

LNA install in Yaesu FT-847 for 144MHz

- **LNA 50-4000 MHz RF Low Noise Amplifier Signal Receiver**
- **SPF5189 NF = 0.6dB MA**
- **US \$4.79**
- **Found on eBay**



This RF Amplifier features low noise figure, is a LNA RF Amplifier. Generally used as a high frequency or intermediate frequency preamplifier for a wide range of radio receivers, as well as amplifying circuits of highly sensitive electronic detection devices. In the case of amplifying weak signal, the noise of the amplifier itself may be very serious, so it is hoped that this noise will be reduced to improve the signal-to-noise ratio of the output. Application: LNA for the main mobile communication base station infrastructure applications, such as wireless communication transceiver card, tower mounted amplifier (TMA), combiner, Repeaters, and distal/digital wireless wide band end equipment application design. This RF low noise amplifier LNA is 50-4000MHz, NF = 0.6dB.

Specifications:

LNA: 50-4000mhz

NF: SPF5189Z

LNA0: 0.6 dB

Size: 34 x 25mm/1.33 x1.0inch

Weight:10g

DCV: +5V

Package Included: 1 x LNA 50-4000MHz SPF5189 RF Amplifier

<https://www.ebay.com/itm/LNA-50-4000-MHz-RF-Low-Noise-Amplifier-Signal-Receiver-SPF5189-NF-0-6dB->

[MA/113967035917?ssPageName=STRK%3AMEBIDX%3AIT&trksid=p2060353.m2749.l2649](https://www.ebay.com/itm/LNA-50-4000-MHz-RF-Low-Noise-Amplifier-Signal-Receiver-SPF5189-NF-0-6dB-MA/113967035917?ssPageName=STRK%3AMEBIDX%3AIT&trksid=p2060353.m2749.l2649)

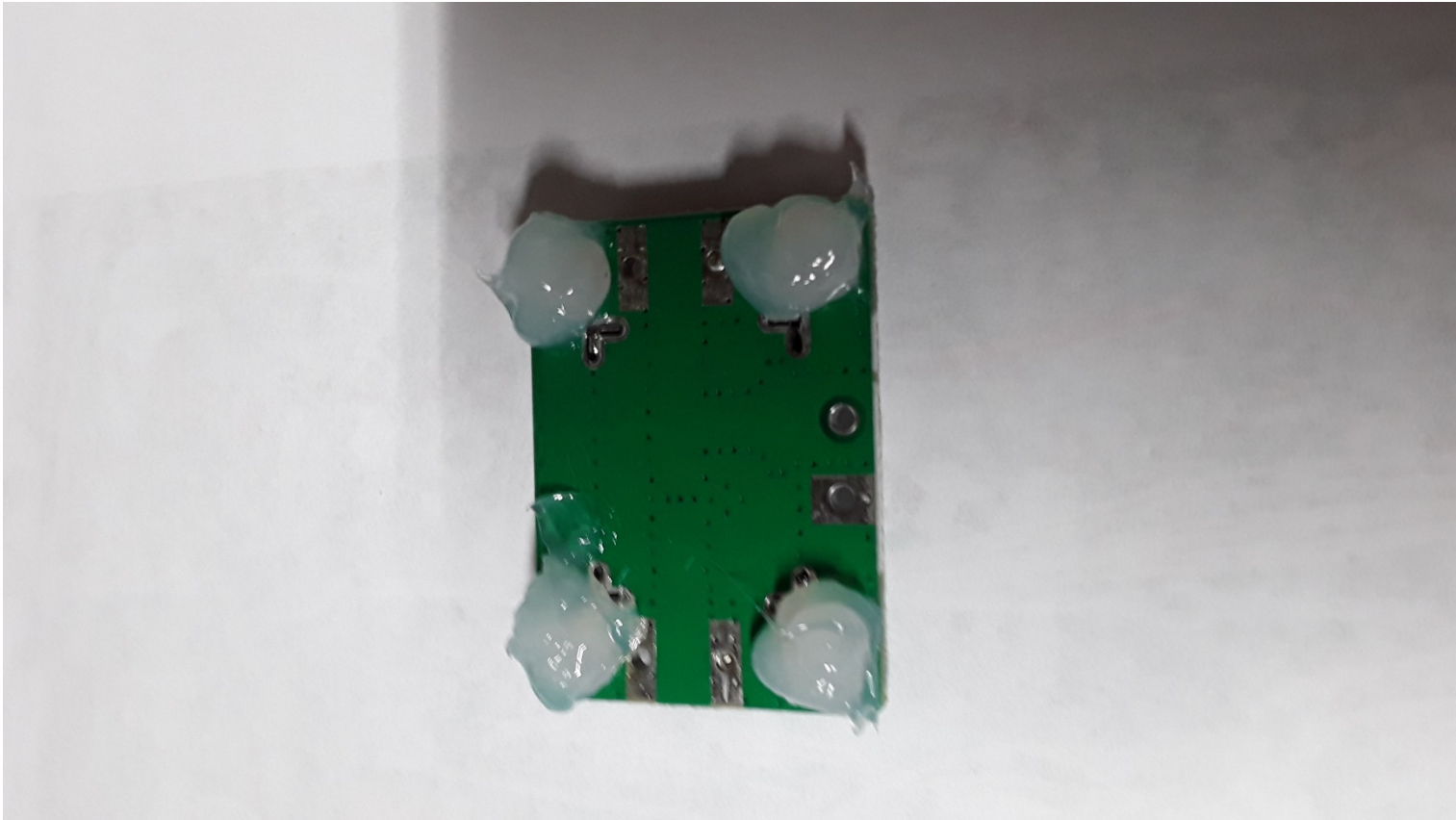
data sheet link:

[file:///E:/Yaesu%20manuals/FT-847/LNA%20spf5189z data sheet.pdf](file:///E:/Yaesu%20manuals/FT-847/LNA%20spf5189z%20data%20sheet.pdf)

SMA connectors removed from board



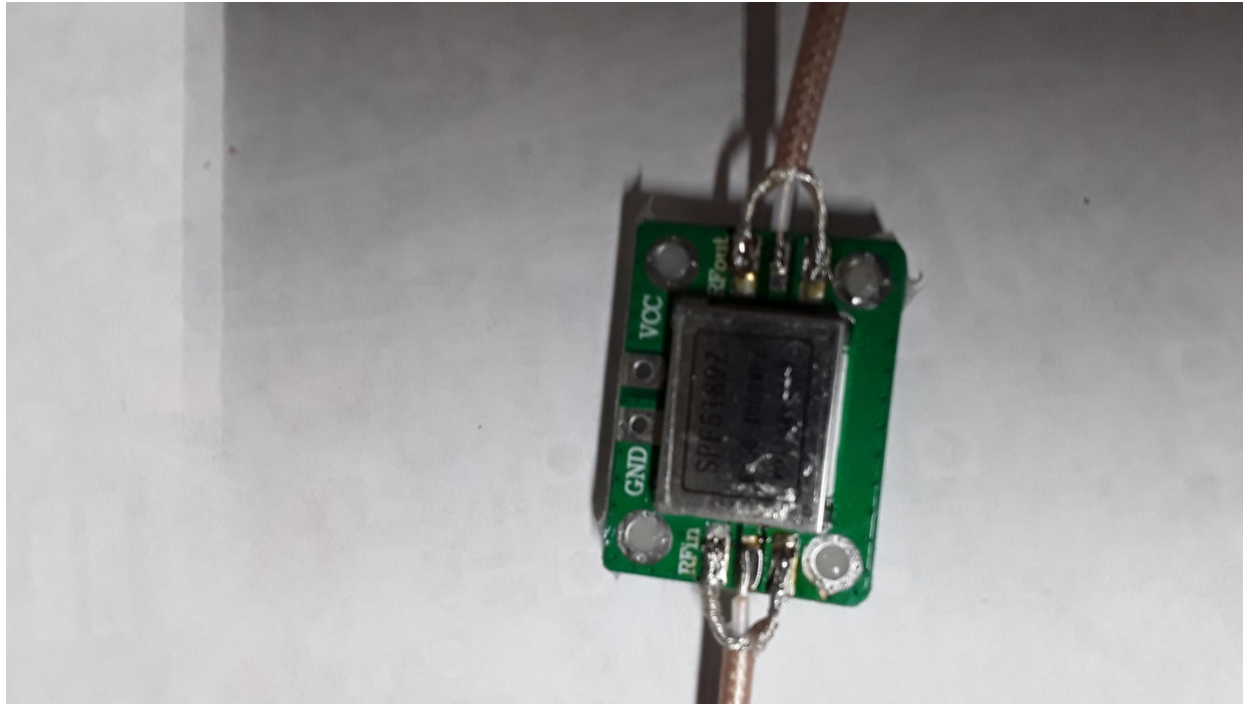
Silicone feet added to bottom of board



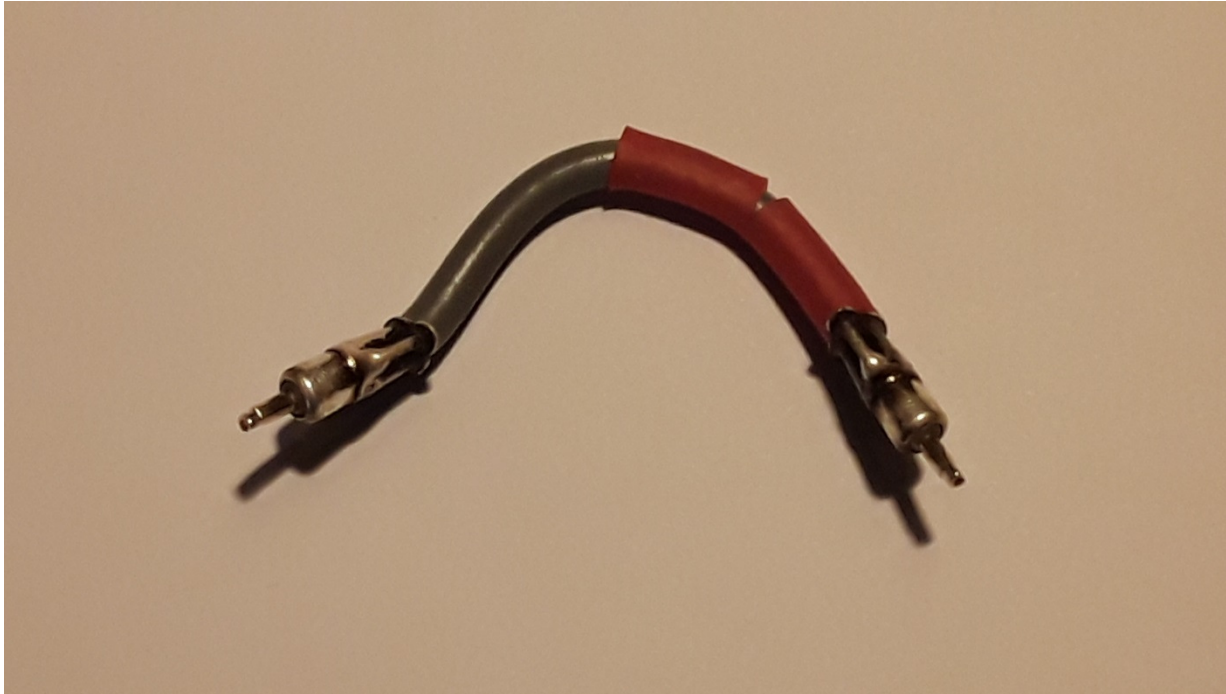
Coax prepared for LNA board



