

BAOFENG[®]

UV-5G PRO
GMRS Radio

OWNER'S MANUAL

PREFACE

Thank you for purchasing UV-5G PRO Two Way Radio, It is a multitask GMRS transceiver. Combining the latest technology in radio communication along with a sturdy mechanical frame, UV-5G PRO is the ideal and effective solution for the professionals who need to stay in touch with the working team (in construction sites, buildings, shows, trade fairs or hotels) or for leisure users that just want to keep up with friends and family.



IMPORTANT NOTICE

To help you ward off bodily injury or property loss that may arise from improper operation, please read all the information carefully before using our products. This contains instructions for safe usage and RF energy awareness and control for compliance with applicable standards and regulation.

Safety Information for GMRS Radios

Your wireless handheld portable transceiver contains a low power transmitter. When the talk button is pushed, it sends out radio frequency (RF) signals. The device is authorized to operate at a duty factor not to exceed 50%. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless devices.

FCC Part 15.21 Warning Statement

THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

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Chapter1. Getting Started

Chapter1. Getting Started

1.1 Regulations and Safety Warnings

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

Important: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device. Your radio is set up to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the radio to exceed those limitations. Any adjustments to your radio must be made by qualified technicians.

To be safe and sure:

- Never open your radio's case.
- Never change or replace anything in your radio except the battery.

Your radio might cause TV or radio interference even when it is operating properly. To determine whether your radio is causing the interference, turn it off. If the interference goes away, your radio is causing it. Try to eliminate the interference by moving your radio away from the receiver. If you cannot eliminate the interference, the FCC requires that you stop using the radio.

Hazardous Environments: Do not operate the radio in hazardous environments. Explosion or fire may result.

Do not operate the radio near unshielded electrical blasting caps.

Under certain conditions, radios can interfere with blasting operations and may cause an explosion. Turn your radio OFF to prevent accidental transmission when in a blasting area or in areas posted: "Turn off two-way radio." Construction crews often use remote control RF devices to set off explosives.

Care and Safety: To clean the radio, use a soft cloth dampened with water. Do not use cleaners or solvents because they can harm the body of the unit and leak inside, causing permanent damage. Use a dry, lint-free cloth to clean the battery contacts.

RF Exposure Information

WARNING! Read this information before using the radio. In August 1996 the Federal Communications Commission (FCC) of the United States with its action in Report and Order FCC 96-326 adopted an updated safety standard for human exposure to radio frequency electromagnetic energy emitted by FCC regulated transmitters.

Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of the radio complies with the FCC guidelines and these international standards.

Never allow children to operate the radio without adult supervision and the knowledge of the following guidelines.

WARNING! It is up to the user to properly operate this radio transmitter to insure safe operation. Please adhere to the following:

Use only the supplied or an approved antenna. Unauthorized antennas, modifications, or attachments could impair call quality, damage the radio, or result in violation of FCC regulations.

Do not use the radio with a damaged antenna.

If a damaged antenna comes into contact with the skin, a minor burn may result. Please contact your local dealer for a replacement antenna.

Hand-held Operation (Held-to-Face)

This device was evaluated for typical hand-held (held-to-face) operations with a 1 inch spacing from the front of the radio. For hand-held operation, the radio should be held 1 inch from the user's face in order to comply with FCC RF exposure requirements.

For more information about RF exposure, please visit the FCC web site at www.fcc.gov.

Body-worn Operation

This device was evaluated for body-worn operations with the supplied belt-clip accessory. (All necessary accessories are included in the package; any additional or optional accessories are not required for compliance with the guidelines.) Third party accessories (unless approved by the manufacturer) should be avoided as these might not comply with FCC RF exposure guidelines.

For more information about RF exposure, please visit the FCC web site at www.fcc.gov.

GMRS Communication

This GMRS (General Mobile Radio Service) feature is a land-mobile service available for short-distance, two-way communications in the USA. You must have a valid FCC license to communicate on these channels. The GMRS/FRS frequencies that this radio uses are set aside for communicating with others while hiking, biking, and working; keeping track of family and friends at a crowded public event; checking with travel companions in another car; talking with neighbors; arranging meeting spots with others while shopping at the mall. Licensed users will be issued a call sign by the FCC, which should be used for station identification when operating this radio. GMRS users should also cooperate by engaging in permissible transmissions only, avoiding channel interference with other GMRS users, and being prudent with the length of their transmission time.

FCC License Required

This two-way radio operates on GMRS (General Mobile Radio Service) frequencies which require an FCC (Federal Communications Commission) license. A user must be licensed prior to transmitting on the GMRS band with this radio. Serious penalties could result for unlicensed use of GMRS channels, in violation of FCC rules. Operation of this radio is subject to additional rules specified in 47 C.F.R. Part 95. For licensing information and application forms, please call the FCC Hotline at 800418-FORM. Request form #159 and form #605. Questions regarding the license application should be directed to the FCC at 888-CALL-FCC. Additional information is available on the FCC's website at www.fcc.gov.

NOTE: Even if you operate this radio on FRS (Family Radio Service) channels at low power (0.5 watt), you are required to have an FCC license. Because this radio operates in the 0.5 to 5 watt GMRS power range all GMRS rules apply and will require you have a GMRS license even for FRS (Family Radio Service) communication. Normal FRS only radios operate at a maximum power of 0.5 watt (500 mill watt) power and have an integral (non-detachable) antenna.

FCC Warnings

Replacement or substitution of transistors, regular diodes or other parts of a unique nature, with parts other than those recommended by Pofung may cause a violation of the technical regulations of part 95 of the FCC rules, or violation of type acceptance requirements of part 2 of the rules.

