Baofeng UV-82 8W Programming Guide

INTRODUCTION

BaoFeng BF-UV82 is a dual-band (VHF, UHF) versatile amateur radio. It offers 128 channels, you can add or remove channels from scanning list and give channels alphanumeric names via programming with a computer. With the enhanced capabilities of the UV82 radio, this Programming Guide will help you get a quick start to program the radio.

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Preparation before Programming

1. Computer System Requirements

Manufacture Programming Software Operating System: Windows 7, Windows 8 and Windows 10

CHIRP Programming Software Operating System: Windows 7\8\10, Windows 2000, Mac OS, Linux

2. Programming Cable

A.USB programming cable - The driver should be installed before programming.

Driver download link:

http://www.walkietalkiesoftware.com/portal/index/software.html

1) Find the corresponding driver of the system.

2) Click and wait for the download.

3) Click install and wait for the installation



Come with the USB programming cable is only suitable for WINDOWS system

B.If you use a FTDI cable, it does not need to be installed with a driver. You can just plug in and use directly.

1) If your computer did not automatically install the driver, you will need to update the driver to the latest driver

Download the latest FTDI driver at :http://www.ftdichip.com/Driver/VCP.htm

3. Software Download & Install

1) Turn on the computer, check if your computer system meets the requirements.

2) Download the manufacture software on walkietalkiesoftware.com or CHIRP software on https://chirp.danplanet.com/projects/chirp/wiki/Download

3) Install the programming software

4. Connect your Walkie Talkie with Computer

1) USB programming cable connects with the computer end.

2) Connect the other end of the cable with your walkie talkie.

3) When both ends have been connected, turn on your radio. Make sure it has enough power during the programming procedure.

ERROR: Failed to Connect to the transceiver (Radio)

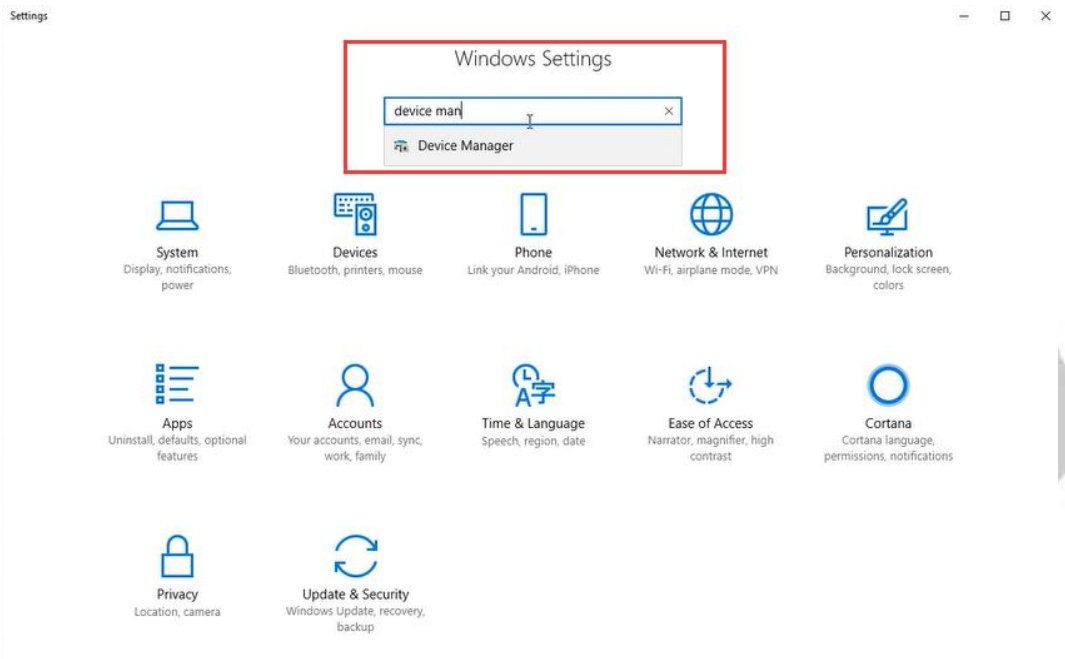
If it says it cannot connect to the radio - this means the cable is working but is not installed correctly into the radio.

Items to Check:

- Radio is turned on
- The cable is FULLY inserted (it can be deceiving but there is a double click)
- Hold the cable into the radio - some radios might not make contact without pressure
- A way to cheat - dampen the pins of the cable before pushing it into the radio. This will give a solid contact

5.How to choose your port?

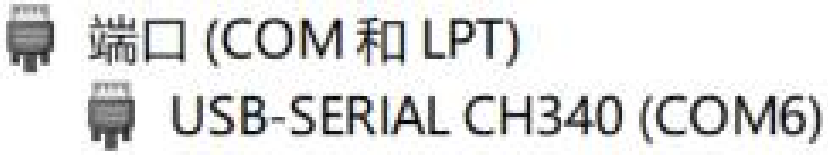
1.Get into “Window Setting”, then search “Device Manager”.



2.Open “Device Manager”, and unfold Port (COM & LPT) to check the existing port.



