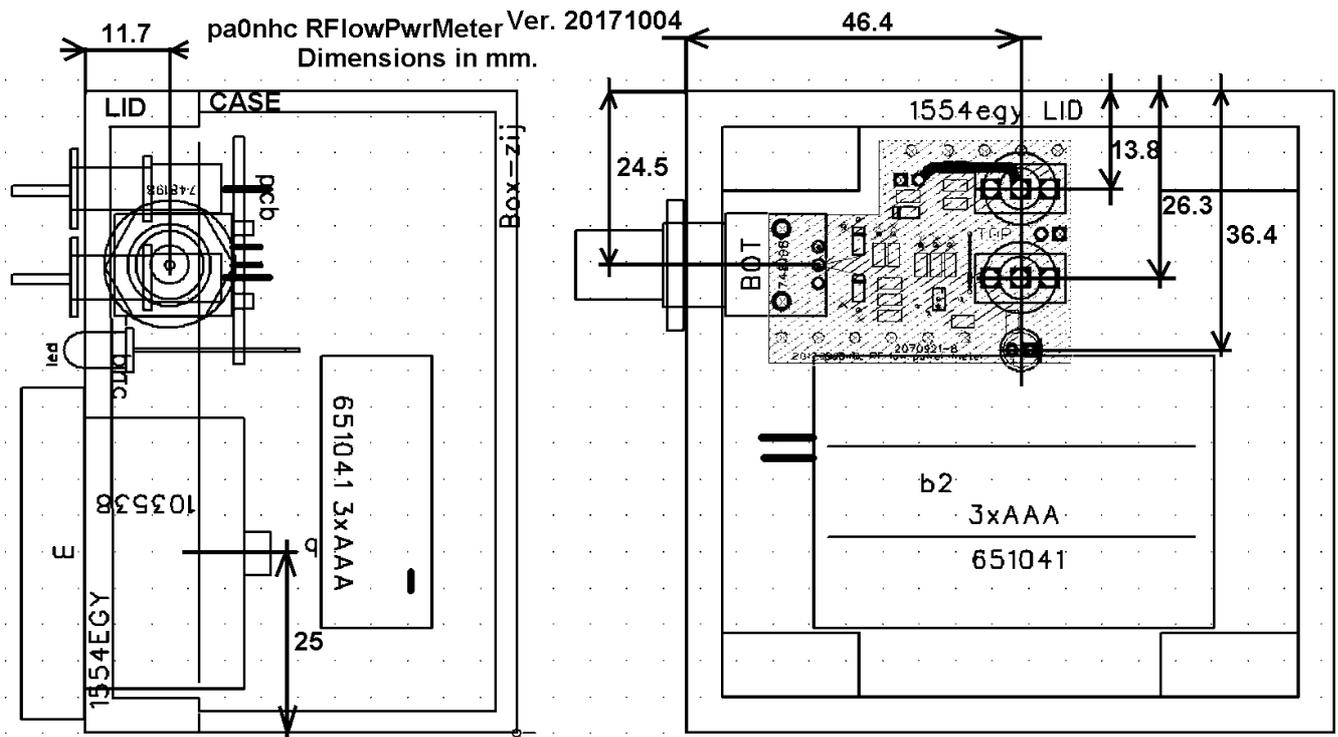


# Pa0nhc RF Low Power Meter

20171221 Drilling.



- Remove the packing from the lid.
  - Screw the lid onto the box.
  - Mark the position on a lid side for the 13mm hole for the Amphenol BNC bus (Conrad 748198)
- REM: As the dimensions of the sides differ internally, see drilling plans above for the correct side to drill.** Prevent melting of the ABS. Drill repeatedly and shortly, and let cool down inbetween.
- Place the closed box in a vice, on a table drill stand.
  - Pre-drill a hole of 2mm.
  - Enlarge it to 6mm.
  - Again enlarge it to **max 13mm**, using a conic or trapped drill.
  - **File the conic hole hole to cylindrical.**
  - Remove the lid.
  - Change the shape of the hole in the lid, so the BNCbus can slide **side wards** into the lid.
  - Carefully remove raw edges.
  - Drill all other holes. REM: switches 6mm, **LED 5mm.**
  - Remove all raw edges and counter sink these holes on the inside of the lid, so the components easilly slide into them.

## Installation in another housing.

The switches and the LED are soldered onto the top side of the PCB.  
Handy for installation into the lid of this ABS box.

As the switches and the LED in this design only carry DC voltages, they could be installed separately, and connected with wires.

## The use of another moving coil meter.

(R5 // R6) and R4 are dimensioned to give Full Scale Deflection of a 1mA / 210 Ohms meter at 3.3V and 0.33V output from IC1. If a moving coil meter with different internal resistance and/or full scale current (max. 10 mA) is to be used. The values of (R5//6) and R4 have to be adapted.

A drawing for a **dBm meter scale**, and a **conversion table** for other meters are available.

To minimize the chances of interference from low frequency sources, C8 attenuates frequencies below 14 KHz by 6dB/oct (-45dB @ 50Hz).

**If power at even still lower frequencies should be measured**, a capacitor of 1uF can be soldered in parallel to C8.