Coax soldered to board in place of SMA connectors

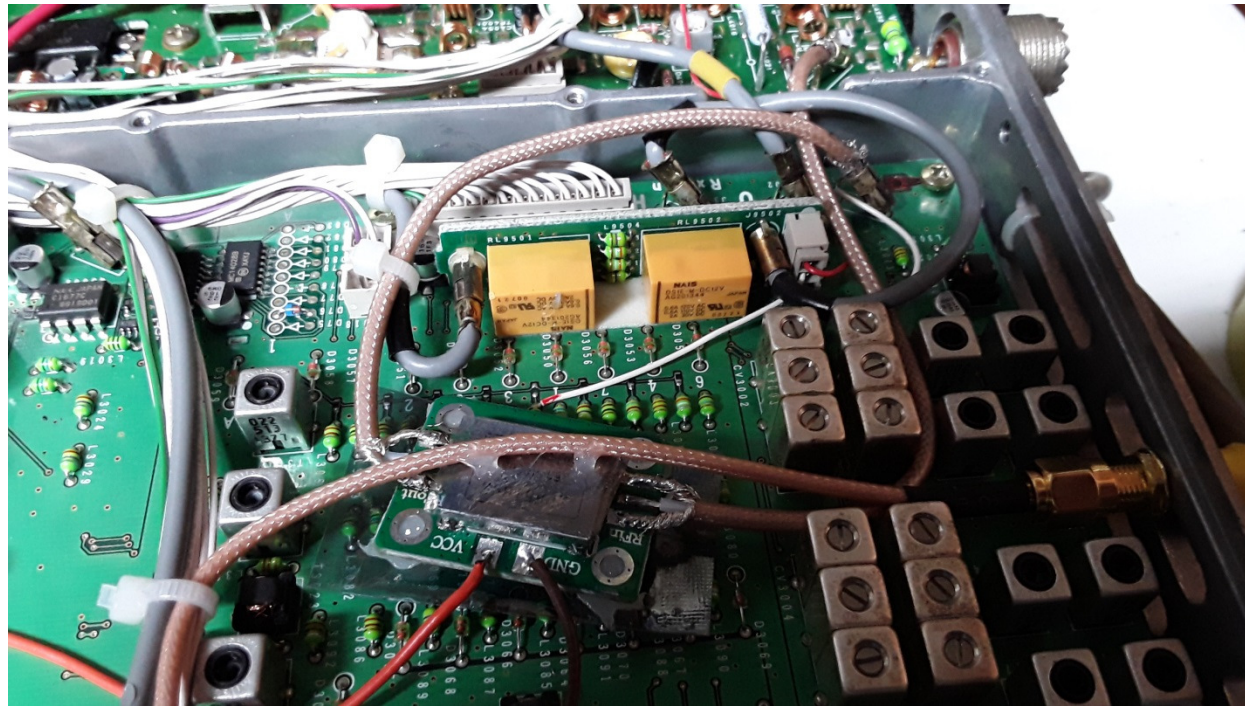


Find and remove the jumper

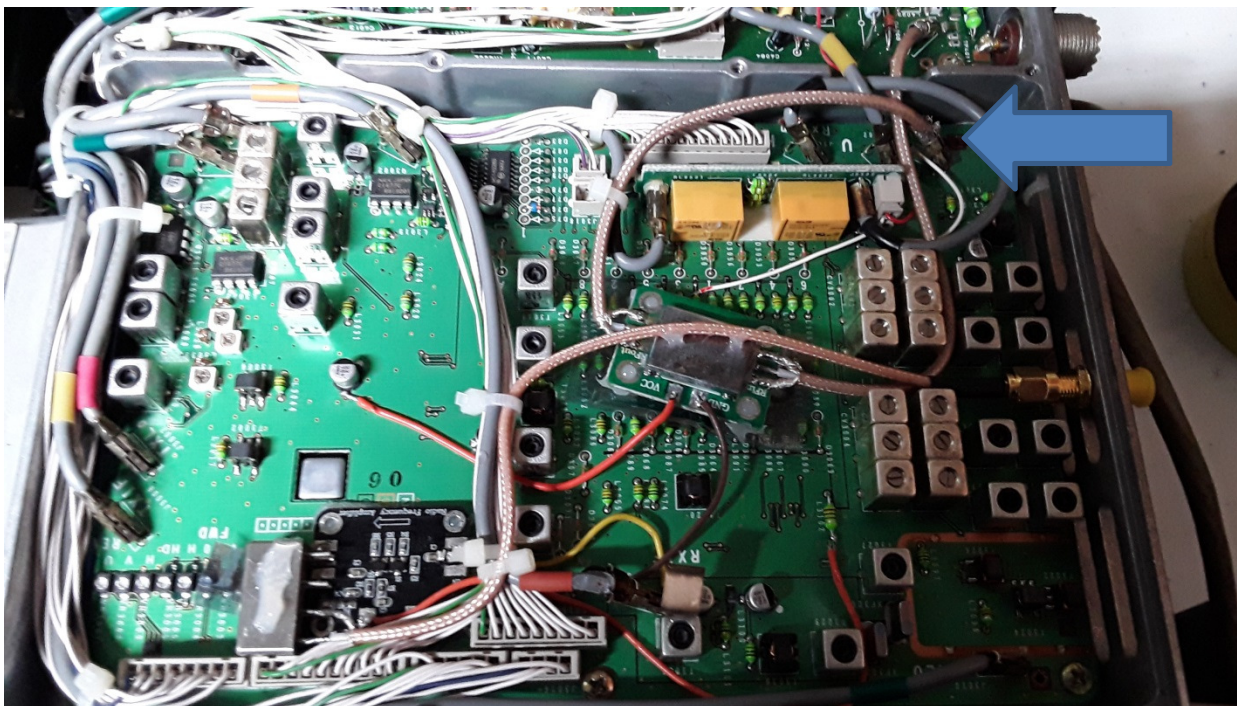


**between J3001 and J4004
on the