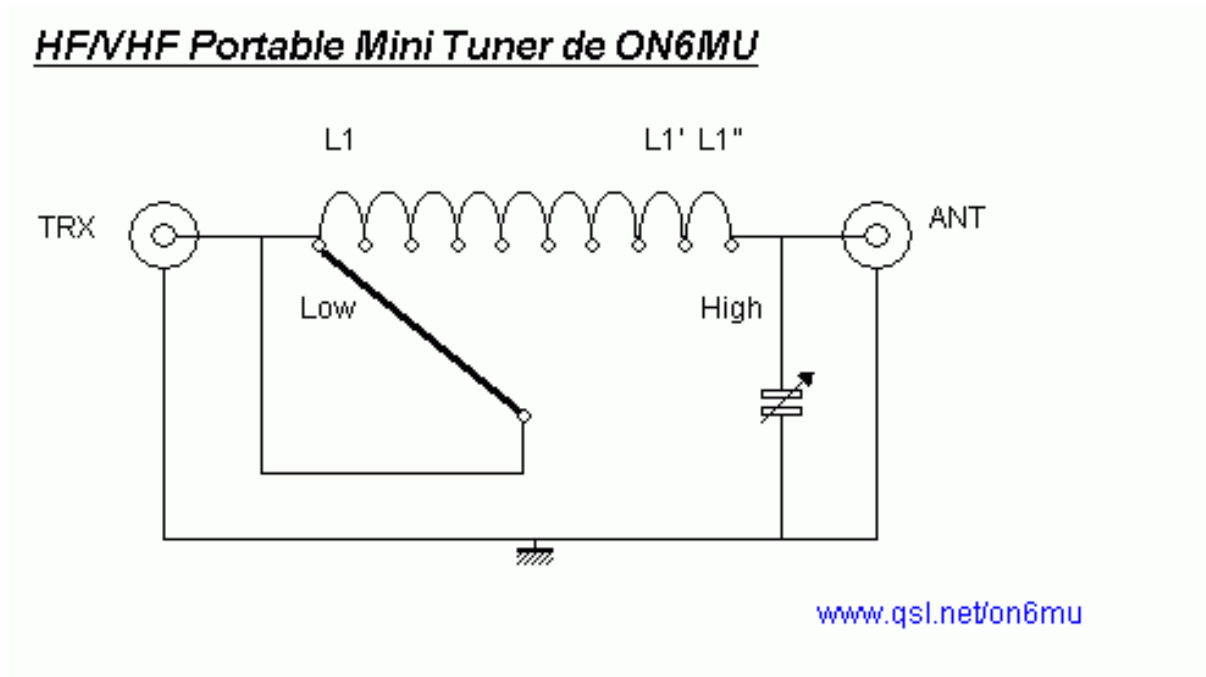


## HF/VHF Portable Mini Tuner



By Guy, de ON6MU

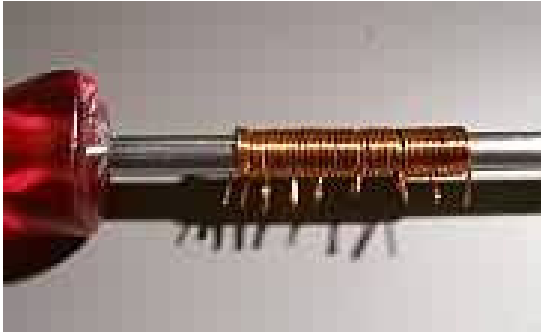
### Schematic fig1



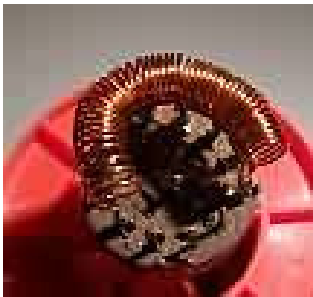
### Parts list

- alu box of 70mm X 40mm X 33mm
- 2 female PL 259 chassis
- C1 = variable capacitor of 300 or better 500 pF
- S1 = 10 or more position rotary switch
- L1 = 0,7mm insulated copper wire, 6 turns par connection closely together, 9mm outside diameter (8mm inside)  
taps every 6 turns and the last two sections (L1' and L1'') 4 turns spaced at 1mm and 3turns spaced by 2 mm

## The coil



- Wind 6 turns x - 2 connections on your switch (in this project a 10-position rotary switch is used, being 8 times  $6 = 48 + 4 + 3 = 55$  turns) over a 7mm screwdriver (or similar object) and make a tap every connection. Solder each tap.



- Solder each tap to each connection of your switch and stretch L1' (being 4 turns) at 1mm spacing and L1'' (being only 3 turns) at 2 mm spacing. You can replace L1'' by 3 turns of silver wire to allow better Q on higher frequencies (VHF).



- Mini-tuner insides...

## Specifications

- 2 set manual operation
- frequency range: 160m...6m (2m band if L1'' is silver, High Q switch, coil and close connections are used)
- 10 Watt +-
- direct feed
- compact design ideal for low power transceivers, like the Yaesu FT-817...

# Homemade aluminum box

