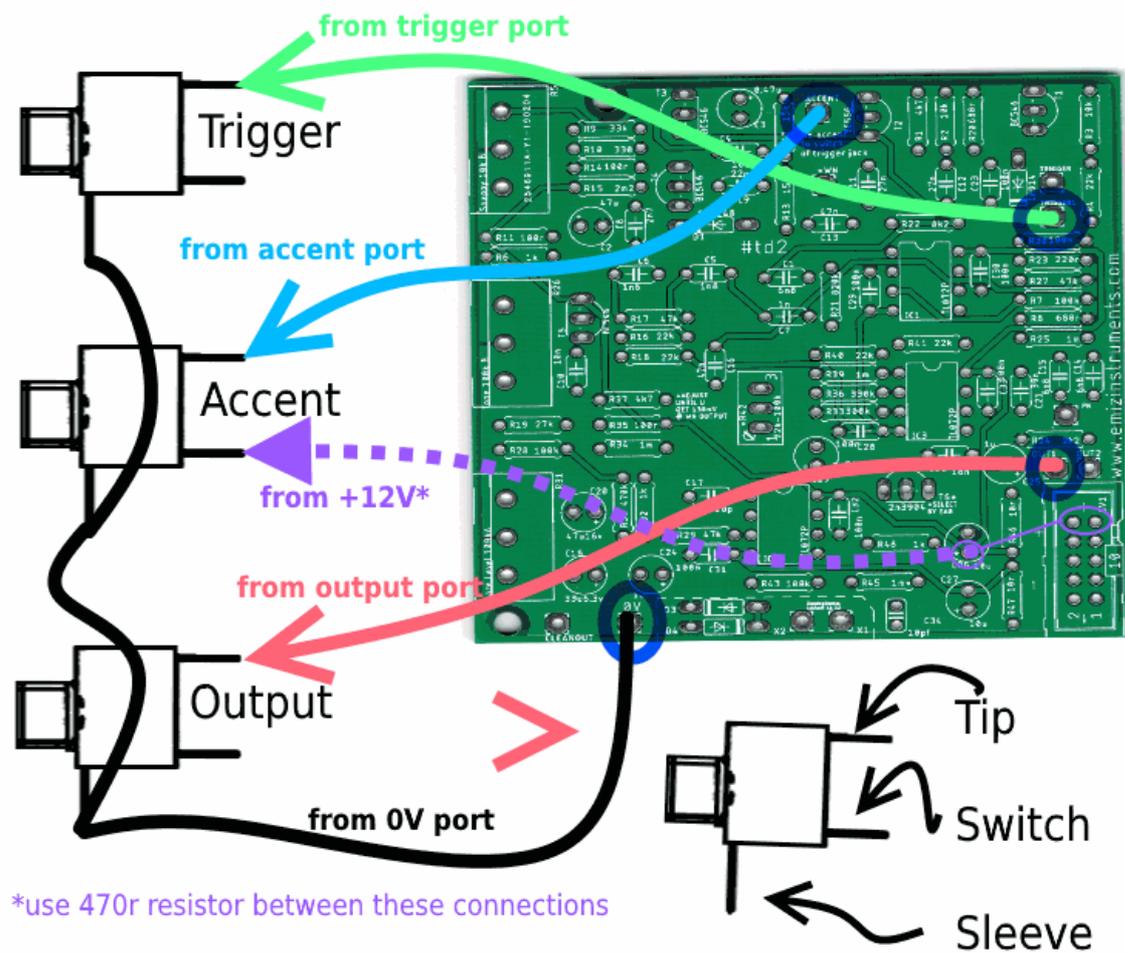
### C: Additional Ports

trigger port is available in duplicate, for those who install a oneshot button.

Output is also on the board twice so you can easily modify the module.

In addition, there is a port called Cleanout, which takes the signal before the last OP amp. This output has line level to connect to non-modular gear.

## 5. Wiring



Trigger Port -> Tip of trigger jack

Accent Port -> Tip of accent jack

Output Port -> Tip of output jack

+12V -> Switch of accent jack

0V Port -> Sleeve of every jack

## 6. Links

[Schematic](#)

[Bill of materials](#)