3.Come with USB programming cable port is **USB-SERIAL CH340 (COM?)**

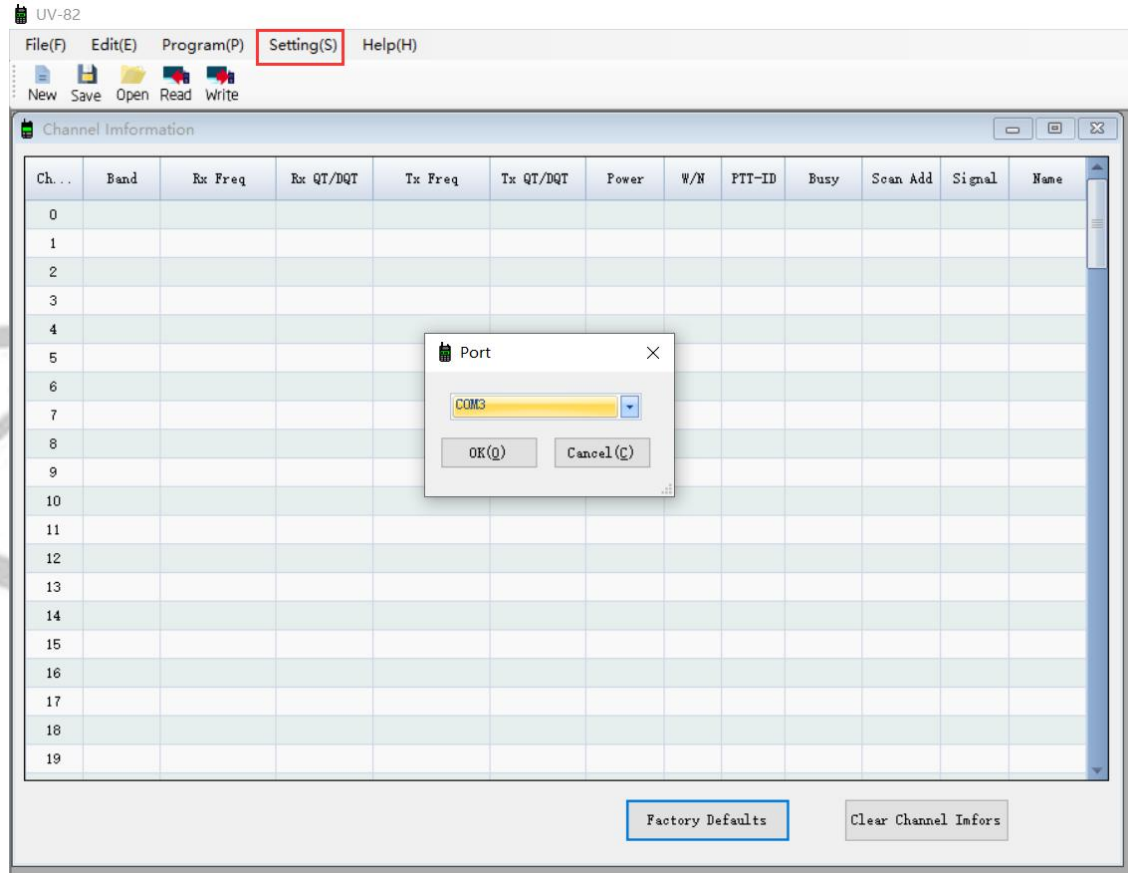


4.FTDI programming cable port is **USB Serial Port (COM?)**

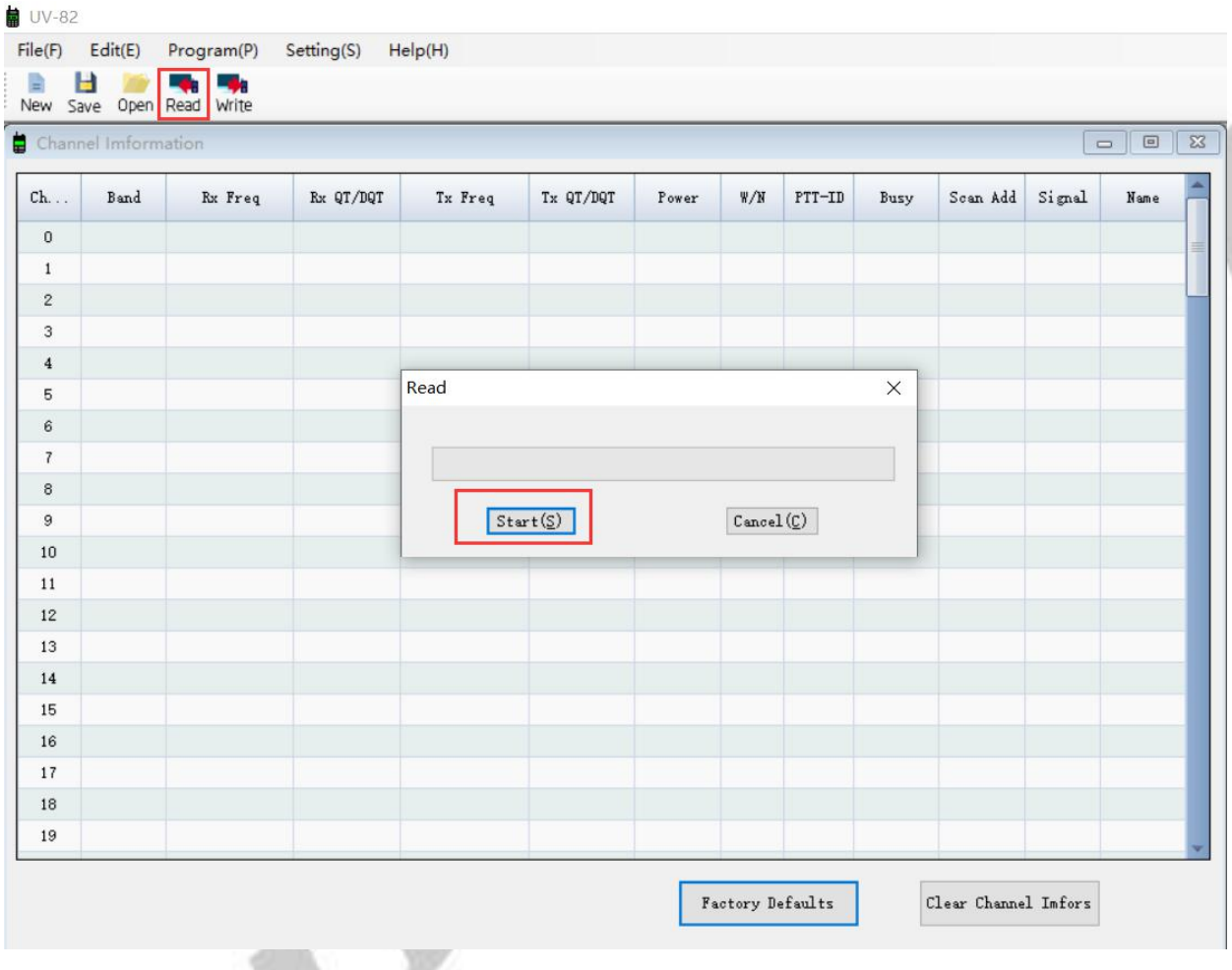


UV-82 Manufacture Software Programming Process

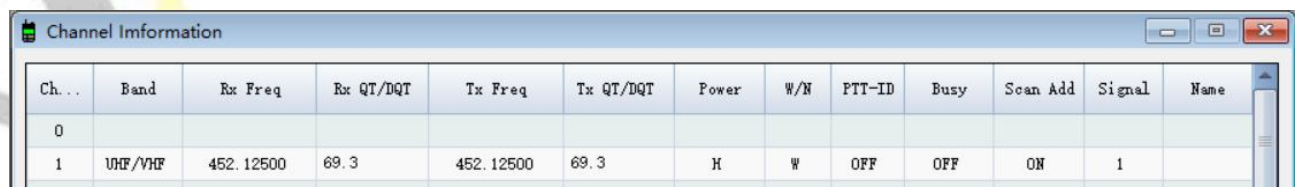
1) Download and open the manufacture software. Click "Setting" and Chose "Port", then click the "OK" button.



2) Click the "Read" button, then click "Start" and ready to read the data from your radio.



3) You will come to the parameter page and adjust the limited parameters (Channel,TX Frequency, RX Frequency,RX QT/DQT,TX QT/DQT, High/Low Power, and Wide/Narrow Band,etc).



