

Pa0nhc RF power meter 20171220.

Assembling.

(First read "solder strategy").

The switches first.

Use the three holes in the top of the box as lining-up guides for the switches :

- Place the switches upside-down into the switch holes at the top of the box.
- Shift the PCB (upside-down) with the non-component TOP side over the switch pins.
- Solder the switch pins at the PCB component-side.

The switches should sit flush onto the PCB.

- Solder the LED, battery cable, and meter wires.
 - Glue the wires near their solder points onto the PCB, to prevent breaking later.
- Let harden the thermal glue..

Solder IC1 as last, and take anti-static measures.

Connect yourself and the soldering iron to the mass planes of the board.

- See to it that each component is centered onto its soldering islands, and no component is overlapping its insulation slit.
- Solder all electronic components onto the PCB.

Shift the PCB into the box, with the switches and the LED sliding into their holes.
Leave the lower nuts of the switches loose.

Install both BNC bushes, with each two ground lugs facing downwards to two different bottom grounding surfaces of the PCB..

Let the PCB bottom "50 ohms line" surfaces rest onto the BNC central pins.
Solder the BNC pins onto the bottom "50 ohms line" surfaces.

Bend the BNC ground lugs so they make contact to the "ground" surfaces at the bottom copper side of the PCB.

TIP : If the lugs are too short to make contact, use pieces of de-solder wick as a flat copper wire to connect the grounding surfaces to the BNC bushes.

Solder at each BNC bus, the two ground lugs to two different ground surfaces.

Adjust and tighten the nuts of the switches.

Install meter M, and connect it.

Do not fit locking springs, but loch with glue, if screwing the nuts is problematic.

