

## Manually Programing Your BAOFENG UV5RA Dual band Transceiver

by Bob Peterson KE7RAP, Randall Jones AE7RJ and Jack Tiley AD7FO

1. Turn on the radio (knob on the top of the radio).
2. Push **Orange V/M button** If necessary to enter Frequency (VFO) mode (no channel number is shown) if voice mode is on the radio will announce *+Frequency mode+*

### ENTERING A FREQUENCY IN FREQUENCY (VFO) MODE

3. Press the **A/B key** so that the **▲** symbol is to the left of the upper frequency display
4. Press **Orange V/M Button** to enter the frequency mode If you have the voice on (option #14) the radio will announce *%Frequency Mode+* and there will not be a channel number next to the frequency display. If the radio announced *%channel mode+* press the **Orange VM Button** again.
5. Enter the desired frequency like 147.300 443.400 using the keypad. Note that there is no decimal point key, it will be entered automatically after your first three input digits. If the voice mode (Menu # 14) if on the radio will announce each digit entered.

### SETTING THE REPEATER OFFSET

6. Press the **MENU** Key.
7. Use the **▼ ▲** up down arrow keys to get to menu item #25 to set plus, minus or none offset.
8. Press the **MENU** again and use the **▼ ▲** up down arrow keys to select **+, - or none**.
9. Press **MENU** again to lock in your selection If you have voice turned on (Menu #14) the radio announce *%confirmed+*
10. Press the **EXIT** key to leave the menu system.

### SETTING THE REPEATER OFFSET FREQUENCY

11. Press the **MENU** key.
12. Use the **▼ ▲** up down arrow keys to get to menu # 26 to set plus the repeater offset frequency.
13. Press the **MENU** again. The radio will announce *%offset frequency+* if the voice is turned on (Menu #14) . Use keyboard to enter the desired offset frequency (for 2 meters this will be 600 KHz and for 70 cm it will be 5 MHz). For 600 KHz enter 00600 and for 5 MHz enter 05000.
14. Press **MENU** again to lock in your selection If you have voice turned on (Menu # 14) the radio announce *%confirmed+*
15. Press the **EXIT** key to leave the menu system.

### SETTING TRANSMIT POWER

16. Press the **MENU** again and use the **▼ ▲** up down arrow keys to get to item #2 Transmit Power
17. Press the **MENU** again The radio will respond with *+power+* if voice (menu #14) is on and use the **▼ ▲** up down arrow keys to select the desired power level (**HIGH** or **LOW**)

18. Press the **MENU** again to lock in your selection If you have voice turned on (Menu item 14) the radio announce *%confirmed+*
19. Press the **EXIT** key to leave the menu system.

### **SETTING THE CTCSS TONE**

20. Press the **MENU** key and use the ▼ ▲ up down arrow keys to get to menu item #13 to set the CTCSS Tone if used.
21. Press the **MENU** If you have voice turned on (Menu item 14) the radio will respond with *% CTCSS+*. Use the keypad to select the desired CTCSS tone (i.e. 100, 123, 141, etc.)
22. Press the **MENU** again to lock in your selection If you have voice turned on (Menu #14) the radio announce *%confirmed.*
23. Press the **EXIT** key to leave the menu system.

### **STORING THE FREQUENCY**

24. This procedure will store the frequency entered above along with the above settings.
25. Press the **MENU** and use the ▼ ▲ up down arrow keys to get to menu # 27 MEM-CH
26. Press the **MENU** the radio will announce *%memory channel+*. Use the keyboard to enter an empty channel number location.
27. Press the **MENU** the radio will announce *%receiving memory”*
28. Press the **EXIT** key to leave the menu system.

### **ENTERING AND STORING THE TRANSMIT FREQUENCY**

29. Press the **\* KEY**. The display will show the transmit frequency (previously entered frequency + or . or the offset set above or (no offset))
30. Press the **MENU** key
31. Press the **MENU** key the radio will announce *%Channel number+*
32. Press the **MENU** key again and the radio will announce *%Transmitting memory+*.
33. Press the **EXIT** key to leave the menu system.
34. Press the **\* KEY** to exit the *%everse+mode*.

**If you are entering additional frequencies go back to step 2, skipping steps that are the same as the previous entry (power, offset, offset frequency, etc.)**

### **Deleting a memory location**

35. Press the **MENU** and use the ▼ ▲ up down arrow keys to get to menu #28 DEL-CH
36. Press the **MENU** The voice will announce *%Delete Memory+*. Use the keyboard to enter the channel number to be deleted.
37. Press the **MENU** the radio will announce *%Confirm+*
38. Press the **EXIT** key to leave the menu system.

=====

Keep in mind that you can program frequencies that are illegal to use with your amateur radio privileges. This radio does not inhibit transmitting on these frequencies so if you

accidentally transmit you will be heard on that frequency (police, weather, taxi, fire, etc.) The way to avoid this is to use the programming software and enter a transmit frequency of 000.000 MHz). We have not found a way of entering 000.000 in the manual programming mode.

### **Additional "Menu" choices that may be of interest**

All of these modes are accessed by pressing the **MENU** key then using the **▼ ▲** up down arrow keys to get to the menu item then pressing the **MENU** key and the **▼ ▲** up down arrow keys or entering data to make choices.

<b>Menu #</b>	<b>Function</b>
# 0	<b>SQL</b> Set Squelch threshold (0 is no squelch 9 is max squelch))
# 1	<b>STEP</b> Tuning step size using the <b>▼ ▲</b> up down arrow keys
# 2	<b>TXP</b> Set transmit power (High or Low)
# 3	<b>SAVE</b> Battery Save Mode (Off or 1,2,3 or 4 Hours)
# 4	<b>VOX</b> (ON or OFF and sensitivity)
# 5	<b>WN</b> Wide or Narrow Bandwidth (5 KHz or 2½ KHz)
# 6	<b>ABR</b> Display illumination (Off or 1 to 10 Seconds)
# 7	<b>TDR</b> Dual watch (on, A or B)
# 8	<b>BEEP</b> Tone on key stroke (ON or OFF)
# 9	<b>TOT</b> Transmitter On Time, in seconds
# 11	<b>RCTCS</b> Receive CTCSS (set tone or off with the <b>▼ ▲</b> up down arrow keys)
# 13	<b>TCTCS</b> Transmit CTCSS (off or select tone with the <b>▼ ▲</b> up down arrow keys)
#14	<b>VOICE</b> Select language (English or Chinese)
# 19	<b>PTT-ID</b> (Off, BOT, EOT, BOTH)
# 20	<b>PTT-LT</b> Delay PTT for coding (0 to 50 ms)
# 23	<b>BCL</b> Busy Channel Lockout (on or off)
# 24	<b>AUTOLK</b> Automatic Keyboard Lock (on or Off)
# 25	<b>SFT-D</b> Repeater Offset (+,-, off)
# 26	<b>OFFSET</b> Repeater Offset Frequency
# 27	<b>MEM-CH</b> Memory Channel number entry
# 28	<b>DEL-CH</b> Delete Channel number entry
#33	<b>BAND</b> Band select VHF or UHF (same as BAND button)
# 34	<b>TDR</b> Dual watch (on, A or B)
#39	<b>RODGER</b> places tone at end of transmission (On or Off)
# 40	<b>RESET ALL</b> Restores default settings (use with caution, your stored data will be lost)