Manual programming instructions for Baofeng BF-8hp and UV-5

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General Information;

Two modes, frequency mode and channel mode. – <u>Work in Frequency mode (Press red button)</u>

Two radios A and B radio. You can only Program and save A radio so use A / B button to select A radio. To the left of the frequency information an up arrow points to radio A, down arrow to B, <u>We will use A only</u>

Set Squelch to 3 or 4 as follows: (Menu item 0)

Menu (radio says Menu**) press 0, Menu** (radio says squelch)

then **press 3**

Basics – An explanation of functions

Receive Frequency: Using Radio A when you put in a frequency using the keyboard, such as 147040 which is 147.040 Mhz you are setting the radio to receive that frequency and if someone is talking you will hear it. That sets the **Receive Frequency.**

Frequency Offset (Menu item 26) "Offset Frequency"

The Transmit frequency is either above or below the Receive frequency. For 2 Meters it is an offset of 600 Khz, for .75 Meters (440) it is an offset of 5Mhz.

Frequency Direction (Menu Item 25) "Frequency Direction"

Frequency direction is + - or Off. For simplex (transmit and receive on the same frequency) select off. Otherwise select + or –

For 2 meters it is usually – for frequencies below 147.00 and + for frequencies equal to or above 147.00

T-CTCSS (Transmit) (Menu item 13) "CTCSS" Also called a pl tone

T-CTCSS is the sub-audible tone your radio transmits with your voice which tells the repeater to turn on and repeat your signal. This prevents repeaters from turning on due to noise or due to a weak signal from far away using the same frequency.   (R-CTCSS is normally set to **off**)

The frequencies are available in the menu by scrolling up and down in that menu item, there are 38 frequencies, select the one for the repeater you are using.

Programming the Radio by Hand.

The listing for a repeater will look like this: 147.040 + 103.5 [Call letters]

It gives: Frequency – Offset direction(+ -) – T-CTCSS tone

Step 0 – Press red button to enter frequency mode Radio says "frequency Mode" and "channel mode", Set to A radio (UP sign on top line of display)

Step 1 – **Clear the channel** on your radio that you will use to store the new entry, I will use 87 in this example.

[**Menu**] (radio says Menu**) Enter: 28** [**Menu**] Radio says "Delete Channel" Enter: **087** [**Menu**] Radio says "Confirm" ===Channel 87 is now empty, we will get back to that later.

Step 2 – Set Offset Frequency – 600KHz

[**Menu**] (radio says Menu**) Enter:** 26 [**Menu**] Radio says "Offset Frequency"   Enter **000600** [**Menu**] Radio says "Confirm" ====Offset is now set to 600KHz for 2 Meters

Note: for 440 band it would be 005000, or 5 MHz

Step 3 – **Set Frequency direction – Plus/Minus/Off**

[**Menu**] (radio says Menu**)** **Enter:** **25** [**Menu**] Radio Says "frequency Direction" Use up down arrows to select **+** [**Menu**] Radio Says "confirm" ====Radio is now set to transmit above receive frequency by the offset frequency which we just set to 600Khz- Note: for simplex channels set this to **OFF**.

Step 4 – Program T-CTCSS – Sub-audible tone for repeater

[**Menu**] (Radio says Menu) **Enter**: **13** [**Menu**] Radio says "CTCSS" - Use up down buttons to scroll to CTCSS tone frequency, or enter the frequency directly in this case **103.5** [**Menu**] Radio says "confirm" === This sets the tone that keys the repeater squelch.

Step 5 – **Enter Receive Frequency of 147.040**

Hit [**exit**] to make sure you are at the beginning of the menu

Enter: 147040 (Note: add trailing 0's if necessary) You have now moved the receiver to listen on 147.040.

*Since you are in **frequency** mode, and you have put in the correct T-**CTCSS** frequency **offset** and **offset direction** you can operate in this mode and the radio will select the correct transmit frequency and add the CTCSS tone.*

Test your quick setup as follows:

Look at your display and see that it says for the top radio 147.040 along the top of the display you will see a small + indicating positive offset.

Press the **TRANSMIT** Button, you will see the frequency change to 147.640 which is your transmit frequency, you will see a red light on the front panel which says you are transmitting, Say "you call letters, testing" then release the transmit button. If you are on an active repeater you will see a Green light on the front panel for a fraction of a second to indicate the repeater heard you.

Store Data in a Memory channel

Next is to store this data in Channel 87
>In Step 1 we cleared Chanel 87
Press [exit] (to make certain you are at the main menu)

➔Store Receive Memory

[Menu] 27 [Menu] Radio says "Memory Channel" Enter: 087 before radio times out, [Menu] radio says "Receive memory" [exit]

➔Press   *[SCAN] to display transmit frequency, you will see an R near the PLUS at the top of the screen and the frequency shown will change to 147640 in the display for radio A

➔Store Transmit Memory

[Menu] 27 [menu] Radio says "Memory Channel" Enter: 087 before radio times out, [Menu] radio says "transmitting memory"   [exit]

If the process fails or needs to be repeated, clear the memory channel before proceeding.

TEST

Change mode to "**channel mode**" enter: 087 to change to channel 87 and test as before:

Press the TRANSMIT Button, you will see the frequency change from 147.040 to 147.640 which is your transmit frequency, you will see a red light on the front panel, Say "*you call letters*, testing" then release the transmit button. If you are on an active repeater you will see a Green light on the front panel for a fraction of a second to indicate the repeater heard you. You have now tested the data saved in channel 87, you can go back to this repeater at any time in either radio A or B