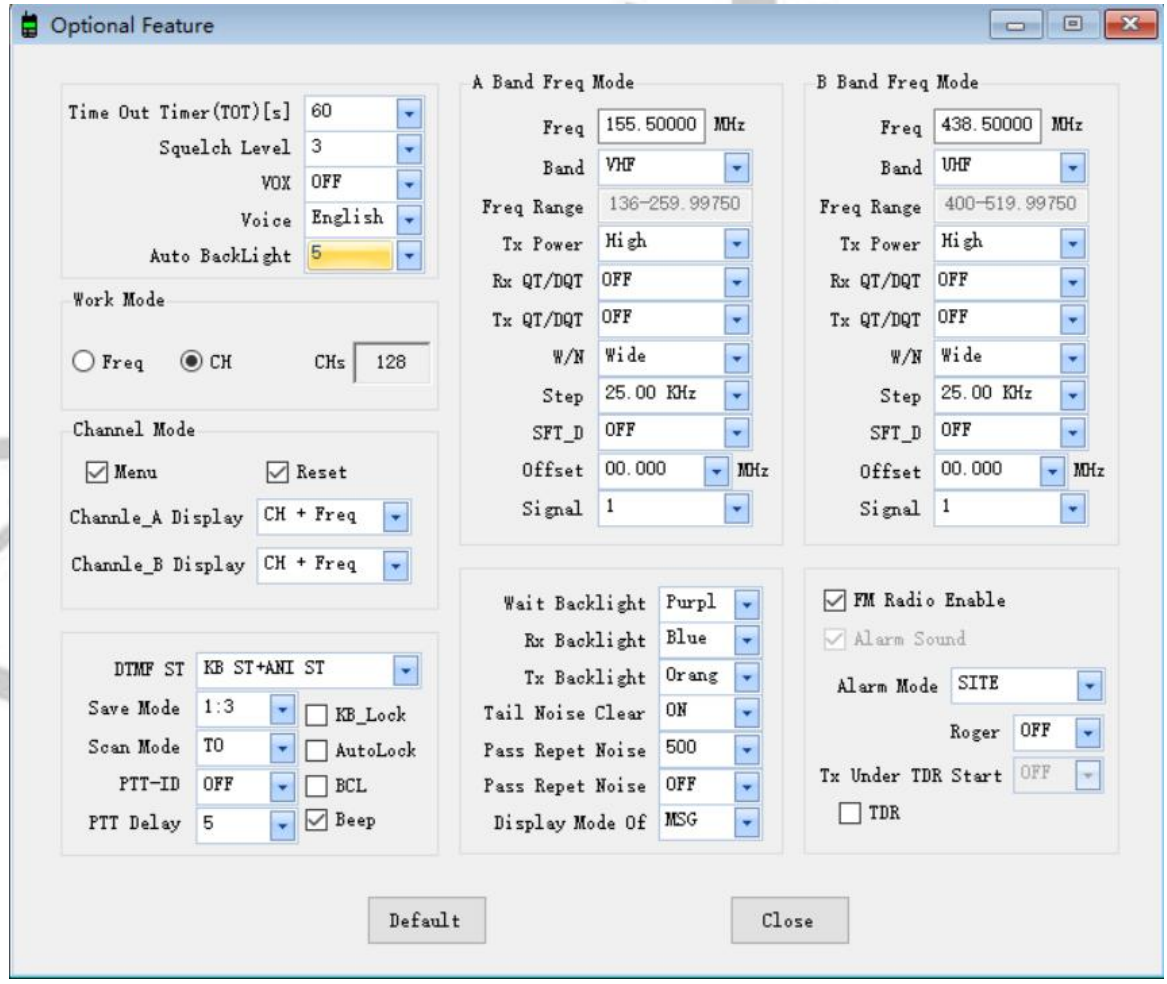
Channel Information

The UV-82 radio has 128 channels, you can edit the channel number and channel information according to your needs. The following is an introduction to each term.

Name	Meaning	Setting	Description
RX Freq	Receiving frequency	VHF:136-174MHz UHF:400-520MHz	
TX Freq	Transmitting frequency	VHF:136-174MHz UHF:400-520MHz	
RX QT/DQT	Receiving CTCSS/DCS	Refer to the DCS table and CTCSS table in the manual.	Mutes the speaker of the transceiver in the absence of a specific low level digital signal. If the station you are listening to does not transmit this specific signal,you will not hear anything.
TX QT/DQT	Receiving CTCSS/DCS	Refer to the DCS table and CTCSS table in the manual	Mutes the speaker of the transceiver in the absence of a specific low level digital signal. If the station you are listening to does not transmit this specific signal,you will not hear anything.
Power	Transmit power	HIGH/LOW	HIGH：8W LOW：1W
W/N	Channel bandwidth	WIDE/NARROW	Wideband (25kHz bandwidth) narrowband (12.5 kHz bandwidth).
PTT-ID	When to send the PTT-ID	**OFF** does not send code; **BOT** press PTT button to send code; **EOT** release PTT button to send code; **BOTH** press and release PTT button to send code	Codes are sent during either the beginning or end of a transmission.
Busy	Busy Channel Lockout	OFF/ON	**ON:** If the channel is occupied, when you press the [PTT] key on this channel, the radio will make a beep tone and will not transmit any signal. **OFF**: No matter if the channel is occupied, the radio will transmit the signal when you press the [PTT] key.

Scan add		OFF/ON	In the scan mode, whether add the channel to the scan list. **ON**: the channel is added to scan list; **OFF**: the channel cannot be scanned.
Signal	Signal code	1-15	Selects 1 of 15 DTMF codes. The DTMF codes are programmed with software and are up to 5 digits each
Name	Customize channel name		Support alphanumeric channel name.

4) Click "Optional Features" under "Edit", a page of "Optional Features" will pop up,you can adjust the limited parameters (VOX Function, Squelch, Backlight, DTMF, FM Radio, Voice Prompt, Scanning, VFO Mode, etc.).



A. Basic Setting

Name	Meaning	Settings	Description
TOT(Time Out)	Transmission time-out timer	15-600(s)	This feature provides a limits transmission time to a programmed value. This will promote battery conservation by not allowing you to make excessively long-time transmissions and in the event of a stuck PTT switch, it can prevent interference to other users as well as battery depletion.
Squelch Level		0-9	Mutes the speaker of the transceiver in the absence of a strong signal. Squelch is either OFF or 1-9 levels. The higher level, the stronger the signal must be to in-mute the speaker.
VOX	Voice operated TX	OFF/0-10	When enabled it is not necessary to push the [PTT] button on the transceiver. Adjust the gain level to an appropriate sensitivity to allow smooth transmission.
Voice Annunciation		OFF\English\Chinese	Switch the language of menu display and voice prompts
ABR	Display time	OFF/0-10 (s)	Time-out for the LCD backlight.-
Work mode		Frequency	CHT is channel quantity
		Channel	

B. Channel Mode



You can customize the display on Channel A/B:

CH + Name: Display Channel Number and Channel Name (Name column in Channel information part)

