

## Are you a NEW UV-5R OWNER?

Here's a step-by-step recommendation on how to get your radio working properly if you just purchased your UV-5R.

**Note:** you can skip all of these steps if you purchased a pre-programmed radio from **RF Gear 2 Go**.

DON'T TRY TO TAKE SHORTCUTS. Other than purchasing a pre-programmed UV-5R radio from **RF Gear 2 Go**, there are none. "If" you really understand software drivers and follow the directions correctly, you will probably be ready to start programming your new radio within an hour. Filling up all 128 memories will add more time. Checking to make sure you have the correct frequency splits for each memory channel (if required), PL tones or Privacy Codes (if required), or DCS (if required) will add even more time. Depending on your speed, this can take anywhere from several hours to several days.

Taking "shortcuts" is almost always guaranteed to add more time. 99% of the time when a new-owner feels their radio or cable is "broken"; it's actually the result of them not following the correct steps. Please remember this is a Chinese made radio (designed for the commercial market), it does NOT program the way any "normal" Japanese radio from Alinco, Kenwood, Icom or Yaesu does. "If" your computer skills start and stop at watching videos or playing games on your computer, or if changing something on your computer requires a call to the neighborhood kid down the street, or if you simply value your time (since it could easily take days to completely program the radio depending on your skill level and your ability to verify the frequency data), spend the extra few dollars and get your radio pre-programmed from **RF Gear 2 Go** (you'll literally walk away with a ready-to-go working radio). If you purchased a pre-programmed unit, you can skip all of the steps below and immediately start using your new radio.

If you did not and now have to program it yourself, hopefully these steps will help get you started. Learn to program a few channels manually first. Simple starter guidelines are shown below:

You can program channel memories either with a standard split, odd splits, or no splits at all (Simplex). Memories store both transmit (TX) and receive (RX) frequencies, along with any CTCSS or DCS codes (if required), power level (high or low), and Bandwidth (wide or narrow).

### How to Program a Repeater Channel with a Standard Offset

**FIRST HINT:** I suggest you do not have your radio monitoring any active local frequency while programming memories (either manually or via the computer), as the receiver is very sensitive to any nearby frequencies and can interrupt the programming sequence, so have both VFO's tuned to something like 144.800 (if that's quiet in your area). May sure VFO "A" is your VFO that's selected to start your programming.

**SECOND HINT:** Memories (like James Bond), are always entered as 3 digit numbers. Memory 7 is actually 007, and you will need to enter any memory channel as a 3 digit number. Menu options, however, are "usually" 2 digit numbers, but the frequently used ones are conveniently shown on the front keypad. Those can be selected by either pressing **[MENU]** and the appropriate keypad number or by pressing **[MENU]** and the 2 digit menu selection you wish to access. For example, transmit power can be changed by pressing **[MENU] 2**, or by pressing **[MENU] 0 2**.

Another annoying habit is that the radio will only give you a few seconds (3 to 4) to make a selection, then you'll hear a beep and the radio will return to its previous display. This can be especially problematic to a new owner, so be patient with your new radio while you program it to work the way you want it.

**WARNING:** Menu # 40 will reset your radio back to the original Chinese programming defaults. If you find yourself staring at Menu 40 on the display, press **[EXIT]** or simply turn off the radio. If you accidentally reset your radio, all previous programming will be gone and you will hear Chinese from your speaker.

This programming example is for a VHF repeater on 146.940 MHz with a 600 KHz minus offset and a CTCSS tone of 162.2.

1. Press the **[VFO/MR]** button until you hear "Frequency Mode".
2. Select VFO "A" by pressing the **[A/B]** button until the small triangle (to the immediate left of the frequency) is next to the **Upper Display**. **Only the "A" VFO can be used for programming memories.**
3. Disable TDR (Dual Watch/Dual Reception) which toggles between A and B, by pressing **[MENU] 7 [MENU]**, then select **OFF** by using the up/down Arrow Keys (above numbers 2 and 3). Press **[MENU] [EXIT]**.

