## FT8800 Alignment mode by DL5DKW

This transceiver has several sub-menus for individual band alignment. Enter alignment mode by pressing following key sequence:

Press & hold "left" band [VM] key and hyper memory [6] buttons while turning the radio on. Release keys when radio is on.

Then perform following key sequence:

- "left" band [LOW] -" "left" band [V/M] -" "left" band [HM] -"
- "left" band [SCN] -" "right" band [LOW] -" "right" band [V/M] -"
- "right" band [HM] -" "right" band [SCN]

-" You are now in alignment mode.!

Now tune the rig to the band and frequency you want to perform your alignment on. -" 145 MHz on "left" display, 435 MHz on "right" display.

Press & hold the "right" DIAL button to switch between the different alignment menus. (b-0 REF -" b-8 BAT SC)

b-0 REF is Reference Frequency tuning. To adjust Ref. Freq. press PTT and tune with DIAL knob.

(Do so with 435.000 MHz on "right" radio display and tune with "left" DIAL knob.) Measure TX freq. with freq. counter.

b-1 TUN is Front-End Tuning. (ONLY for Experts.!!!)

b-2 PWR is TX Power adjust. To do so, switch the "right" band display to 435.000 MHz or 145.000 MHz and to desired power level (low, mid2, mid1 or high).

Press PTT and adjust power with "left" DIAL knob.

b-3 DEV is FM-Deviation adjustment.

b-4 DCS adjusts DCS freq. deviation and should not be tampered with.

b-5-CTC does the same for sub-tone CTCSS frequencies. (factory adjustment o.k.)

A-7-SM L/V should be performed for each band as well and is normally not necessary. (S-Meter adjustment for S1 and S9)

A-8 BAT SC calibrates the voltage value displayed on the TRX. (Set power supply to 13.8 VDC and store by pressing "left" band [SCN] key.)

-" To exit Alignment Mode just power off the TRX. (Hold "right" volume button for more than 2 seconds.)

-" Power on the transceiver to resume normal operation.

Important notice: Perform alignment carefully as you may easily screw up your TRX! Remember, you do so at your own risk!

Don't try to adjust any value if you do not know exactly what you are doing!

Don't try to adjust A-3 PRO values, as this is done at the factory only!

73 de Wolf, DL5DKW

### FT8800 Backlight by KC9BZX

Change the display backlight to another color:

I used to own a Yaesu FT-90 and I loved the blue LCD display backlight, so I finally got around to changing the backlight in my FT-8800 to blue.

Here's how it's done:

First you will need two 3mm LED's of whatever color you desire. As stated above, I used blue to mimic the blue display of the FT-90. (Both LEDs are switched in series and driven by a regulated current source that limits the current to 20mA.)

- 1. Remove the display unit from the transceiver and unplug the microphone.
- 2. Remove the four small screws in the back of the Display.
- 3. Remove the six buttons from inside the front panel, then remove the groove nuts from outside the lower squelch knobs.
- 4. Remove the back plane and take the PCB out.
- 5. Locate the two LEDs on the side of the display; be sure that the Cathode is marked.
- 6. using a low-voltage soldering iron, unsolder the two LEDs and replace them with the new LED's.
- 7. Carefully reassemble the head and enjoy your new display backlights.

## FT8800 Colored volume by W0JRG

I own a FT-8800R. This radio is great. I have the face mounted above the car stereo in the dash. I had a problem seeing what position the volume and squelch knobs are at. I have my speaker in the headrest of my seat and tend to turn the knob up to far and startle myself.

Solution: I painted the indicators on the knobs with some acrylic craft paint. I used blaze orange for the volume and bright green for the squelch. Problem solved. I intend on adding some "glow in the dark" paint on the knobs in the future for increased visibility at night.



Regards,

Jeremy Geppert W0JRG

### FT8800 Extended TX by WD5JFM

I just recently purchased a FT8800 and could not find any mod for the freq CAP/MARS modificaton: Called Yaesu 8-22-03 and said that it would be around 2 months before it would be released.

I took the 8 screws off of the top and sides of the unit. Located the main CPU and on the left side approximately the same location as the FT8900 are 6 spaces next to the case. One Resistor/Diode at the front toward the panel and one at the rear most position toward the back of the unit.

I took it on myslef to unsolder the front as it was similar too the 8900 and left the rear one in tact.

IT WORKED; powered the unit up and it went through the entire reset like the 8900. NOTE: The resistor/diode when unsoldering I used a very low wattage soldering iron with a ground strap from the iron too the case of the radio. It works flawlessly.

Bill WD5JFM

Thanks to James Fairhurst for the picture.



I find that after using the crossband repeat function, when switching back to normal operation, the transmit audio, on the left side, is terrible with very low power. I have to switch off the radio and switch it back on to get it to work normally. Has anyone else found this or have any ideas or suggestions.. This was on the amateur frequencies.

### FT8800 Extended TX with ARS function by DF5WK

I've modified my FT-8800E for extended TX without loss the ARS function.

In my German Version their is only the 0 Ohm resistor R 1431 on the left side of the main unit and it must be unsoldered and you have to solder a 0 Ohm resistor R 1432.

After this modification the transmit frequencies are 137 - 174 MHz and 420 - 470 MHz and the ARS function for the German Version will be as before.

If you have no Service Manual, you can see on the left side of the CPU six soldering pads for 0 Ohm resistors. In my version there is only a 0 Ohm resistor on the second soldering pad, which must be unsoldered and you must solder a 0 Ohm resistor about the third soldering pad from the front of the main unit started. Please look to the picture from Geoffrey.

This modification is correct for the European Version of the FT-8800E and I think it is also correct for the FT-8900E.