Precautions for Portable Terminals

Operating Prohibitions

To protect you against any property loss, bodily injury or even death, be sure to observe the following safety instructions:

1. Do not operate the product in a location containing fuels, chemicals, explosive atmospheres and other flammable or explosive materials. In such location, only an approved Ex-protection model is allowed for use, but any attempt to assemble or disassemble it is strictly prohibited.
2. Do not operate the product near or in any blasting area.
3. Do not operate the product near any medical or electronic equipment that is vulnerable to RF signals.
4. Do not hold the product while driving.
5. Do not operate the product in any area where use of wireless communication equipment is completely prohibited.

Important Tips

To help you make better use of the product, be sure to observe the following instructions:

1. Do not use any unauthorized or damaged accessory.
2. Keep the product at least 2.5 centimeters away from your body during transmission.
3. Do not keep the product receiving at high volume for a long time.
4. For vehicles with an air bag, do not place the product in the area over the air bag or in the air bag deployment area.
5. Keep the product and its accessories out of reach of children and pets.
6. Please operate the product within the specified temperature range.
7. Continuous transmission for a long time may lead to heat accumulation within the product. In this case, please keep it at a proper location for cooling.
8. Handle the product with care.
9. Do not disassemble, modify or repair the product and its accessories without authorization.

Precautions for Batteries

Charging Prohibitions

To protect you against any property loss, bodily injury or even death, be sure to observe the following safety instructions:

1. Do not charge or replace your battery in a location containing fuels, chemicals, explosive atmospheres and other

flammable or explosive materials.

2. Do not charge your battery that is wet. Please dry it with a soft and clean cloth prior to charge.
3. Do not charge your battery suffering deformation, leakage and overheat.
4. Do not charge your battery with an unauthorized charger.
5. Do not charge your battery in a location where strong radiation is present.
6. Overcharge shall always be prohibited for it may shorten the life of your battery.

Maintenance Instructions

To help your battery work normally or prolong its life, be sure to observe the following instructions:

1. Accumulated dust on charging connector may affect normal charging. Please use a clean and dry cloth to wipe it on a regular basis.
2. It is recommended to charge the battery under 5°C~40°C. Violation of the said limit may cause battery life reduction or even battery leakage.
3. To charge a battery attached to the product, turn it off to ensure a full charge.
4. Do not remove the battery or unplug the power cord during charging to ensure a smooth charging process.
5. Do not dispose of the battery in fire.
6. Do not expose the battery to direct sunlight for a long time nor place it close to other heating sources.
7. Do not squeeze and penetrate the battery, nor remove its housing.

Transportation Instructions

1. Damaged batteries must not be transported.
2. To avoid short circuit, separate the battery from metal parts or from each other if two or more batteries are transported in one packaging.
3. The radio must be switched off and secured against switch-on, if the battery is attached.

The content of the shipment must be declared in the shipping documents and by a Battery Shipping Label on the packaging. Contact your hauler for the local regulations and further information.

1.2 Content of the packaging

- 1 Radio
- 1 Fast desktop charger
- 1 Antenna

- 1 Li-Ion battery pack
- 1 Wall adaptor
- 1 Belt clip

If any item is missing, please verify with your dealer.

1.3 Main features

- 22 Modifiable GMRS Channels (RX &TX)
- Scanning receiver frequency range: FM 76-108 MHz; AM108-136MHz; VHF 136-260MHz, UHF 400-520MHz
- One touch search frequency, easy pairing and grouping (copying channel configuration parameters)
- Frequency step, selectable between 2.5K | 5.0K | 6.25K | 10.0K | 12.5K | 20.0K | 25.0K | 50.0K
- Frequency hopping and scramble functions to keep your call privacy confidential
- Channel scan, frequency scan, and three scan and recovery methods: TO, CO, and SE
- Up to 128 memory channels.
- DTMF encoder and DTMF manual dial
- VOX (voice activated transmit).
- Alarm function.
- Programmable repeater offset.
- Transmission time-out timer.
- LED flashlight.
- End of transmission tone, aka "Roger Beep"
- Support NOAA weather reception function in the United States and Canada
- 8 Modifiable GMRS Repeater Channels (RX & TX)
- Broadcast FM radio receiver 76-108 MHz
- High Capacity Lithium-Ion battery.
- Display illumination programmable via keypad.
- Battery save function.
- Busy channel lock out.
- Ten (10) levels of Squelch adjustment.
- Two (2) pins for Kenwood accessory port

Chapter2. Battery Information

2.1 Charging the Battery Pack

The Li-ion battery pack is not charged at the factory; please charge it before use. Charging the battery pack for the first time after purchase or extended storage (more than 2 months) may not bring the battery pack to its normal maximum operating capacity. Best operation will require fully charging/ discharging the battery two or three times before the operating capacity will reach its best performance. The battery pack life may be depleted when it's operating time decreases even though it has been fully and correctly charged. If this is the case, replace the battery pack.

2.2 Charger Supplied

Please use the specified charger provided by BAOFENG. Other models may cause explosion and personal injury. After installing the battery pack, and if the radio displays low battery with a voice prompt, please charge the battery.

2.3 Use Caution with the Li-ion Battery

- a. Do not short the battery terminals or throw the battery into a fire. Never attempt to remove the casing from the battery pack, as BAOFENG cannot be held responsible for any accident caused by modifying the battery.
- b. The ambient temperature should be between 5°C-40°C (40°F - 105°F) while charging the battery. Charging outside this range may not fully charge the battery.
- c. Please turn off the radio before inserting it into the charger. It may otherwise interfere with correct charging.
- d. To avoid interfering with the charging cycle, please do not cut off the power or remove the battery during charging until the green light is on.
- e. Do not recharge the battery pack if it is fully charged. This may shorten the life of the battery pack or damage the battery pack.
- f. Do not charge the battery or the radio if it is damp. Dry it before charging to avoid damage.