CH + Freq: Display Channel Number and Frequency

C. DTMF



Name	Setting	Description
DTMF ST (DTMF side tone of transmit code)	**OFF :** No DTMF Side Tones are heard	Determines when DTMF side tones can be heard from the transceiver speaker
	KB Side Tone: Side Tones are heard only from manually keyed DTMF codes	
	ANI Side Tone: Side Tones are heard only from automatically keyed DTMF codes	
	KB ST+ANI ST: All DTMF Side Tones are heard	
Save mode	OFF/1:1/1:2/1:3/1:4	Selects the ratio of sleep cycles to awake cycles. The higher number the longer the battery lasts. When enabled, a word or two might be missed when the frequency being monitored becomes active.
Scan Mode	**TO:** Time Operation - scanning will resume after a fixed time has passed	Scanning Resume Method
	CO: Carrier Operation -Scanning Resume Method scanning will resume after the signal disappears	
	SE: Search Operation scanning will not resume	
PTT_ID	**OFF**: No ID is sent	When to Send PTT-ID; Codes are sent during either the beginning or end of a transmission.
	BOT : The selected S-CODE is sent at the beginning	
	EOT: The selected S-CODE is sent at the ending	
	BOTH: The selected SCODE is sent at the beginning and ending	
PTT Delay	0-30ms	Signal code sending delay
KB_LOCK		If you select this option, the keyboard is locked.
AutoLock(automatic keypad lock)		When ON, the keypad will be locked if not used in 8 seconds. Pressing the [# ╔O] key for 2 seconds will unlock the keypad.

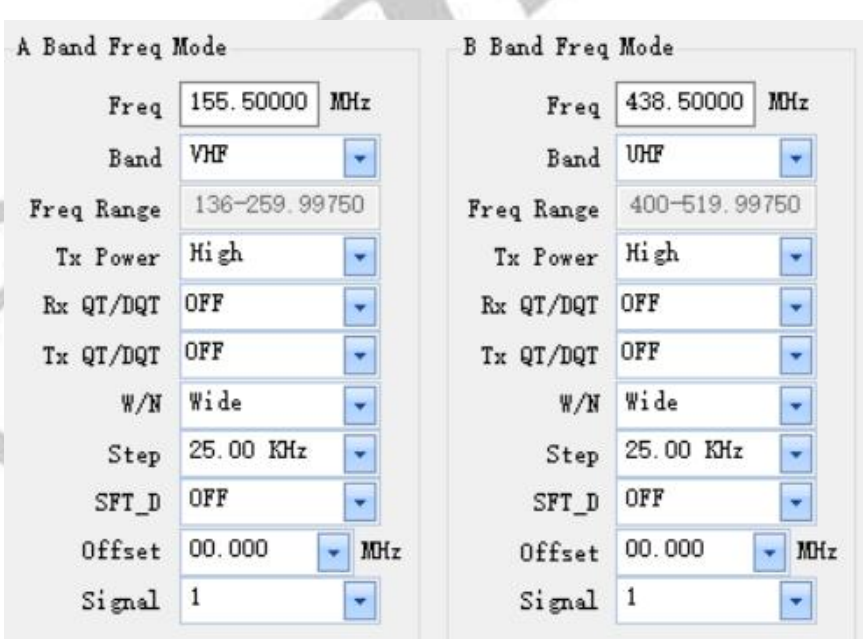
BCL(busy channel Lock-out)		**Check**: If the channel is occupied, when you press the [PTT] key on this channel, the radio will make a beep tone and will not transmit any signal. **Uncheck**: No matter if the channel is occupied, the radio will transmit the signal when you press the [PTT] key.
Beep(keypad beep)		Allows audible confirmation of a key press

D. Frequency mode

STEP: Select the amount of frequency change in VFO/Frequency mode when scanning or pressing the keys.

SFT_D: Enable access of repeaters in VFO/Frequency Mode ([OFF]: TX = RX (simplex); [+]: TX will be shifted higher than RX in frequency; [-]: TX will be shifted lower than RX in frequency)

Offset: Specifies the difference between the TX and RX frequency (For the explanation of TX Power, RX QT/DQT, TX QT/DQT, W/N, Signal, please refer to introduction above)



E. Backlight and Sound



F. FM Radio

FM Radio Enable: When you check off, FM Radio function will be activated on the radio.