two boards in the FT-847**

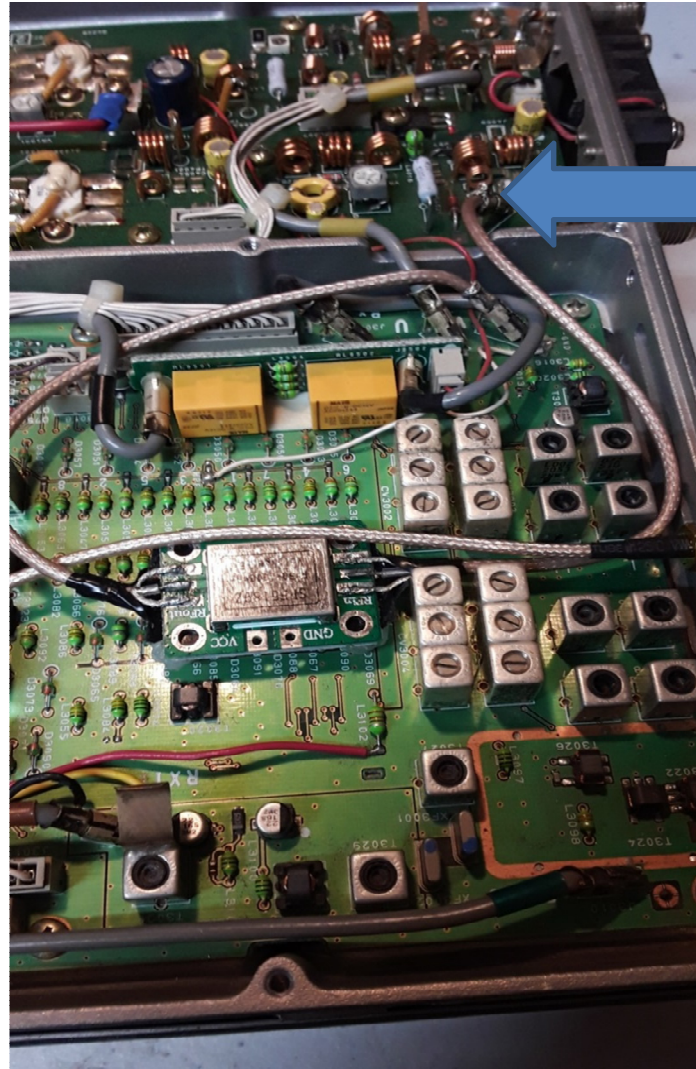
Board installed in FT-847 electrical tape used as insulation between main board of FT-847 and LNA board



