

Programming the Baofeng UV-5R() Series Radio to Work SaudiSat 1C (SO-50)

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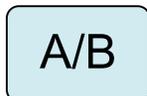
When I received my radio, I was excited to be able to work the FM repeater satellites. My excitement was dashed when I found out that there is only one satellite left: SO-50. So I went about looking for detailed instructions on how to program the radio for SO-50. All I found was programming instructions on programming for repeaters. Although it is the same concept, I needed the details that were pertinent to SO-50. So, with the information available and what I figured out, here are the results. Enjoy!

How to program the Baofeng UV-5R() for SO-50 Operation

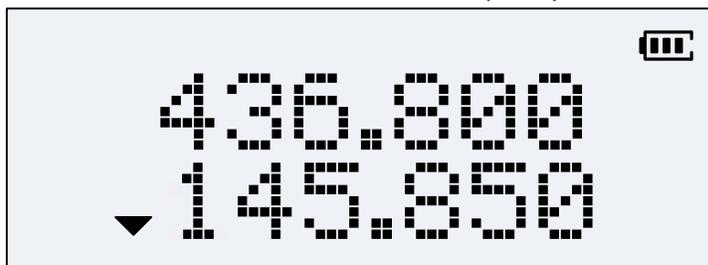
1. Set the radio to FREQUENCY MODE
 - a. Press the VFO/MR button until the radio says "Frequency Mode"



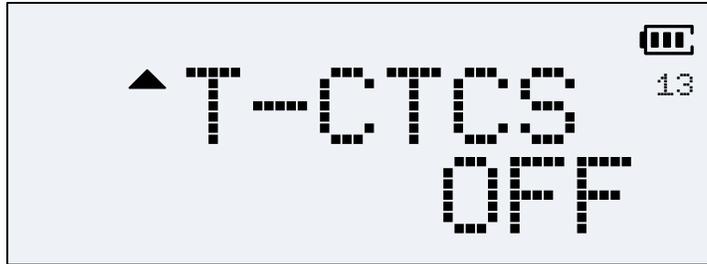
2. Press A/B button to move the arrow between frequency A and B



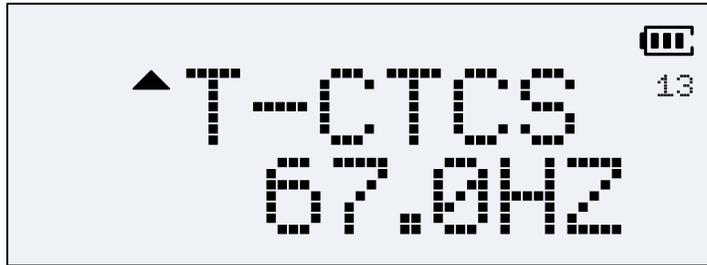
3. Press the A/B button to set frequency A
 - a. Set frequency to 436.800 (downlink)
4. Press the A/B button to set frequency B
 - a. Set frequency to 145.850 (uplink)
 - b. Arrow should now be on frequency B



5. Set Menu 13 - T-CTCSS to 67.0 Hz (access tone for the transmit frequency)
 - a. Menu (accesses the menu function)
 - b. 13 (accesses menu item 13)

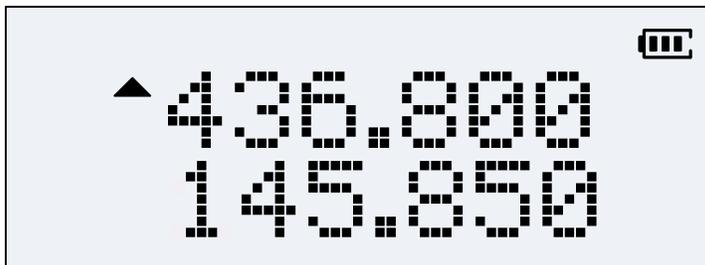
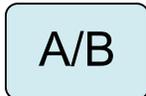


- c. Menu (allows modifying the menu function)
- d. 67 (value to enter to modify the function)



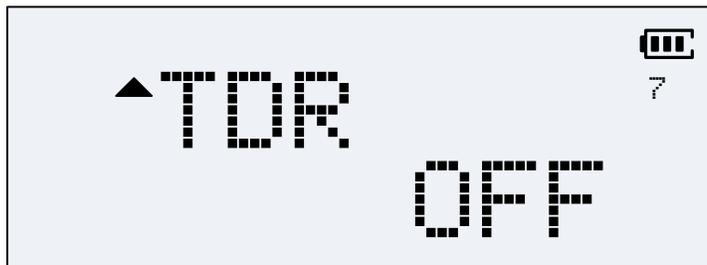
- e. Menu (sets the new value and confirms)
- f. Exit (exits back to the frequency mode)

