The stock filter is a MURATA CFJ455K14 (2.4 kHz). It is soldered on the PCB.

The optional filter is selected with a MURATA CFJ455K13 (2.7 kHz) which you can easily solder to the optional filter socket.

You can buy the MURATA CFJ455K13 at www.qrp-service.de for example.

The wider MURATA 2.7 kHz filter adds much more intelligibility both for RX and TX and gives the modulation more "punch". It is much cheaper than the usual Collins filters, e.g. the MURATA costs about 25 EUR while the Collins would cost about 125 EUR !! Of course the cut-off curve is not so sharp as on the Collins filters but for me this doesn't matter on a portable TRX like the YAESU FT-817 where you usually should NOT HAVE such strong signals besides. And it is usually not used on contests besides strong stations.

So for me the advantage of the better and powerful sound is much more important than the (possible) disadvantages on the RX side. A narrow filter only had help me to suppress interferences on about 10% of all situations but I had lose much more audio sound dynamics. So for me only the 2.7 kHz is the one-and-only solution for the future.

Installation:

Just add a little piece of double sided adhesive tape to the front side.

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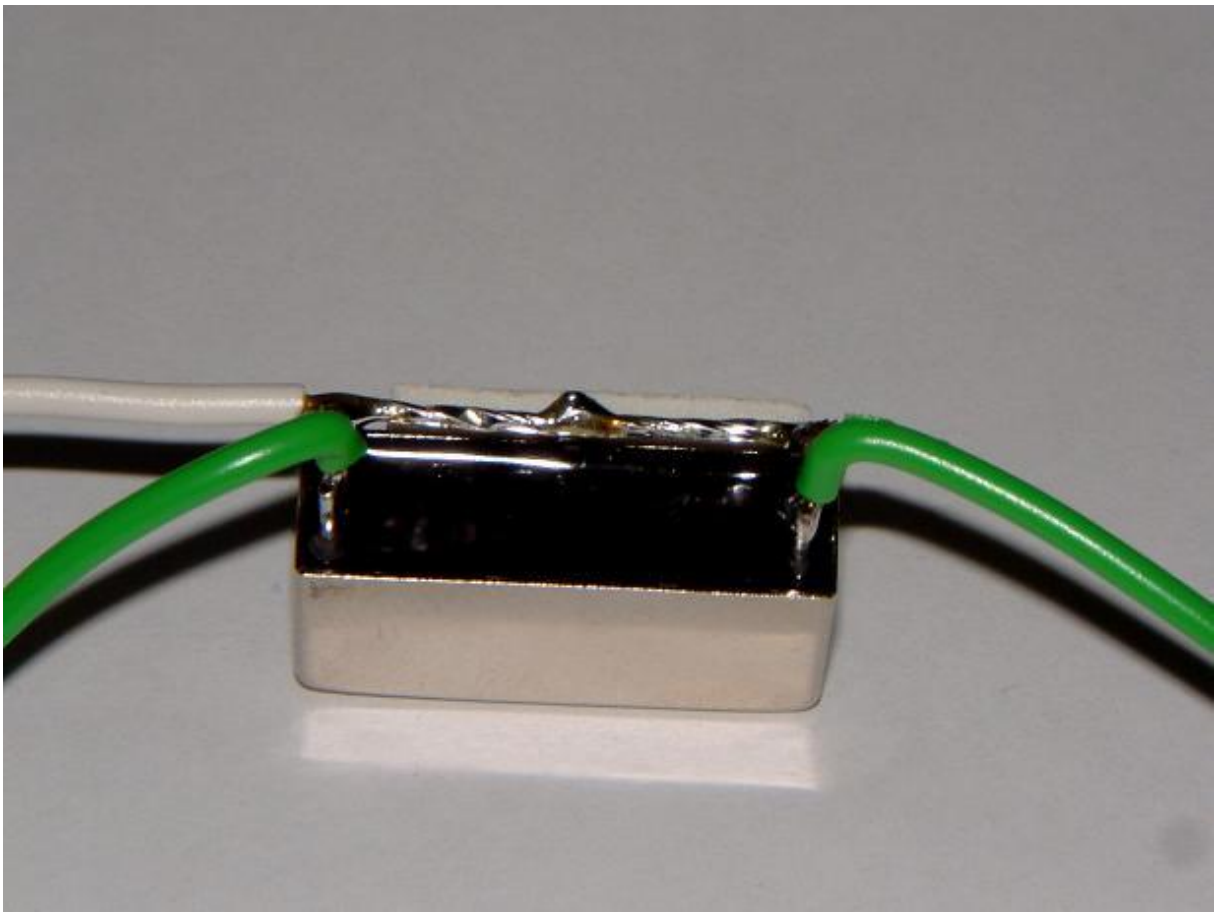