WARNING!

When keys, ornamental chain or other electric metals contact the battery terminal, the battery may become damage or injure a human. If the battery terminals are short circuited it will generate a lot of heat. Take care when carrying and using the battery. Remember to put the battery or radio into an insulated container. Do not put it into a metal container.

2.4 How to Charge

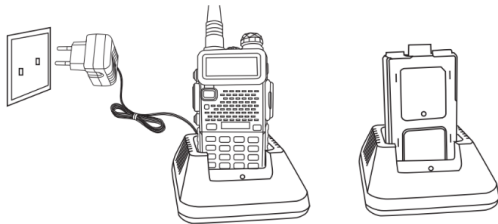
- Plug the AC adaptor into the AC outlet, and then plug the cable of the AC adaptor into the DC jack located on the back of the charger. The indicator light blinks orange and is then ready to charge a battery.
- Plug the battery or the radio into the charger. Make sure the battery terminals are good in contact with charging terminals. The indicator light turns to red--- charging begins.
- It takes approximately 2-5 hours to fully charge the battery. When the lamp lights green, the charging is completed. Remove the battery or the radio unit with its battery from socket.

When charging a radio (with battery) the indicating lamp will not turn into green to show the fully charged status if the radio is powered on. Only when the radio is switched off will the lamp indicate normal operation. The radio consumes energy when it is power-on, and the charger cannot detect the correct battery voltage when the battery has been fully charged. So the charger will charge the battery in constant voltage mode and fail to indicate correctly when the battery has been fully charged.

2.5 LED Indicator

STATUS	LED
No Battery	Green and red alternately flashing
Charge Normally	Red
Fully Charged	Green
Trouble	Red blinks fast for a long time

NOTE: Trouble means battery too warm, battery short-circ



Chapter3. Installation of Accessories

Before the radio is ready for use we need to attach the antenna and battery pack, as well as charge the battery.

3.1 Installing/ Removing the Antenna

- Installing the Antenna: Screw the antenna into the connector on the top of the transceiver by holding the antenna at its base and turning it clockwise until secure.
- Removing the Antenna: Turn the antenna counter-clockwise to remove it.



3.2 Installing the belt clip

- At the back of the radio there are two parallel screws mounted above the battery, remove these and thread them through the holes on the belt clip as you screw them back into the radio body.
- Removing the Belt Clip: Unscrew counter-clockwise to remove the belt clip.



3.3 Installing the battery pack

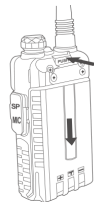
Before attaching or removing the battery make sure your radio is turned off by turning the power/volume knob all the way counter-clockwise.

- Make sure the battery is aligned in parallel with the radio body with the lower edge of the battery about 1-2cm below the edge of the radio.
- Once aligned with the guide-rails, slide the battery upward until you hear a click as the battery locks in place.



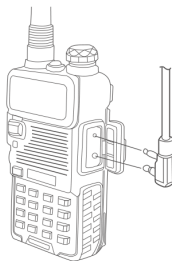
Remove the battery pack

To remove the battery, press the battery release above the battery pack, as you slide the battery downward.



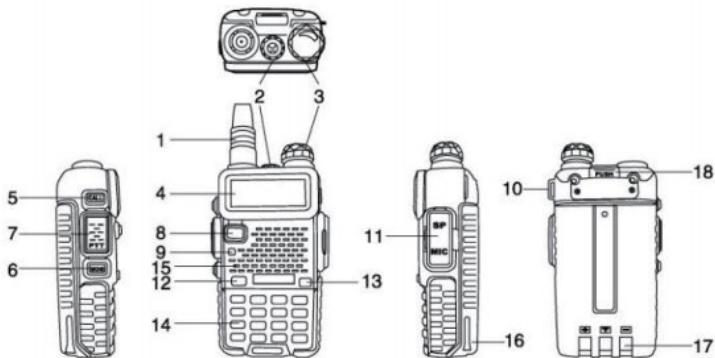
3.4 Installing the Additional Speaker/Microphone (Optional)

Pry open the rubber MIC-Headset jack cover and then insert the Speaker / Microphone plug into the double jack.



Chapter4. Radio Overview

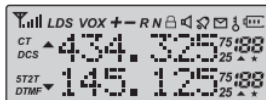
4.1 Buttons and controls of the radio



1. Antenna	7. PTT - Push to talk	13. BAND key
2. LED flashlight	8. VFO/MR mode key	14. Keypad
3. Power / Volume knob	9. Status LED	15. Speaker and microphone
4. Two-line LCD	10. Lanyard loop	16. Battery pack
5. Call key	11. Accessory jack	17. Battery contacts
6. Monitor key	12. A / B select key	18. Battery release latch

4.2 Main controls and parts of the radio

LCD Display



Icon	Description	Icon	Description
	Memory channel	R	Reverse function enabled
	Least significant modifiers.	N	Narrowband enabled
CT	CTCSS enabled		Battery level indicator
DCS	DCS enabled		Keypad lock enabled
+-	Frequency shift direction if enabled in VFO	H,L	Transmit power level indicator According to Power (High, Low)
S	Dual watch enabled		Indicates active band or channel
VOX	VOX enabled		Squelch Open/ Close Indicator

Note: Even though it is a seven character by two-line display, channel memories are only configurable to six character names.