Vy 73 de Wolf, DF5WK

### FT8800 from mem name to freq by KC0SHM

The manual didn't have mention of this feature (that I could find)...

If you push and hold the F4 key (the far right key on the bottom of the face of the mic) for about a second, the display will toggle from the memory alpha numeric name to the frequency and vice versa.

## FT8800 MH48 audio mods by KC9BZX

Some users may find that the MH-48 microphone supplied with the FT-8900 gives a very pronounced bass response. It's an easy task to reduce the bass response and give your TX audio a more balanced quality.

To perform the modification, you will need a .01uF ceramic capacitor.

- 1. Remove all three screws from the back of the microphone, and lift the back cover away from the front.
- 2. Locate the white plastic connector which attaches the microphone cable to the circuit board. There are six wires leading from the microphone cable to this connector.
- 3. Locate the 'audio out' wire this is the second wire in from the right-hand side of the connector (on my microphone it was the white wire).
- 4. Using wire cutters, snip the audio out wire approximately half way along its exposed length. (Be careful not to inadvertently cut any of the other wires)
- 5. Carefully removed 1/8" insulation from both free ends of the audio out wire, then tin them.
- 6. Take your new .01uF ceramic capacitor (usually marked "103") and snip the legs to around 1/4" in length, then tin them.
- 7. Solder one leg of the capacitor to one free end of the audio out wire, and the other leg of the capacitor to the remaining end; ie. place the capacitor "in series" with the audio out wire.
- 8. Ensure the legs of the capacitor are not touching each other. Then, fold a piece of electrician's tape around the capacitor and the wire connections so that they can't short to the circuit board.
- 9. Replace the back cover of the microphone (ensuring that the PTT bar is located correctly) and all three screws.

You should now find that the transmitted audio is crisp and clear. Enjoy!

### FT8800 Monitor AM by KC9BZX

How to monitor AM outside the default Aircraft band:

Depress the set button once and rotate the left selector knob to menu item 46, it will say AM.

Select the frequency you wish to operate by VFO. You are now on AM. If you turn VFO one click to left or right, radio will revert back to FM.

You can program this into a memory channel and it will stay in the AM mode.

#### FT8800 OPC478 to FT8800 by VK3XPT

If you have an Icom cable OPC-478, then this could not be easier! All you need is a 3.5mm stereo socket, and a 6-pin mini DIN plug (which can often be found on an old mouse!)



Enjoy!

Schematic og description of the OPC-478 interface.

#### FT8800 pre-amphasis 1200 baud TX by G4HFQ

The FT-8800 does not pre-emphasize audio when transmitting 1200 baud data output using the packet socket at the rear of the radio.

Most radios using this 6-pin mini din connection output squelched and de-emphasized audio to pin 6 and non-squelched flat audio directly off the FM discriminator to pin 5. Many audio interface cables are wired to receive the audio off pin 5 - the de-emphasized pin.

This results in a slope in the received audio amplitude that is high at the bass end and low at the treble end.

Yaesu UK supplied me with a modification to correct this situation. Replace C1377 (originally 0.015 uF) with a value of 0.001uF.

The capacitor is located on the same side of the main board as the microprocessor:



Bob G4HFQ

# FT8800 PTT lock by KC9BZX

The annoying lock function only locks the DTMF buttons and the FUNCTION buttons, leaveing the PTT button unlocked for you or others to accidentally transmit.

This simple mod locks the PTT button and the user programble buttons, but leaves the DTMF buttons unlocked when the lock switch is switched on.

The picture below shows the solder blobs before and after the mod:



GENERIC VIEW OF INSIDE THE MH-48 FROM BACK

In the factory setup, in the solder joints near the lock button, only D and E are soldered. To perform this mod, remove the solder blob from D and put a blob over A.

I only tried the blobs until I reached the point where all buttons worked unlocked, and the PTT was disabled when locked. I don't know what the other solder jumpers do.

# FT8800 remote cable kit by Rey Fimbres



Catalog Number: 279-422



Catalog Number: 279-434

- Remove head from radio.
  Unplug modular cable from head unit.
  Leave the short modular cable attached to radio.
  Attach above adaptor to modular cable on radio.

- Plug one end of new cord into modular daptor.
  Connect the remaining connector into the head unit.
  You are ready to transmit.

### FT8800 Using a Yaesu FT-8800R with a J&M Integrtr Iv by Josef Zeevi

How to hook up a HAM radio to a J&M Integrtr IV.

The J&M Integrtr IV may be the best add-on intercom out there. With built in FM, and multiple priorities (and a dedicated cell phone input) it covers the gamut of things you might want to do on a motorcycle. There's also a way to wire up a remote PTT and a MUTE button (that softens the music/radio input). I put a remote PTT under the clutch assembly on my bike so I can hit the button without giving up motorcyclce control.

However, the designer didn't clearly document the FRS/GMRS radio interface.

So, I tested it and found that the following worked with my FT-8800R.

First off, I had to identify the pins on what is a standard PS-2connector. Looking at the pins, with the key (a small bar that runs vertically) let's call the upper left pin, pin 1. Then going counter-clockwise, they increase in number, ending in pin 6 as the upper right pin.



For use with my FT-8800R I wired as follows:

pin 1 is ground

pin 6 as PTT

pin 2 as the input from the radio speaker

pin 5 as the microphone output from the integrtr to the radio

pin 4 as microphone ground

On the integratr there is a high priority input that puts whatever comes in on the right headset speaker, overiding other source inputs. I use that most of the time with my radio so I can listen to music when there's no radio traffic. For high-use radio, I can plug the speaker output of the radio into a connecter I added to the PS-2 connector. When audio is input there, the sound appears in both headset speakers, overiding the music/radio input.