Solder 3 short wires for INPUT, OUTPUT and GROUND.

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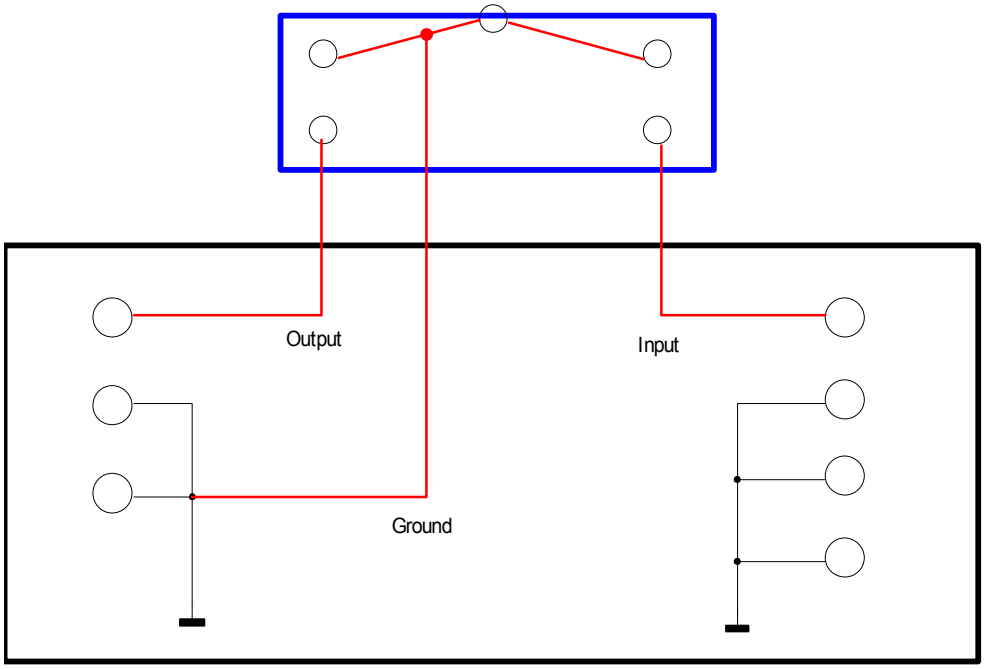
MURATA CFJ455K13 (bottom view)



Optional Filter Socket (upper view, looking onto the PCB)

Wiring schematic.