Battery Level Indicator

When the battery level indicator reads the battery is depleted. At this point the radio will start beeping periodically as well as flash the backlight of the display and when voice prompts are enabled, a "Low Voltage" announcement will be heard,

indicating that you need to change your battery or put your radio in the charger.

4.3 Status Indications

The status LED has a very simple and traditional design. When you receive a signal it turns green, when you transmit it turns red, and it's off in standby.

LED Indicator	Radio Status
Constant Red	Transmitting.
Constant Green	Receiving.

4.4 Main keypad controls

- **[CALL] key:** Press it for a short time to turn on the FM radio. Press it again to turn it off.
If you press it for a long time you will activate the alarm function. Press it again to turn off this feature.
- **[MON] key:** Press it for a short time to light up the flashlight. If you push this button again, the flashlight will light up to strobe mode. Press MONI a third time to turn off the flashlight.
To activate the Monitor function presses the button for a long time.
- **[VFO/MR] key:** Press it for switches between Frequency (VFO) Mode and Memory (MR) mode. Memory mode is sometimes also referred to as Channel mode.
To save frequencies to channel memory you must be in Frequency (VFO) mode.
- **[A/B] key:** Press it for switches between A (upper) and B (lower) displays. The frequency or channel on the selected display becomes the active listening and transmit frequency or channel.
To save frequencies to channel memory you must be on the A display.
- **[MENU] key:** it is used for activating the MENU, choose each MENU selection and confirm the parameter.
- **[▲] key:** Press it for more than 2 seconds, the channel and frequency will move upwards rapidly; in SCAN mode, press this control to move the scanning upwards.
- **[▼] key:** Keep it pressed it for more than 2 seconds, the channel and frequency will move downwards rapidly; in SCAN mode, press this control to move the scanning downwards.
- **[EXIT] key:** push this button to exit the functions and settings.
- **[BAND] key:** Press it for switch between VHF or UHF bands. Press and hold the [BAND] key to activate the one-touch search function. When listening to broadcast FM, the [BAND] key switches between 65-75 MHz and 76-108 MHz bands.

- **Numeric keypad**

With these keys you can input the information or your selections on the radio. In tx mode, push the number keys to send a corresponding DTMF code.



- ***SCAN Key**

A short momentary press of the key enables the reverse function.

When listening to broadcast FM a momentary press will start the scanning. Scanning in broadcast FM will stop as soon as an active station is found, regardless of scanner resume method.

To enable the scanner, press and hold the [***SCAN**] key for about two seconds.

- **Zero 0 Key**

The BAOFENG UV-5G PRO features a battery voltage meter that the current voltage of the battery on the display.

To see the voltage displayed, press and hold the [**0SQL**] key for about two seconds.

- **#T/O key**

If you press shortly [**#T/O**] you will switch to High or Low output power.

If you press this button for more than 2 seconds you will lock/unlock the keypad.

Chapter5. Basic Operations

5.1 Power on the radio

To turn the unit on, simply rotate the **Volume/Power** knob clockwise until you hear a "click". If your radio powers on correctly there should be an audible double beep after about one second and the display will show a message or flash the LCD depending on settings for about one second. Then it will display a frequency or channel. If the Voice prompt is enabled, the voice will announce "frequency mode" or "channel mode".

Turn the **Volume/Power** knob counter-clock wise all the way until you hear a "click". The unit is now off.

5.2 Adjusting the volume

To turn up the volume, turn the **Volume/Power** knob clock-wise. To turn the volume down, turn the **Volume/Power** knob counter-clock-wise. Be careful not to turn it too far, as you may inadvertently turn your radio off.

5.3 Making a call

NOTE: Press the [A/B] key to switch the main channel to the other channel if there is 2 channels shown on the display. Press the [VFO/MR] key to switch between VFO and channel display.

- Channel mode call: After selecting a channel, hold down the [PTT] key to initiate a call to the current channel. Speak into the microphone with normal tone. Initiate a call, the red LED is on.
- Frequency mode call: Press the [VFO/MR] key to switch to the frequency mode, the frequency range allowed entering, press the [PTT] key, a call to the current channel. Speak into the microphone with normal tone. Initiate a call, the red LED is on.
- Receive a call: When you release the [PTT] key, you can answer it without any action.
When receiving a call, the green LED is on.

NOTE: To ensure the best reception volume, keep the distance between the microphone and the mouth at the time of transmission from 2.5 cm to 5 cm.

5.4 Channel selection

There are two modes of operation: Frequency (VFO) mode, and Channel or Memory (MR) mode.

For everyday use, Channel (MR) mode is going to be a whole lot more practical than Frequency (VFO) mode. However, Frequency (VFO) mode is very handy for experimentation out in the field. Frequency (VFO) mode is also used for programming channels into memory.

In Channel (MR) mode you can navigate up and down the channel by using the ▲ and ▼ keys.

Ultimately which mode you end up using will depend entirely on your use case.

5.5 Frequency (VFO) mode

In Frequency (VFO) mode you can navigate up and down the band by using the ▲ and ▼ keys. Each press will increment or decrement your frequency according to the frequency step you've set your transceiver to.

You can also input frequencies directly on your numeric keypad with kilohertz accuracy.

The following example assumes the use of a 12.5 kHz frequency step.

Example. Entering the frequency 462.6125 MHz on display A

- a. Use the [VFO/MR] key to switch to Frequency (VFO) mode.
- b. Press [A/B] until the ▲ icon appears next to the upper display.

c. Enter [4][6][2][6][1][2][5] on the numeric keypad.



WARNING!