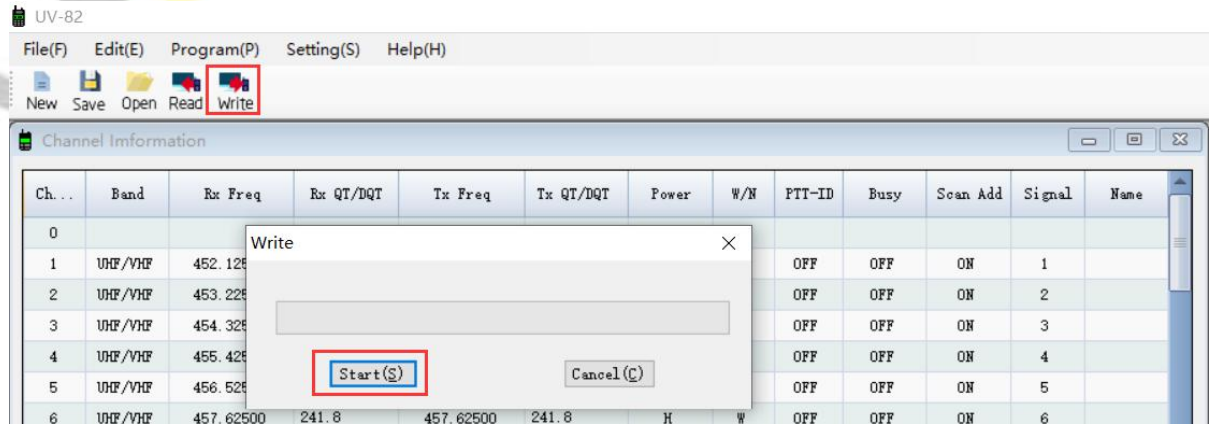
Roger: Sends an end-of-transmission tone to indicate to other stations that the transmission has ended

TX Under TDR Start: Transmit selection while in Dual Watch mode, when enabled, priority is returned to selected display once the signal in the other display disappears.

TDR: Dual Watch mode, the ability to monitor two channels at once can be a valuable asset

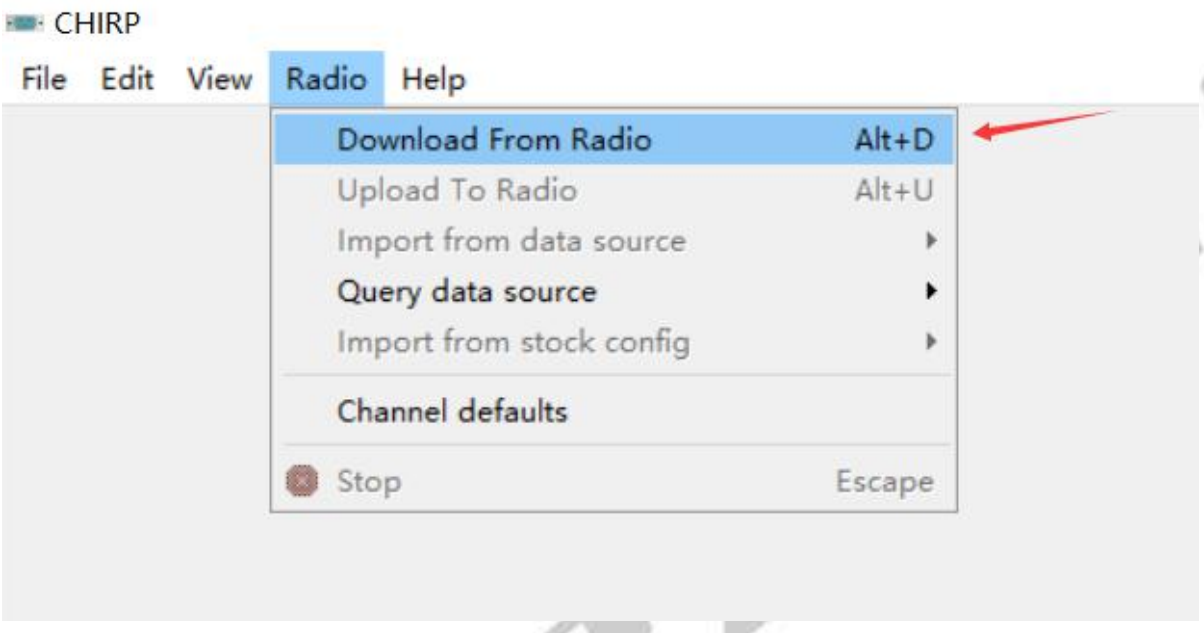


5) Finally, all the modification will be saved by clicking the "Write" button, then clicking the "Start" button on the pop up. And you can check the setting you modified after reboot the radio.