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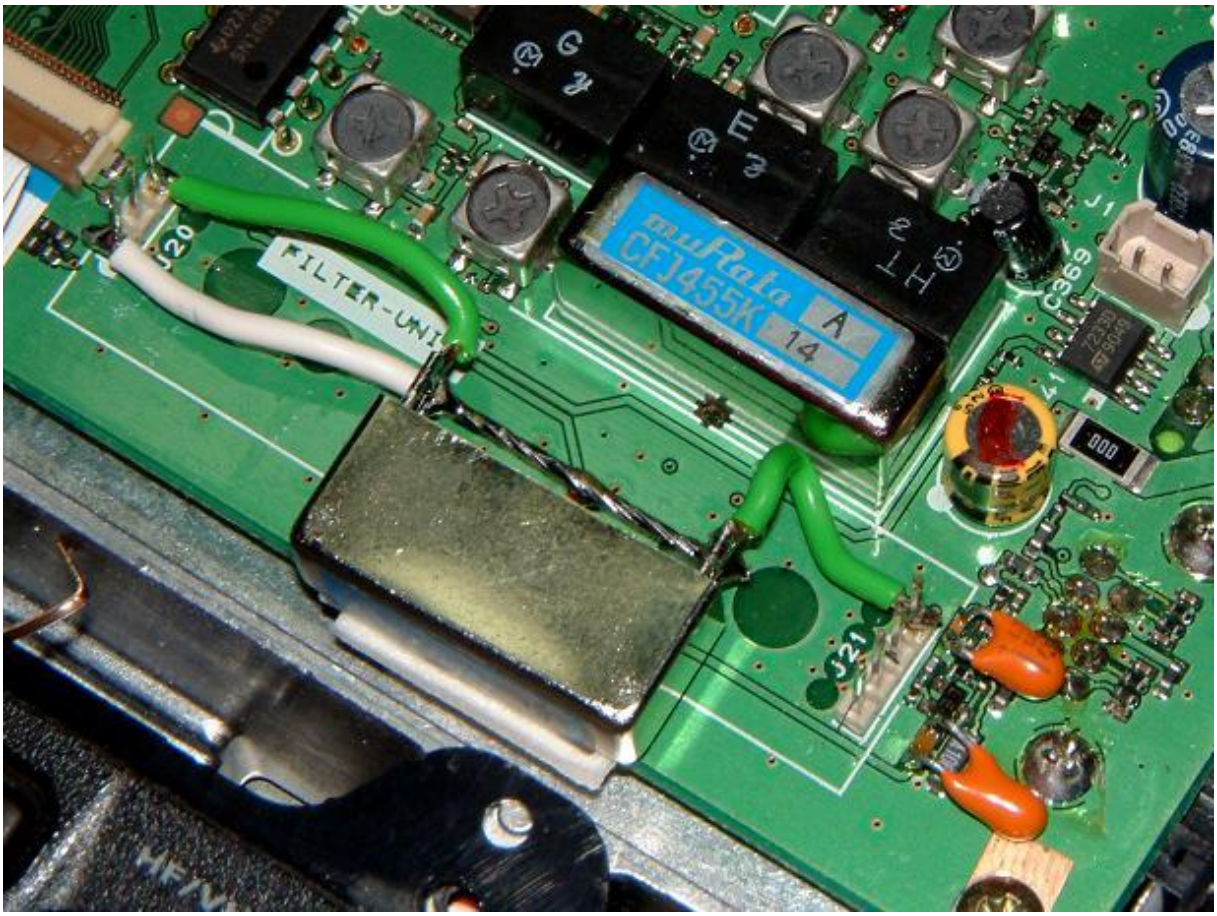

The final wiring.

Alignment:

1. Switch menu **#38** ("OP FILTER") from "OFF" to "**SSB**".
2. Set menu items **#54**, **#55**, **#56** and **#57** to "**0**" (SSB Carrier Shift).

   Go into the servicemenu (alignment menu) and do a re-calibration of service menu items #75 and #76. Or just try out my values I verified on two FT-817 yet:

   #75 (LSB-CP) → **+10** (+99 is bassy, -99 is pitched)
   #76 (USB-CP) → **- 10** (-99 is bassy, +99 is pitched)
3. Save and leave the service menu.
4. You can do a further fine alignment by adjusting the SSB Carrier Shift again now, if you like. Here are my values which add some more basses and "heaviness" but without cutting the high tones:

   #54 (R LSB CAR) → **+50** (+300 is bassy, -300 is pitched)
   #55 (R USB CAR) → **- 50** (-300 is bassy, +300 is pitched)
   #56 (T LSB CAR) → **+50** (+300 is bassy, -300 is pitched)
   #57 (T USB CAR) → **- 50** (-300 is bassy, +300 is pitched)

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Disclaimer • Disclaimer of liability

This modifications mostly need to be done by a electronic specialist who had enough practise and who has knowledge in SMD soldering. **You do the modifications on your own risk !**

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