Just because you can program in a channel does not mean you're automatically authorized to use that frequency. You may be tempted to use PMR446, FRS, GMRS and MURS (in USA) frequencies. Do note however that there are restrictions on these bands that make this transceiver illegal for use. Contact your local regulatory body for further information on what laws, rules and regulations apply to your area.

5.6 Channel (MR) mode

The use of Channel (MR) mode is dependent on actually having programmed in some channels to use. Once you have channels programmed and ready, you can use the ▲ and ▼ keys to navigate between channels.

Note: *If you have channels programmed with Transmit power set to Low, you can use the [#M0] key to momentarily switch over to mid or high power if you're having trouble getting through.*

Chapter6. Advanced Features

6.1 Frequency scanning

This function can scan the frequency.

- a. In frequency mode, press [*/scan] key for more than 2 seconds. The radio will start scanning the frequency according to the set frequency step.
- b. You can change the scanning direction with the ▲ and ▼ keys.
- c. Press any key to stop the scanning.

Note: *for Scan mode, see Menu No.18.*

6.2 Channel scanning

This function can scan the channels.

- a. In channels mode, press [*scan] key for more than 2 seconds. The radio will start scanning according to the channel you set.
- b. You can change the scanning direction with the ▲ and ▼ keys.

c. Press any key to stop scanning.

Note: for Scan mode, see Menu No.18.

6.3 Tone Scanning

Scanning for CTCSS and DCS Tones/Codes

Scanning for a CTCSS tone or DCS code can be done while Frequency Mode (VFO) or Channel Mode (MR) is selected. Only when VFO mode is selected, can the detected tone/code be saved to menu 11/10.

CTCSS tone and DCS code scanning mode can be accessed with or without a signal being present. The scanning process itself only occurs while a signal is being received.

Not all repeaters requiring a CTCSS tone or DCS code for access will transmit one back. In that case, the transmitter of a station that can access the repeater would need to be scanned. In other words: this would be done by listening to stations on the repeater's input frequency.

• Scanning for CTCSS Tone

1. Press the **[MENU] [1] [1]** to come to Menu 11: R-CTCS
2. Press the **[MENU]** key to select. **Insure you have a tone activated (and it is not off)**
3. Press the **[*SCAN]** to begin CTCSS scanning

A flashing "CT" will be in the left status display to indicate the radio is in CTCSS scanning mode. In this mode, whenever the radio is receiving an RF signal on the selected MR channel or VFO frequency, the lower display will cycle through the CTCSS tones as they are being tested. Once the frequency of the received CTCSS tone is determined, the "CT" indicator will stop flashing.

Press the **[MENU]** key to save the scanned tone into memory (VFO Mode Only) then press the **[EXIT]** key to exit the menu.

Don't forget to set VFO menu 11 back to OFF when the CTCSS tone is no longer required.

• Scanning for a DCS tone

1. Press the **[MENU] [1] [0]** to come to Menu 10: R-DCS
2. Press the **[MENU]** key to select. **Insure you have a tone activated (and it is not off)**
3. Press the **[*SCAN]** to begin DCS scanning

A flashing "DCS" will be in the left status display to indicate the radio is in DCS scanning mode. In this mode, whenever the radio is receiving an RF signal on the selected MR channel or VFO frequency, the lower display will cycle through the DCS codes as they are being tested. Once the bits of the received DCS code are determined, the "DCS" indicator will stop flashing.

Press the [MENU] key to save the scanned tone into memory (VFO Mode Only) then press the [EXIT] key to exit the menu. ***Don't forget to set VFO menu 10 back to OFF when the DCS tone is no longer required.***

6.4 Dual Watch

The BAOFENG UV-5G PRO features Dual Watch functionality (single receiver) with the ability to lock the transmit frequency to one of the two channels it monitors.

• Enabling or disabling Dual Watch mode

1. Press the [MENU] [7] to get to MENU 7: TDR.
2. Press [MENU] key to select.
3. Use the ▲ and ▼ keys to enable or disable.
4. Press the [MENU] key to confirm.
5. Press the [EXIT] key to exit the menu.

Due to the way the BAOFENG UV-5G PRO is constructed, whenever one of the A or B Frequencies (VFO/MR) goes active, it will default to transmit on that channel. This behavior can be inconvenient, especially if when monitoring a frequency, you should not transmit on. There is a menu option available to lock the transmitter to one of the A or B channels.

• Locking the Dual Watch transmit channel

1. Press the [MENU] [3][4] to get to MENU 34: TDR-AB.
2. Press [MENU] key to select.
3. Use the ▲ and ▼ keys to select A (upper) or B (lower) display.
4. Press the [MENU] key to confirm.
5. Press the [EXIT] key to exit the menu.

If you want to momentarily override the lock without having to setting the menu option to OFF, you can do so by pressing the [A/B] key an instant before pressing the PTT.

Another option is to disable menu [7] (TDR) to override the lock. Then re-enable TDR when you want the lock resumed

6.5 Cursor Conversion (A/B)

Directly press [A/B] key to move the cursor up and down. Then, you can modify or confirm the parameters indicated by the cursor.

Important1: UV-5G PRO has a dual-frequency display function. In frequency mode, you will see on the display two different receiving and transmitting frequencies; while in channel mode the two different channels will be displayed.

Important2: In frequency or channel mode, press the [A/B] key to shift between the main channel A and the sub-channel B

▲ on the display indicates on which channel (main channel A or sub channel B) you are operating.

▼ is displayed next to the channel.

6.6 High/low power fast selection

In channel mode, press [#**PO**] key to shift between high and low power.