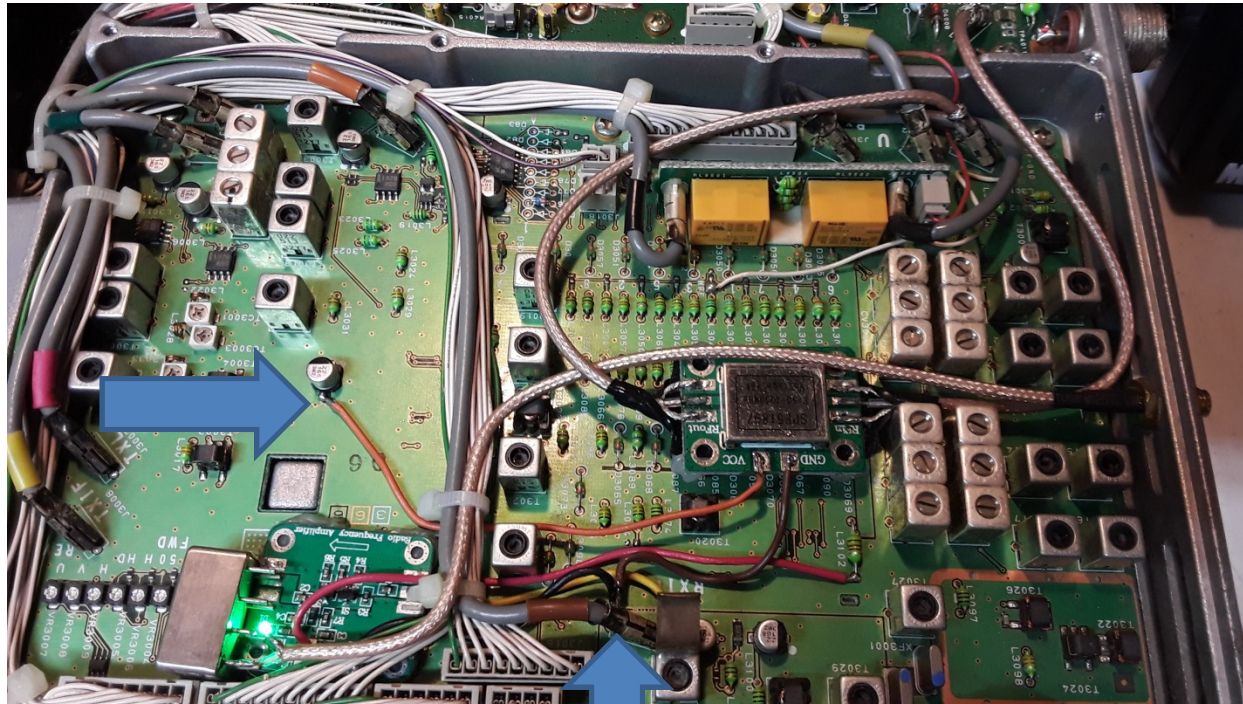
(RF out of LNA to J3001 here)



RF into LNA comes from J4004



**+5VDC
for LNA comes from this point**



- gnd here

Credit

to

K2UA –James (Rus) Healy