

Sniffer Build guide v1



The Sniffer is a prototype, so a few adjustments are made in the kit.

Resistors:

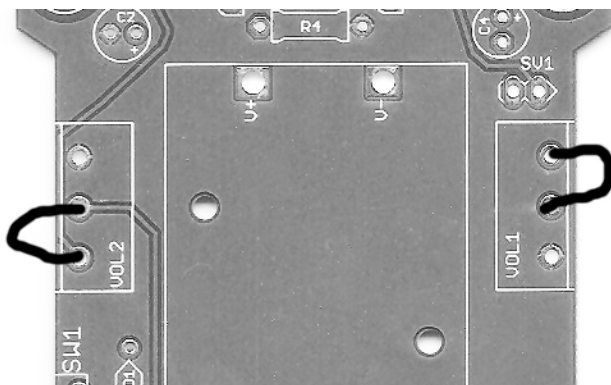
Solder all resistors in place.

r1 and r8 : 75r

r6 : 1k

r3, r4, r5 and r7 : 100k

On the places where the pots were supposed to go, (locations: "VOL1 & VOL2") , you will need to solder two wire connections. Use the snipped-off pins of the resistors.



Diode:

d1 : 1n5819 This part has an orientation.

The black stripe on the diode has to match the white stripe on the PCB.

This diode protects the IC.

IC socket:

Get the 8 pin socket , while taking care of the orientation, place it in u1.

Flip the board and solder 1 or 2 pins.

Flip the board again and check if the socket is aligned to the board.

If not, reheat the soldered pins and push the socket flat to the PCB.

Solder the other pins too.

Capacitors:

Start with the small capacitors.

c5 and c6 : 10pF (code: 10)

c7 and c8: 100nF (code: 104)

Then go on with the larger caps. the longer leg is the PLUS

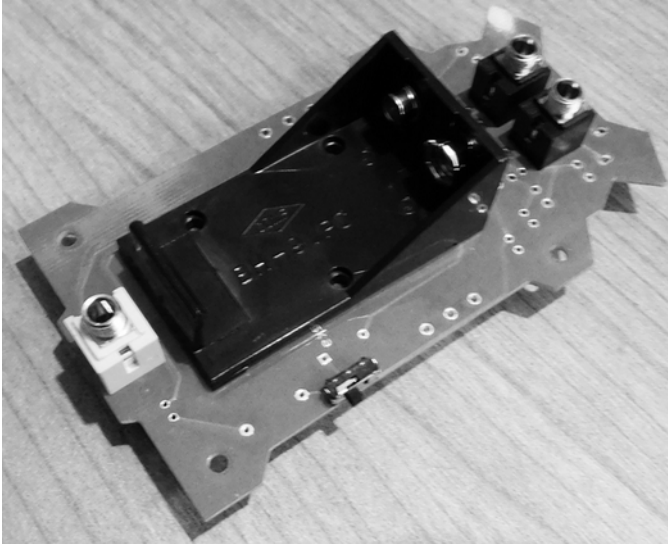
c1, c2, c3, c4 : 47uF

IC:

Bend the legs of the IC so that they are in 90° and insert the IC into the socket.
Push it careful but firmly into place.

You are now done on this side of the PCB.

Flip the board over!

**Switch:**

Insert the microswitch at SW1 and solder.
Note: the marking is on the other side of the PCB.

Inductor coils / antenna's:

Insert the 2 10mH coils in the top holes (the ears)
CL1&CL2 and CL3&CL4 (these markings are on the backside)
Bend the coils so that they match the board shape, then solder them in place.

Jacks:

There are 2 mono jacks (black) and one stereo jack (green)
The 2 mono jacks are for external antenna's, the stereo jack is the output.
The markings are on the backside:
EXT1, EXT2: monojacks
OUT1 : stereojack.
First put the panel on and fasten the jacks lightly with the nuts.
Check if the jacks are aligned correctly and then solder one pin of each jack.
Then check if the jacks are still aligned correctly and solder the rest.

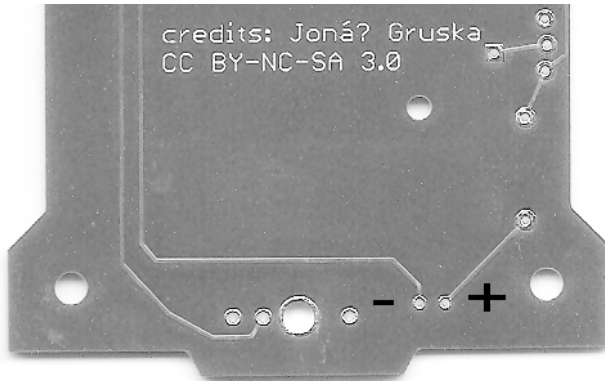
Leave the panel on. We will need it for the next steps.

Battery holder:

Place the batteryholder. Make sure that the mounting holes are aligned. Solder in place.
The 2mm holes have to be drilled manually. Use a 2mm drill .
First drill one hole. Put the 2mm bolt through that hole and screw on the nut.
Now continue drilling the next holes and screw the rest of the 2mm bolts in.

LED:**Take off the panel.**

Stick the led in the pcb (marked "LED1" on the backside) - DO NOT SOLDER JUST YET!!
Long leg goes in the right side hole (see picture)



Place the panel back, tighten the nuts on the jacks and push the LED through the hole on the panel.
Now solder!

Now you are almost done!

Test the board by sticking in the 9v battery. Slide the switch to the "on" position.
The LED should light up. Connect the Sniffer to a mixer and test the device.
(Listen to a electronic device)
You should hear buzzing, crackling noise of bleeps.
If all works well, let's go on with the next steps.

Panels:

Mount the backside panel using the four black standoffs and the four 30mm bolts.
Next, add the other four standoffs on the other side of the PCB.
Now mount the frontside panel. Screw on the four nuts.

And..... you are done!

Test the device once more. And Play!

Tips:

Use the Sniffer on electro moters like a cordless powerdrill. They make wonderful squeaky sounds!
Also test stepper moters and servo moters.
Mobile phones, laptops, ATM machines, Wallwarts, lamps... experiment on everything!

The Sniffer is stereo. Move the Sniffer over your target to get a nice effect.
You can make your own (larger) antenna's! These will pick up larger area's .

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