6.7 Keypad lock

This function locks the keypad to prevent accidental pressure of the controls.

To unlock the keypad, press [#**PO**] for more than 2 seconds.

6.8 FM Radio (FM)

The frequency range to listen to the radio is 65-108MHz. When listening to broadcast FM, press [A / B] key switches between 65-75 MHz and 76-108 MHz band.

a. In frequency or channel mode, Press [**CALL**] to turn on the radio.

b. Select the desired radio frequency with the ▲ or ▼ keys or input the frequency. or

- Press [* **SCAN**] to automatically search a radio station.

c. Press [**CALL**] to exit FM radio.

Note: while you are listening to the radio, the frequency or channel of A / B receiving signal will automatically switch to the frequency or channel mode for normal transmitting and receiving.

When the signal disappears the radio will automatically switch again to FM radio mode.

6.9 Flashlight

This function is very useful for night illumination.

To turn it on press MON; push it again, the flash light will be strobe; push it again: it will turn off.

6.10 1000Hz, 1450Hz, 1750Hz Tone-burst

To send out a tone-burst; you simultaneously will press a key while holding down the PTT. No further configuration required using this feature.

The following configurations will transmit accordingly:

- **[PTT] + [CALL]** = Transmits 1000Hz Tone Burst
- **[PTT] + [VFO/MR]** = Transmits 1450Hz Tone Burst
- **[PTT] + [A/B]** = Transmits 1750Hz Tone Burst

If you have the keypad lock enabled on your radio, you can still send a 1750Hz tone the regular way without having to unlock your radio.

6.11 DTMF

DTMF is an in-band signaling method using dual sinusoidal signals for any given code. Originally developed for telephony systems, it has proved a very versatile tool in many other areas.

In two-way radio systems, DTMF is most commonly used for automation systems and remote control. A common example would be in amateur radio repeaters where some repeaters are activated by sending out a DTMF sequence (usually a simple single-digit sequence).

	1209 Hz	1336 Hz	1477 Hz	1633 Hz
697 Hz	1	2	3	A
770 Hz	4	5	6	B
852 Hz	7	8	9	C
941 Hz	*	0	#	D

The BAOFENG UV-5G PRO EU has a full implementation of DTMF, including the A, B, C and D codes. The numerical keys, as well as the [***SCAN**], and [**#PTO**], keys correspond to the matching DTMF codes as you would expect. The A, B, C and D codes are located in the [**MENU**], [**▲**], [**▼**] and [**EXIT**] keys respectively (+).

To send DTMF codes, press the key(s) corresponding to the message you want to send while holding down the PTT key. *If you have the keypad lock enabled on your radio, you can still send DTMF tones the regular way without having to unlock your radio.*

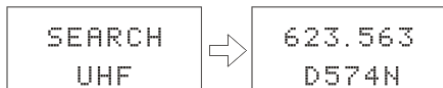
6.12 One touch frequency Search

(1) The radio will act as a receiver. Press and hold the [**BAND**] key, and the screen will display “**SEARCH UHF**”.

(2) If the transmitter continues to transmit and the unit receives an effective frequency (the strongest and stable signal), the received frequency will be displayed. If there is a CTCSS or DCS, the CTCSS or DCS value is displayed, and if there is no CTCSS or DCS, NONE is displayed

(3) You can press the [**MENU**] key to save the Search frequency and CTCSS or DCS to the channel.

*Note: During frequency Search, press the [**#PTO**] key on the radio to switch between UHF or VHF bands.*



Chapter7. Working the MENU System

For a complete reference on available menu items and parameters, see **Appendix C, Shortcut Menu operations.**

Note: in channel mode, the setting of these features is not possible: CTCSS/ DCS tones, wide/narrow bandwidth, PTT-ID, Busy channel lock out, channel name edit.

7.1 Basic use

Using the menu with arrow keys

- Press the [**MENU**] key to enter the menu.
- Use the [**▲**] and [**▼**] keys to navigate between menu items.
- Once you find the desired menu item, press [**MENU**] again to select that menu item.
- Use the [**▲**] and [**▼**] keys to select the desired parameter.

- e. When you've selected the parameter you want to set for a given menu item;
 - a). To confirm your selection, press **[MENU]** and it will save your setting and bring you back to the main menu.
 - b). To cancel your changes, press **[EXIT]** and it will reset that menu item and bring you out of the menu entirely.
- f. To exit out of the menu at any time, press the **[EXIT]** key.



7.2 Using short-cuts

As you may have noticed if you looked at **Appendix C, Shortcut Menu operations**, every menu item has a numerical value associated with it. These numbers can be used for direct access of any given menu item.

The parameters also have a number associated with them, see **Appendix C, Shortcut Menu operations** for details.

Using the menu with short-cuts

- a. Press the **[MENU]** key to enter the menu.
- b. Use the numerical keypad to enter the number of the menu item.
- c. To enter the menu item, press the **[MENU]** key.
- d. For entering the desired parameter you have two options:
 - a). Use the arrow keys as we did in the previous section; or
 - b). Use the numerical keypad to enter the numerical short-cut code.
- e. And just as in the previous section;
 - a). To confirm your selection, press **[MENU]** and it will save your setting and bring you back to the main menu.
 - b). To cancel your changes, press **[EXIT]** and it will reset that menu item and bring you out of the menu entirely.
- f. To exit out of the menu at any time, press the **[EXIT]** key.
- g. All further examples and procedures in this manual will use the numerical menu short- cuts.