6. Press A/B button so the arrow is on A (***very important***)

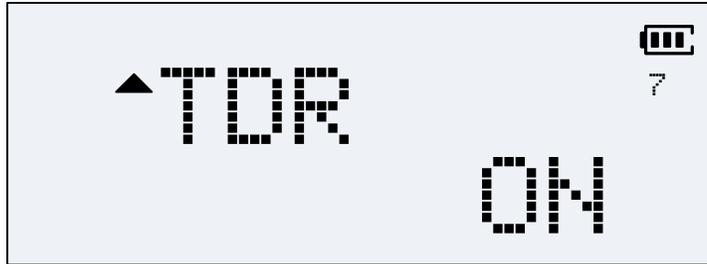


7. Set Menu 7 - TDR to ON (split operations)

- a. Menu
- b. 7



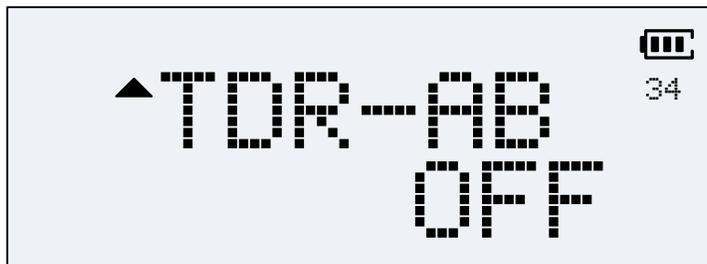
- c. Menu
- d. ON (up arrow or down arrow)



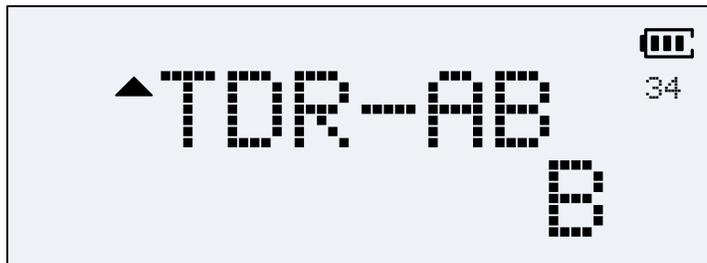
- e. Menu
- f. Exit

8. Set Menu 34 - TDR-AB to B (assigns transmit function to frequency B)

- a. Menu
- b. 34



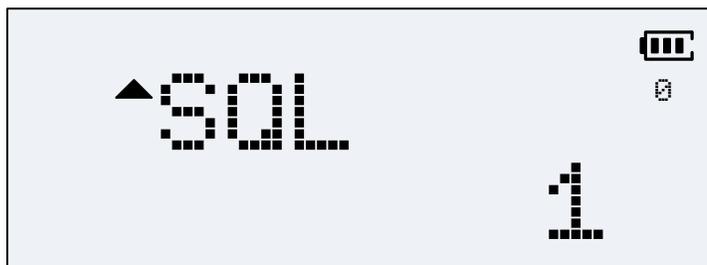
- c. Menu
- d. B (up arrow or down arrow)



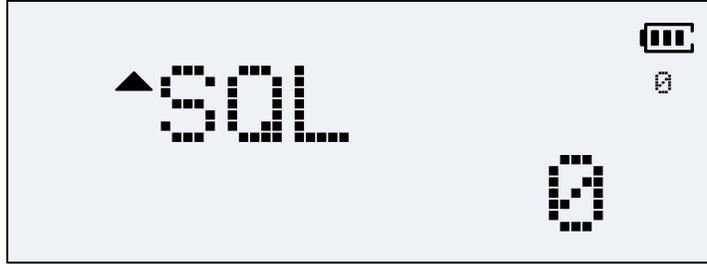
- e. Menu
- f. Exit

9. Set Menu 0 - SQL to 0 (open the squelch so you can hear weak signals)

- a. Menu
- b. 0

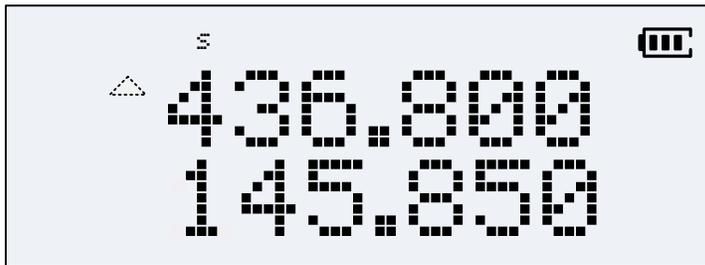


- c. Menu
- d. 0



- e. Menu
- f. Exit

10. Work the bird (the small **s** indicates you are in SPLIT mode)



Once the SQL has been set to zero (0), the arrow to the left of frequency A will flash. This will indicate that you are listening to frequency A.

When you key to transmit, the arrow will become visible on frequency B and will be solid but flashing on frequency A. This is confirmation that you have programmed the radio correctly.

When you are done, repeat the process and set the modified menus to their original values.

UPDATE FOR BFB311 FIRMWARE BUG

While trying to work SO-50, I noticed that the radio was transmitting on the downlink frequency. I decided to program the radio with my local repeater pairs and CTCSS to see what was going on. Here is what I found.

When the radio is SQL = 0 (Squelch wide open), and, TDR-AB ≠ OFF, then, the radio will transmit and receive on the downlink frequency only. It will not switch between DL and UL frequencies.

Work around

To work around this problem, program Menu 34 (TDR-AB) to OFF. Then, every other transmit cycle will be on the UL frequency. This has been reported to Baofeng. Hope they can fix this bug.

Work around procedures

1. With the radio programmed as above, the SQL open, and the arrow on the DL frequency (436.800), key the radio for about 1 second. This will place the flashing arrow on the UL frequency (145.850).

2. Key the radio and make your contact or announce your presence on SO-50.
3. Release the PTT and you should now be listening to the DL frequency (arrow on 436.800).
4. Repeat steps 1 thru 3 until your QSO is complete.

Although a pain in the behind to do this, at least you will not have a delay when changing DL frequencies with the up and down keys. It does take a little use to doing this. It is best to practice when the satellite is not in the area.

Good luck!