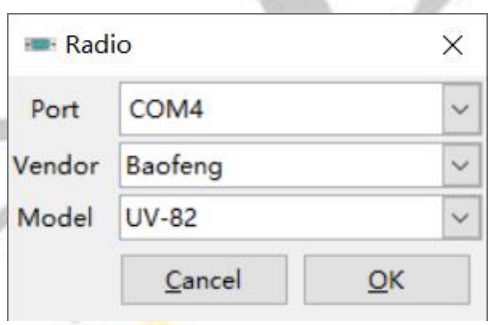


UV-82 Chirp Software Programming Process

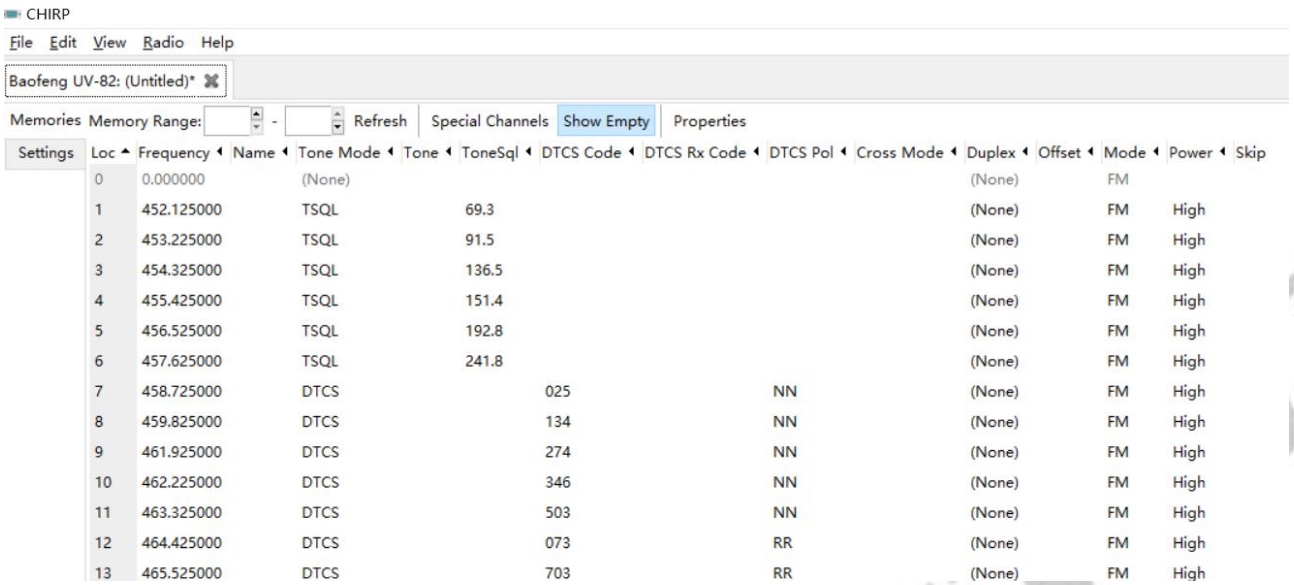
1) Open the CHIRP software (Latest Version), click "Download From Radio" under "Radio"



2) Select the corresponding cable driver port, and select Model "UV-82"or "UV-82HP" under Vendor "Baofeng", then click "OK" to read the radio

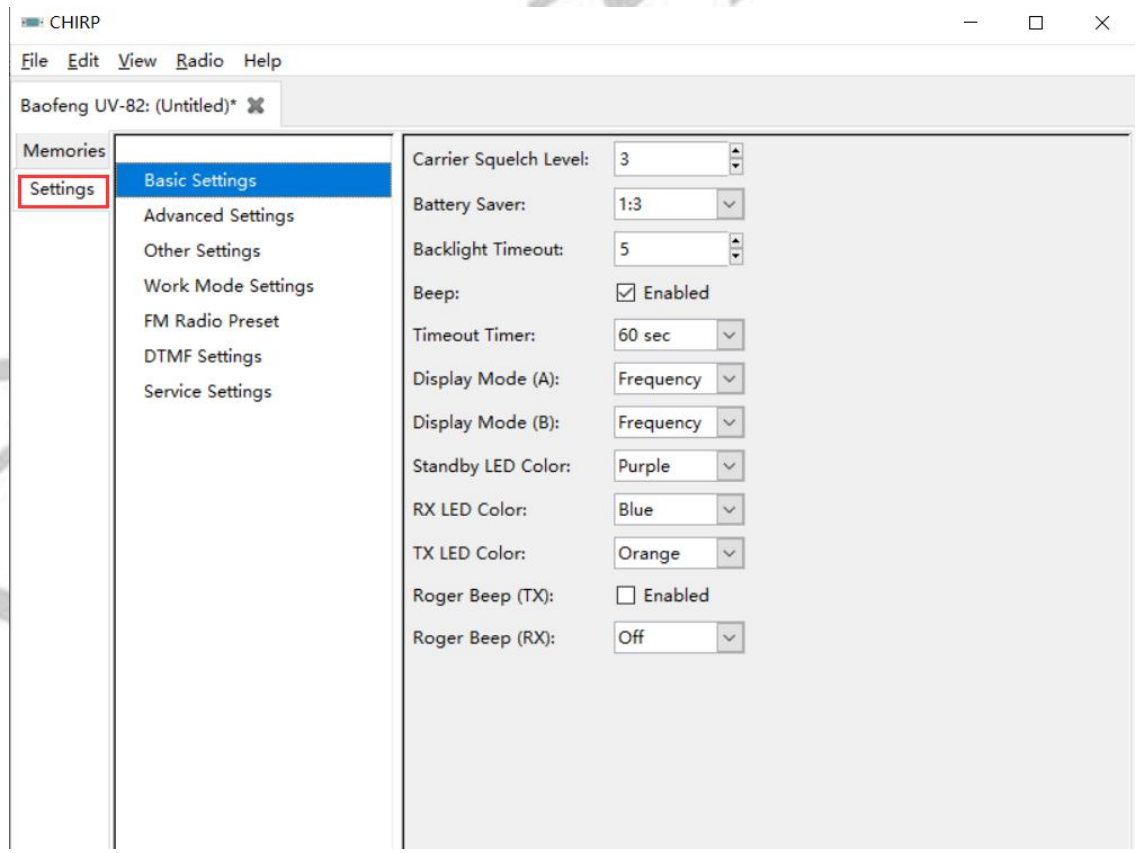


3) And you will come to the page of Memories, in which you can adjust the limited parameters (For the explanation of Channel, TX Frequency, RX Frequency, CTCSS/DCS, High/Low Power,and Wide/Narrow,Band.Please refer to introduction above)