Appendix A. – Trouble shooting guide

Phenomena	Analysis	Solution
You cannot turn on the radio.	The battery may be installed improperly.	Remove and reattach the battery.
	The battery power may run out.	Recharge or replace the battery.
	The battery may suffer from poor contact caused by dirty or damaged battery contacts.	Clean the battery contacts or replace the battery.
During receiving, the voice is weak or intermittent.	The battery voltage maybe low.	Recharge or replace the battery.
	The volume level may be low.	Increase the volume.
	The antenna maybe loose or maybe installed incorrectly.	Turnoff the radio, and then remove and reattach the antenna.
	The speaker maybe blocked.	Clean the surface of the speaker.
You cannot communicate with other group members.	The frequency or signaling type maybe inconsistent with that of other members.	Verify that your TX/RX frequency and signaling type are correct.
	You may be too far away from other members.	Move towards other members.
You hear unknown voices or noise.	You may be interrupted by radios using the same frequency.	Change the frequency, or adjust the squelch level.
	The radio in analog mode maybe set with no signaling.	Request your dealer to set signaling for the current channel to avoid interference
You are unable to hear anyone because of too much noise and hiss.	You may be too far away from other members.	Move towards other members.
	You may be in an unfavorable position. For example, your communication may be blocked by high buildings or blocked in an underground area.	Move to an open and flat area, restart the radio, and try again.
	It may be the result of external disturbance (such as electromagnetic interference).	Stay away from equipment that may cause interference.
The radio keeps transmitting.	VOX may be turned on or the headset is not installed in place	Turn off the VOX function. Check that the headphones are in place.

NOTE: If the above solutions cannot fix your problems, or you may have some other queries, please contact your dealer for more technical support.

Appendix B. - Technical Specifications

Scanning Receive Frequency	FM65-108MHz; AM108-136MHz(Rx); 136-174MHz (Rx); 220-260MHz (Rx); 350-390MHz(Rx); 400-520MHz(Rx)
Transmission Frequency	GMRS
Memory channels	128
Power supply	batteria Li-Ion da 7.4V/1800 mAh (BL-5)
Operating temperature	-10°C to + 45°C
Working mode	monoband/dualband
Modulation	F3E(FM)
Max. frequency deviation	$\leq \pm 5\text{KHz}$
Spurious radiation	$< -60\text{dB}$
Frequency stability	$\pm 2.5\text{ ppm}$
Rx sensitivity	$< 0.2\mu\text{V}$
Audio output power	$\geq 500\text{mW}$
Dimensions	58x109x33mm (LxAxP)
Weight	208g

Specifications are subject to change without notice.

WARNING. *Direct plug-in ac/dc power supply must be used for disconnecting the transceiver from the mains; the desktop charger must be positioned close to the unit and easily accessible.*

Appendix C. - Shortcut Menu operations

MEN U No.	Name (Full Name)	Enter item	Select able
0	SQL - Squelch Level	MENU+0	0-9 Levels 0:Lowest 9:Highest
1	STEP –Step Frequency	MENU+1	2.5K/5.0K/6.25K/10.0K 12.5K/20.0K/25.0K/50.0K
2	TXP – Transmit Power	MENU+2	HIGH:5W(VHF) 4W(UHF)* Low:2W
3	SAVE - Battery Saving	MENU+3	OFF: 1:1 2:2 3:3 4:4
4	VOX - VOX	MENU+4	OFF, 1-9 OFF: off 1: Highest Sensitivity 9: Highest Sensitivity
5	WN-Wide/Narrow	MENU+5	WIDE:25.0K NARR:12.5K
6	ABR –Auto Backlight	MENU+6	OFF/1,2,3...8, 9,10 *Time-out for the LCD backlight. (seconds)
7	TDR – Dual Watch Operation	MENU+7	OFF ON *Monitor [A] and [B] at the same time. The display with the most recent activity ([A] or [B]) becomes the selected display.
8	BEEP - Keypad Beep	MENU+8	OFF ON *Allows audible confirmation of a key press.

9	TOT- Time-Out-Timer	MENU+9	15,30...600S *This feature provides a safety switch that limits transmission time to a programmed value. This will promote battery conservation by not allowing you to make excessively long transmissions, and in the event of a stuck PTT switch it can prevent interference to other users as well as battery depletion
10	R-DCS - Receiver DCS	MENU+10	OFF D023N...D754N D023I ...D754I *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.
11	R-CTCS - Receiver CTCSS	MENU+11	OFF 67.0HZ...254.1HZ *Mutes the speaker of the transceiver in the absence of a specific and continuous sub-audible signal. If the station you are Listening to does not transmit this specific and continuous signal, you will not hear anything.
12	T-DCS -Transmitter DCS	MENU+12	OFF D023N...D754N D023I ...D754I *Transmits a specific low-level digital signal to unlock the squelch of a distant receiver (usually a repeater).

13	T-CTCS - Transmitter CTCSS	MENU+13	OFF 67.0HZ...254.1HZ *Transmits a specific and continuous sub audible signal to unlock the squelch of a distant receiver (usually a repeater).
14	VOICE - Voice Reminding	MENU+14	OFF CHI ENG *Allows audible voice confirmation of a key press.
15	ANI-ID -ANI-ID	MENU+15	It can be programmed by software
16	DTMFST - DTMFST	MENU+16	OFF: No DTMF Side Tones are heard DT-ST : Side Tones are heard only from manually keyed DTMF codes ANI-ST: Side Tones are heard only from automatically keyed DTMF codes DT+ANI : All DTMF Side Tones are heard
17	S-CODE - Signal Code	MENU+17	1,...,15
18	SC-REV - Scanner Resume Method	MENU+18	TO : Time Operation - scanning will resume after a fixed time has passed CO : Carrier Operation -scanning will resume after the signal disappears SE : Search Operation -scanning will not resume
19	PTT-ID - PTT-ID	MENU+19	OFF: No ID is sent BOT: The selected S-CODE is sent at the beginning EOT: The selected S-CODE is sent at the ending BOTH : The selected S-CODE is sent at the beginning and ending