4. Delete Prior Data from the channel to be programmed by pressing **[Menu] 2 8 [Menu]**, then enter the 3 digit **Channel Number** to clear, or use the UP/DOWN arrow numbers to select the memory to delete, then press **[Menu] [Exit]**.
5. Enter the Repeater Offset by pressing **[Menu] 2 6 [Menu]** and then the offset amount (in the case of VHF this is normally 600 KHz). If that matches your offset requirements, then enter **0 0 6 0 0** and press **[Menu] [Exit]**.
6. Enter the Transmit Frequency Shift by pressing **[Menu] 2 5 [Menu]**, and enter **2** for the Minus offset shift, the press **[Menu] [Exit]**.
7. Set the CTCSS or DCS codes for Transmit (if required for the repeater). Our example has a CTCSS TX tone of 162.2 Hz. Press **[Menu] 1 3 [Menu]**, then enter **1 6 2 2 [Menu] [Exit]**.
8. Enter the repeater's output frequency, which in our example is **1 4 6 . 9 4 0**
9. Store the repeater's receive frequency by pressing **[Menu] 2 7 [Menu]**, then enter the **Channel Number** (000 to 127), which is the channel that was cleared in Step 4, by pressing **[Menu] [Exit]**.
10. Press the **[ \* Scan ]** button, which activates the Reverse Mode and displays the Transmit frequency.
11. Press **[Menu] 2 7 [Menu]** and enter the same 3 digit **Memory Channel** that was entered above in Step 9, then press **[Menu]**.
12. Press the **[ \* Scan ]** button again to exit the Reverse Mode and press **[Exit]**. This programmed memory will now appear in the channel list when you switch to "Channel Mode" (but keyboard entry of channel memories does NOT allow then to be named with proper names, only by frequency). If you want your memories to have Alpha-Numeric names you have to use programming software.

"If" your recently entered memory shows "CH-001" in memory position 001 and you wish to see the actual repeater frequency instead, enter **[MENU] 2 1 [MENU]**. Use the Up/Down arrow keys to change the "CH" or "NAME" option that's currently displayed to "FREQ", then press **[MENU]** and then **[EXIT]**. Once returning to "Channel Mode" your memory will now display as a frequency. Remember, if you want to "name" your memory frequencies, this can only be done through software on Baofeng model radios. It CAN NOT be done using the radio's keypad.

### **SOFTWARE PROGRAMMING VIA YOUR COMPUTER**

There are three different USB to serial conversion chips used in programming cables. One is from FTDI, one is from Silicon Labs, and the third is from Prolific. Prolific cables are the most copied in China, and you simply can not tell by looking at the cable if your cable is genuine or not. If you have purchased a programming cable that claims to be Prolific, (either the real Prolific USB cable or a fake "cloned" version), review the **DRIVERS** section **completely** at: [http://www.miklor.com/COM/UV\\_Drivers.php](http://www.miklor.com/COM/UV_Drivers.php) and then review the **SOFTWARE** sections found in the Home page at: <http://www.miklor.com/UV5R/>

Unfortunately if you have a fake or "cloned" Prolific cable and are using Microsoft XP, Vista, Windows 7, or Windows 8, your computer will continue to try updating your Prolific cable driver to the "latest" version automatically without your knowledge or approval. That's fine if you have the actual Prolific chip inside your USB cable, but if you don't you could be in for hours of trouble-shooting fun with your software driver for the cable. Even switching the cable from one USB port to another will cause you a driver issue, as the computer will think the cable is "new" hardware and download a "new" driver for the USB cable (which won't work at all if your Prolific cable is fake).

If you purchased a Silicon Labs or FTDI programming cable instead (you can ignore the issues associated with the Prolific drivers), skip the Miklor website altogether and follow the software instructions on your cable package instead. Depending on your computer system and O/S, you may not have to install any drivers and go directly to using the Frequency Programming software of your choice (unless you purchased the RT Systems package, which comes with it's own software).

Answers to the most commonly asked Prolific driver questions can be found in the FAQ section on the Miklor website. If you still have a programming issue, or if you are using a verified Silicon Labs or FTDI cable (remember you can't tell by simply looking at them), call **RF Gear 2 Go** at 866-448-4327 and we'll program (or re-program) your radio for a fee.