# BaoFeng UV-82L User FAQs

#### NEWEST RADIO / FIRMWARE

Q: Which is the Newest version of the UV-82L?

A: The UV-82 is a recently released transceiver.

Although similar to the UV-5R, this was not simply a rebranding.

The size, design, options and software are unique to this radio.

As with all transceivers, the newest firmware determines the newest radio.

Q: How can I determine which firmware my UV-82L has?

A: Power the radio OFF.

Press and Hold the 5 key.

Power the radio ON.

The display will show BF - - - This is the Firmware release.

Q: Can the UV-82L firmware be updated?

A: No. The firmware cannot be updated.

The microcontroller is an OTP (One Time Programmable)

Once 'flash' programmed at the factory, it cannot be changed.

## FCC CERTIFICATION and TYPE ACCEPTANCE (U.S.)

Q: Is this radio FCC Part 90 certified? (Commercial)

A: At this time, its certification is pending.

Q: Is this radio approved for Ham Radio use? (Ham Radio)

A: Yes. It may be used legally by Licensed Hams on any Part 97 allocation or service in the U.S.

# TRANSMITTER and RECEIVER

Q: I can't hear my signal through the repeater, but I hear the repeater tail.

A: The key here is that you can hear the repeater squelch tail.

You are too close to your receiver and over powering (de-sensing) it.

When this happens, you are blocking everything from your monitor.

- 1) Listen to your signal on simplex to verify your audio.
- 2) Call someone on the repeater to verify your signal quality. If they can hear you, then all is fine.
- Q: Can this radio listen to Aircraft frequencies?

- A: No. They are out of the radio's frequency range.

  Also, the Aircraft Band is AM while the UV-82L is FM only.
- Q. Can this radio listen to NOAA / NWS frequencies?
- A. Yes. However, it cannot be put in a standby mode and triggered by their 1050Hz alert tone.
- Q. Why does my FM Broadcast Radio keep cutting out?
- A. The broadcast radio gives priority to an incoming VHF/UHF signal. It returns to broadcast X seconds after the signal clears.

X is determined by the ABR setting.

To prevent the radio from switching, set VHF/UHF to an unused frequency.

- Q. Why is my audio 'chopping' when listening to a station?
- A. The bandwidth settings (Menu 5) should to be set to WIDE.
- Q. What range can I expect from these radios?
- A. There are many factors to consider. Power, antenna, antenna height, HASL (height above sea level), terrain, obstruction, trees, horizon, etc. A good starting point for simplex operation would be QSL.net/distance Your Mileage may Vary.

#### **PROGRAMMING**

- Q: I programmed a channel, but it won't save.
- A: There are three steps to the process:
  - 1) You must be in the VFO/Frequency mode
  - 2) Display A (top display) must be selected.
  - 3) Channel must be empty before programming frequency data. (use menu 28 to delete a channel)
- Q: How can I store a 7th digit of a frequency? xxx.xxx5
- A: Change Step (Menu 1) to 2.5 kHz.

Enter the first 6 digits of the desired frequency, then use the Up/Down arrow for the last .5 kHz.

Example: 462.7125 would be: 4 6 2 7 1 2 Up Arrow. A tiny 5 will show to the right of the frequency display.

- Q. Can I store different frequencies in A and B?
- A. No. There is only a single bank of 128 channels (0-127)

The same frequencies show in both displays A and B.

You can however change the way they appear. (Menu 21 & 22)

The display options are Frequency, Channel Name or Channel Number.

Note:

Manual programming of memory channels can Only be done while display A (top display) is selected.

- Q: What is the purpose of A and B if they are both the same?
- A: Dual Receive. You can set each to a different preprogrammed channel. With TDR (Menu 7) turned on, your radio will sample between the two frequencies and stop on whichever one has activity.
- Q. Can displays be synchronized to show Name in A and Freq in B?
- A. No. Display A and B operate independently.
- Q: Can I disable the transmitter for Receive Only frequencies?
- A: Yes. This can be done using the transmit inhibit function of your software.
- Q. Can I store FM Radio 65-108MHz channels into memory?
- A. No. This is controlled by a separate receive only chip in the radio. You also cannot make this radio transmit on this band.
- Q: How do I switch modes? (VFO/MR)
- A: Press and Hold the [MENU] key when turning radio on.

#### **SCANNING**

- Q: My receiver skips over some channels when scanning.
- A: There is a known 'quirk' with the UV-82L receiver.

If a scanned channel has an R-CTCSS (PL) tone of 136.5 Hz

or lower, the receiver will not stop on that channel.

R-CTCSS (PL) tones of 146.2 and higher work fine.

Note: It is recommended to Not use RX Tones unless absolutely necessary.

- Q: My radio only scans my top group of frequencies, but not all.
- A: Power cycle your radio ON/OFF and the issue should disappear.

## TONE ACCESS (CTCSS, DCS, DTMF)

Q: Why can't I key or hear my local repeater, fire dept, etc.?

A: Some Repeaters and Services require a CTCSS (PL) tone for access but DO NOT transmit one back. If your display indicates there is an incoming signal but you hear no audio, you may have an incorrect or unnecessary RX tone set.

This can be tested by pressing the [M] button. When in doubt, leave the RX tone OFF.

Q: What are these CTCSS (PL) tones I keep hearing about?

