

Modifications for the Yaesu FT-847

Note:

If you only wish to extend the RX and not the TX of the radio have a look at the resistor configuration at position number J4 in your radio (This is shown open in the photo below). if J4 it's fitted remove it. This will open the RX to allow the radio to receive outside the normal amateur bands. If you have a resistor or solder link in the position of J4, then your radio should be locked to RX only within the amateur bands on VHF and UHF.

The configuration of the resistors can done by simply replacing a resistor by soldering a blob of solder to bridge the gap in place of were a resistor should be.

If your not sure in any way about the mods, don't be afraid to ask. I will try to help you the best I can.

(thanks to Colin Lowe G1IVG)

Extending the transmit range

Remove bottom cover..

near battery there are 6 solder pads numbered 1 thru 6....

pad 1 is already shorted with a chip resistor.....

short pads 2 and 3 with solder...

check pad 6 and if it has a chip resistor on it ...

remove it...

this one has to be removed to go out of band on hf and 6m.....

replace cover and turn on radio while holding in the lock and fast buttons....

this resets micro and you will also lose all your memories that you have entered...

you will have to reprogram these....

TX coverage will be 1.8-76mhz with no gaps...

DO NOT TX BETWEEN 30-36MHZ -- not only is it illegal, but you may damage the HF PA.

Thanks to Tom KF4TRZ, Brent K9WV, and others for sharing this information.

19-07-1998 Enter the Alignment Menu

George Nelson WB7VWK Email: WB7VWK.GEORGE@worldnet.att.net

I have just received the Technical Supplement (Service Manual) for the Yaesu FT-847.

This radio has an Alignment Menu in addition to a User Menu. To enter this Alignment Menu, you turn off the transceiver, press the UP, DWN, and FAST keys on the microphone together, while turning the transceiver on again.

In the alignment procedure, each alignment parameter is selected by rotating the SUB-TUNE dial. The alignment is performed by pressing the MCK/W key while injecting a signal of the required frequency and level. Pressing the MENU key after a setting is made stores the entry. To exit the alignment routine, press POWER.

This radio seems to be very high tech in all. I have not entered the Alignment Menu, and do not suggest that anyone do so, without the proper test gear and electronic knowledge.

Help with a noisy fan

Dave Sublette K4T0

A common complaint about the FT-847 is that the fan noise is irritating (and it is). I have been able to quiet the whine using the following method:

Cut a 3" x 3" piece of soft packing foam that is about 2" thick. Be sure to use the "open cell" type of foam. You can tell that it is open cell type construction by holding it up to your mouth and blowing air through it. Wedge the piece of foam between the four coax connectors so that it covers the intake area for the fan. The whine will then disappear. The foam has little effect on the cooling of the radio. I think it works because the foam causes turbulence in the air flow, disrupting the formation of the sound of the whine, which is probably generated by the tips of the fan blades. It may even slow the fan a bit, which stops the noise. However it works, it works. I can't even see it when it is in place. It should also have an added bonus in that it will filter dust from the air before it enters the radio.

Hope this works for you.

Throttling back the audio output level

Bob Nagy, AB5N

Although Yaesu did a fantastic job of gain distribution in the FT-847's receiver, they bombed when it came to the last stage...the audio output. The volume control's lowest setting results in room filling audio. The TDA200 audio amp chip is not actually being over-driven, it just is getting too much audio signal at the lowest input level from the previous stages. A great improvement can be gotten with the following mod.

Take off the covers and turn the rig over on its top....exposing the bottom. Near the rear, opposite side from the power input connector, you will easily be able to locate the audio amp IC. It has 6 legs and is next to the purple 470mf capacitor which it's output goes through. The input to that amp comes in on it's #1 pin - which is

the long leg -at the end nearest the rear of the rig. You can see the small 1uf cap feeding it -quite close to it. The mod is to add a 47K resistor in line with that leg. The easiest way is to snip it in the middle of the leg..seperate the snipped conductor and add the 47K in series with the two leads. Prepair the 1/4 watt 47K resistor with just enough lead length to contact the seperated amp leg. "Tin" resistor and leg contact points and tac solder the resistor in. (be sure that the leg is really seperated). Remember-You can always remove the resistor and bridge the leg together again at a later date.

The 47K gives just enough level reduction that you will now set your volume control at 11am instead of 10am, and the innitial lowest level point will be about half what it was. You may find that 68K or 100K may still provide acceptable volume levels. There is still enough audio to "blast out" the internal speaker...or drive any external unit. I even think that the audio sounds smoother and cleaner at this input level.

Good Luck and 73?s!

TX coverage continues on 137MHz to 174MHz and 410MHz to 470MHz

One problem that happens after the mod is the AUTOMATIC REPEATER MODE no longer functions but repeater shift still works.

What really appears to happen is the Auto repeater mode gets set to USA spec.

To recap then here is the pad info

Pad 1 is short
Pad 2 is short
Pad 3 is short
Pad 4 is open
Pad 5 is short
Pad 6 is open

I Hope this helps, Remember that transmitting out of band and on a frequency you are not licenced for is an offence!

One other annoying problem is the fan that is running continously, This can be changed by connecting the fan to the PA fan, which, under rx mode has the fan running at a much slower and quieter speed, but at tx the fan runs as normal.

So you are not actually stopping the rx fan, just slowing it down, which basically lowers the air flow, but still circulates the air during rx.

How to modify FT-847 with full TX-RANGE on HF

From: D05ARD @ DB0ERF.#THR.DEU.EU (Sven)

It's correct: to close the jumpers 1,2,3 and opening the others ?

The second method sayed:

pad 1 is already shorted with a chip resistor - NEGATIV ON MY TRX !
short pad 2 and 3 with solder ... check pad 6 and if it has a chip resistor remove it ...

Here are my factory-settings in FT-847:

pad 1 = open

pad 2 = shorted with a chip resistor

pad 3 = open

pad 4 = open

pad 5 = shorted with a chip resistor

pad 6 = i'm not shure if open or closed, only a big solder-point

I'll send also a foto of my factory-jumper-settings

ft-847.jpg

I'm happy about any detailed information !

SSTV interface with PTT keying for FT-847

Original circuit by Jim Barber N7CXI

Redraw v 3.1 by VA3JDH. Updated Jan. 16 1999

Note. Due to the low voltage output levels of the PKT and Data IN/OUT ports, it is recommended to use the EXT SPKR port as output to the sound blaster. This will ensure proper SSTV signal triggering and synchronization.