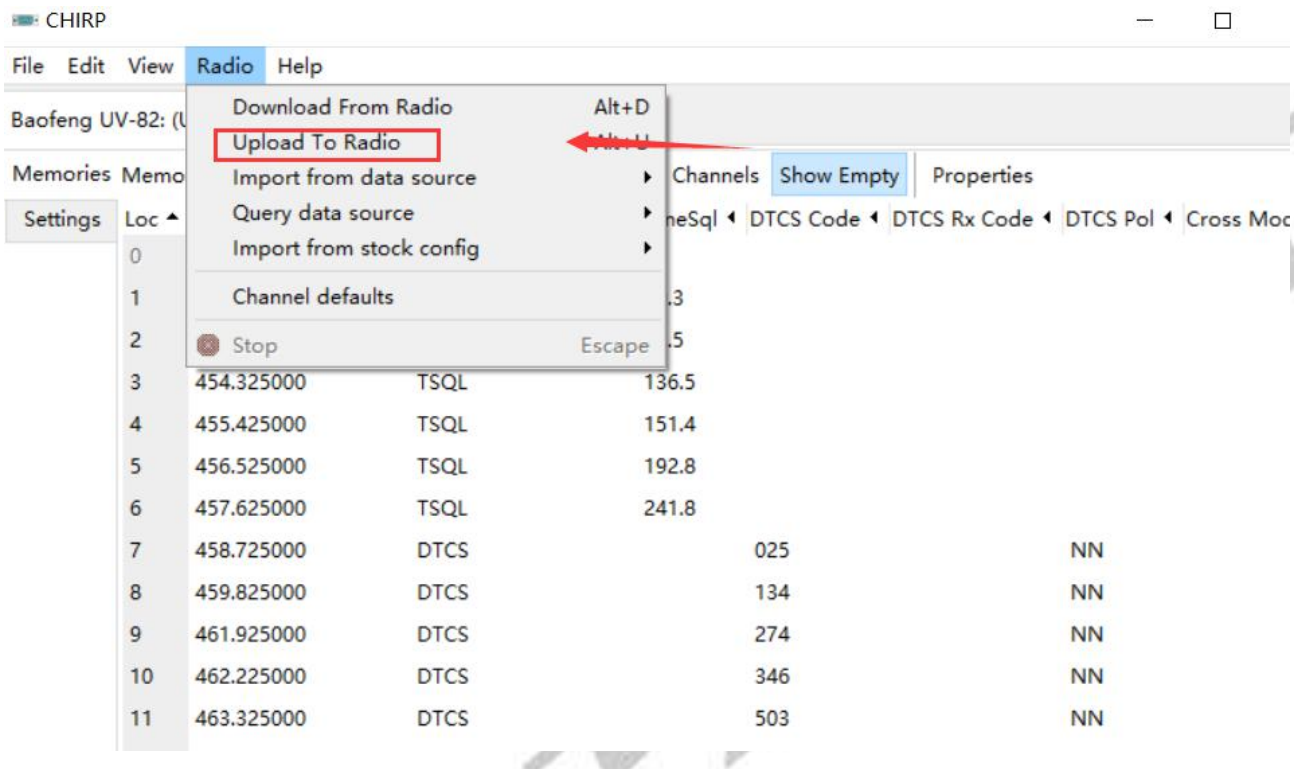
Loc	Frequency	Name	Tone Mode	Tone	ToneSql	DTCS Code	DTCS Rx Code	DTCS Pol	Cross Mode	Duplex	Offset	Mode	Power	Skip
0	0.000000		(None)							(None)		FM		
1	452.125000		TSQL		69.3					(None)		FM	High	
2	453.225000		TSQL		91.5					(None)		FM	High	
3	454.325000		TSQL		136.5					(None)		FM	High	
4	455.425000		TSQL		151.4					(None)		FM	High	
5	456.525000		TSQL		192.8					(None)		FM	High	
6	457.625000		TSQL		241.8					(None)		FM	High	
7	458.725000		DTCS			025		NN		(None)		FM	High	
8	459.825000		DTCS			134		NN		(None)		FM	High	
9	461.925000		DTCS			274		NN		(None)		FM	High	
10	462.225000		DTCS			346		NN		(None)		FM	High	
11	463.325000		DTCS			503		NN		(None)		FM	High	
12	464.425000		DTCS			073		RR		(None)		FM	High	
13	465.525000		DTCS			703		RR		(None)		FM	High	

4)Then if you switch to the page of Settings, you can adjust the limited parameters(For the explanation of VOX Function, Squelch, Backlight, DTMF, FM Radio, Voice Prompt, Scanning, VFO Mode.Please refer to introduction above)



5) All the modification will be saved by clicking "Upload To Radio" under "Radio".

Then you can check the settings you modified after reboot the radio.



*If you have any problem with the BaoFeng UV-82 radio using or programming, please don't hesitate to contact us via support: walkietalkiesoftware.com. It's always our honor to help.