A: A CTCSS is an 'Tone' sent along with your voice when transmitting. They are used to access a specific repeater and block interference.

Q: How do I transmit a 1750 Hz tone for repeater access?

A: Press the [PTT] button and then press the [F] button to transmit a 1750 Hz tone.

Q: What are the DTMF keypad positions for A, B, C & D?

A: [Menu] = A [Up] = B [Down] = C [Exit] = D

### AFTERMARKET ACCESSORIES

Q: Are cables, antennas, spkr/mic, etc interchangeable?

A: Many accessories are, such as Kenwood / Wouxun.

Q: Is a radio case a good purchase?

A: It depends on your use. Refer to Radio Shut Down below.

Q: Is there a Battery Eliminator for the car?

A: At this time, there is no known Battery Eliminator.

## MICROPHONE & AUDIO ISSUES

Q: Why is my microphone audio is low?

A: Here's are some suggestions:

- 1) Talk directly into the radio, within one inch.
- 2) Confirm the audio is set to Wide Band. 5 kHz (Menu 5 = W)
- 3) Try an external spkr/mic to confirm problem is the mic.
- 4) Blow compressed air into the spkr/mic jack.
- 5) If you have an external spkr/mic, plug it in and out a few times.

The issue might be a dirty connector.

Note: Some have reported the need to open up the microphone hole in the plastic case. This can be done by CAREFULLY using a 3/64" drill bit and twisting it slowly by hand to clear out the opening, but avoid touching the microphone.

There is approx 1/16" clearance between the inside of the case and the microphone element.

Q: Why is the audio less sensitive than my Icom or Kenwood?

A: The UV-82L was designed as a commercial radio, not ham. It was designed to block out background noise in an industrial environment. Talking right into the face of the radio cures most audio weakness.

Q: Is the PTT switch disabled when a Spkr/Mic is plugged in?

A: When a Spkr/Mic plugged in, the [A] PTT button is disabled.

# ANTENNA QUESTIONS

Q: Which antenna is best?

A: It's all personal preference, but a good rule of thumb is:

The longer the radiator, the better the range, especially on transmit.

Short stubby antennas use a coil to match TX to 50 ohm, not radiate.

The closer to 1/4 or 3/4 wavelength in the air, the better the performance.

A very popular antenna for general use is the Nagoya NA-701, NA-771.

To mate with the UV-82L, the antenna's connector must be SMA Female.

Just remember, it's only 5 watts into a piece of wire.

There is no Magic Antenna out there.

Q: Can I use an antenna with an SMA RP connector?

A: No. The RP stands for Reverse Polarity. The outer shell looks the same but the Male/Female pin sequence is reversed.

Q: My antenna doesn't screw in all the way.

A: This is not uncommon on some aftermarket antennas. Purchase a thin 5/8" OD rubber O-Ring. Take your HT with you to the hardware store to assure the proper fit. You may want to superglue it to the bottom of the antenna ONLY.

Q: Can I build my own antenna?

A: Absolutely. If you want to start small, try a simple ground plane. Here are the instructions for a GP antenna with a radial length calculator. The calculator covers all frequencies from DC to Light.

# **DISPLAY QUESTIONS**

Q: Display goes dark if I talk too long on Hi power.

A: This is to be expected from a small radio.

5 watts creates a lot of heat in a small unvented area.

Give it time to cool down. The LCD will return to normal.

The same occurs if you leave the unit in the car on a hot day.

Run low power whenever possible. This will also extend battery life.

Q: Why does my display show + and - at the same time.

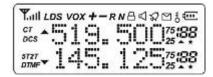
In Channel Mode this is normal when the TX / RX frequencies differ,

In Frequency Mode + or - is displayed based on Menu 25 (SFT-D)

If TX and RX are the same (simplex) the + - indicator does not display.

Q: How accurate is the S-Meter?

A: The What? There's a signal indicator in the upper left. If there's a signal, it appears. If not, it's gone.



Q: How do I translate the Battery indicator in the upper right?

A: Tests have shown the following: (tests by Phil Souza)

Full charge (approx 8.32 volts) 3 bars

Battery drops to 7.09 volts, 2 bars

Battery drops to 6.73 volts, 1 bar

Battery drops to 6.29 volts, 0 bars

Battery drops to 5.91 volts,

the radio announces "low voltage" until the battery expires.

Note: Measurements can vary based on temperature and load.

Q: Why does my display disappear if I wear polarized sunglasses?

A: LCDs function by polarizing the liquid crystal elements in the display. Polarized sunglasses will react to the polarized lens.

# **GENERAL QUESTIONS**

Q: Why did my radio shut down when I took it out of my pocket.

A: If you carry your radio and keys in the same pocket, a case is recommended. If the charging contacts are shorted, the battery goes into the protection mode. There will be no damage to the battery or radio, but the radio will power off. To reset the protection mode, the battery must be removed and reinserted.

Q: Did I get a used radio? My UV-82L had frequencies pre-programmed.

A: No. Your radio is new. These are channels used for factory testing.

The easiest way to remove them is to:

Press Menu, 41 (Reset), Menu, ALL, Menu.

Q: My radio doesn't speak English?

A: Press Menu, 14, Menu, Make selection, Menu Options are: CHI / ENG / OFF

Q: How do I lock/unlock my keypad?

A: Hold the # key in for 2 seconds.

Pressing it quickly alternates TX power level.