

## (FT-212) FT-212RH Extended Frequency Coverage

Remove the bottom and top covers and remove the front panel cover. You must then remove the front board by carefully unplugging it (try not to touch the lcd display). On the back of this board which is the control unit locate jumpers 1 through 12 and unsolder any that are soldered. All jumpers must be open (1-12 only). Reinstall the control unit and just turn on the radio for a few seconds. now turn it off again and remove the control unit again and solder jumpers 3, 4, 5, 11 only.

Put everything back together and apply power. The display will read 000.

Push the MHz button and rotate the main dial until 132.000 reads on the display, then press D/MR once. Now press again the MHz button and rotate to 180.000 and press the D/MR again.

the radio is now programmed to operate from 132 to 180 mhz. mine has tx and rx through the entire spectrum with excellent sensitivity from 136 to 178. Dont forget that transmitting outside the amateur band is not allowed so please consult your local athorities for a special permit.

(FT-212) FT-212 and 4800 bps

I have made the following connections/modifications to the FT212/FT712 transceivers:

For receive, I connected a 10K resistor to pin 11 of Q01 in the IF-unit. The other end of the 10K resistor is the output. The resistor is there to protect the transceiver when you make an error at the external connection...

For transmit, I connected a 10K resistor to the top end of VR03 in the main unit (near pin 1 of the MIC unit connection). This point is fed rather directly to the vco varactor.

I have made the external connection with a shielded cable that can run through a hole near the antenna coax. There is a small plate on the heatsink that you can remove and a suitable hole appears.

When you connect the transmit line, it is possible to switchoff the mike amplifier (at least when you don't have the voice recording unit).

Use 2 diodes, with the kathodes connected together to the external "PTT" switching lead. The anode of one diode is connected to the normal PTT point on the mike connector, the anode of the other diode is connected to pin 10 of Q02 in the MIC unit. When you now pull the external lead to 0V, the set will transmit but the microphone does not work. You can leave it connected! Very convenient when you want to use it for fone...

Summary:

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IF Q01 pin 11 -----|=====|----- > audio out
                    10k
MAIN VR03 top -----|=====|----- < audio in

PTT ----->|---|
          1n4148 |
              ----- PTT
                |
          1n4148 |
MIC Q02 pin 10 ----->|---|

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(this is a text I sent to someone else before)

I have heard both horror- and success-stories about the TM531 too...

The problem is, that different people refer to the same results as "It works perfectly, just a few bit errors", or "It's a complete disaster, every 3rd frame I have to send a re-try, killing the throughput".

We are operating a succesful 4800bps link using the TM531 with the HAPN modem, but that one is a bit less demanding.