20	PTT-LT – PTT ID delay	MENU+20	0,1,2...,50ms *PTT-ID Delay (milliseconds)
21	MDF-A - Channel A Display Mode	MENU+21	FREQ: Displays programmed Frequency CH: Displays the channel number NAME: Displays the channel name *Note: Names must be entered using software.
22	MDF-B - Channel B Display Mode	MENU+22	FREQ: Displays programmed Frequency CH: Displays the channel number NAME: Displays the channel name *Note: Names must be entered using software.
23	BCL – Busy Channel Lock-out	MENU+23	OFF ON *Disables the [PTT] button on a channel that is already in use. The transceiver will sound a beep tone and will not transmit if the [PTT] button is pressed when a channel is already in use.
24	AUTOLK –Automatic Keypad Lock	MENU+24	OFF ON *When ON, the keypad will be locked if not used in 8 seconds. Pressing the [#PTT] key for 2 seconds will unlock the keypad.
25	SFT-D – Frequency Offset Direction	MENU+25	OFF: TX = RX (simplex) +: TX will be shifted higher in frequency than RX - : TX will be shifted lower in frequency than RX
26	OFFSET -Frequency shift amount	MENU+26	00.000...69.990 *Specifies the difference between the TX and RX frequencies

27	MEM-CH - Store a Memory Channel	MENU+27	000...127 *This menu is used to either create new or modify existing channels (0 through 127) so that they can be accessed from MR/Channel Mode
28	DEL-CH - Delete a memory channel	MENU+28	000...127 *This menu is used to delete the programmed information from the specified channel (0 through 127) so that it can either be programmed again or be left empty.
29	WT-LED- Standby Backlight	MENU+29	OFF/ BLUE/ ORANGE/ PURPLE
30	RX-LED- Receive Backlight	MENU+30	OFF/ BLUE/ ORANGE/ PURPLE
31	TX-LED- Transmit Backlight	MENU+31	OFF/ BLUE/ ORANGE/ PURPLE
32	AL-MOD - Alarm Mode	MENU+32	SITE: Sounds alarm through your radio speaker only TONE: Sending alarm tone CODE: Sending alarm code
34	TDR-AB - Transmit selection while in Dual Watch mode	MENU+34	OFF A band transmit (Upper row frequency) B band transmit (Bottom row frequency) *When enabled, priority is returned to selected display once the signal in the other display disappears.
35	STE - Squelch Tail Elimination	MENU+35	ON OFF *This function is used eliminate squelch tail noise between BAOFENG handhelds that are communicating directly (no repeater). Reception

			of a 55 Hz or 134.4 Hz tone burst mutes the audio long enough to prevent hearing any squelch tail noise.
36	RP-STE-Squelch Tail Elimination	MENU+36	OFF/ 1,2,3...10 *This function is used eliminate squelch tail noise when communicating through a repeater.
37	RPT-RL - Delay the squelch tail of repeater	MENU+37	OFF/ 1,2,3...10 *Delay the Tail Tone of Repeater (X100 milliseconds)
38	PONMSG-Power On Message	MENU+38	FULL: Performs an LCD screen test at power-on MSG: Displays a 2-line power on message *Controls the behavior of the display when the transceiver is turned on.
39	ROGER - Roger Beep	MENU+39	OFF ON *Sends an end-of-transmission tone to indicate to other stations that the transmission has ended.
40	RESET – Restore defaults	MENU+40	VFO: Menu initialization ALL: Menu and channel initialization *Resets the radio to factory defaults, with some exceptions.

Appendix D. - GMRS Frequency Chart (MHz)

CH.No	CH.Freq.	Type of Radio	Power Output	CH.No	CH.Freq.	Type of Radio	Power Output
1	462.5625	GMRS	High	16	462.5750	GMRS	High
2	462.5875	GMRS	High	17	462.6000	GMRS	High
3	462.6125	GMRS	High	18	462.6250	GMRS	High
4	462.6375	GMRS	High	19	462.6500	GMRS	High
5	462.6625	GMRS	High	20	462.6750	GMRS	High
6	462.6875	GMRS	High	21	462.7000	GMRS	High
7	462.7125	GMRS	High	22	462.7250	GMRS	High
8	467.5625	FRS	Low	23	467.5500/462.5500	RPT	High
9	467.5875	FRS	Low	24	467.5750/462.5750	RPT	High
10	467.6125	FRS	Low	25	467.6000/462.6000	RPT	High
11	467.6375	FRS	Low	26	467.6250/462.6250	RPT	High
12	467.6625	FRS	Low	27	467.6500/462.6500	RPT	High
13	467.6875	FRS	Low	28	467.6750/462.6750	RPT	High
14	467.7125	FRS	Low	29	467.7000/462.7000	RPT	High
15	462.5500	GMRS	High	30	467.7250/462.7250	RPT	High

* Channels 8~14 are low-power FRS license free channels.

Appendix E. - DCS Table

DCS CODE LIST

Number	Code	Number	Code	Number	Code	Number	Code	Number	Code
1	D023N	2	D025N	3	D026N	4	D031N	5	D032N
6	D036N	7	D043N	8	D047N	9	D051N	10	D053N
11	D054N	12	D065N	13	D071N	14	D072N	15	D073N
16	D074N	17	D114N	18	D115N	19	D116N	20	D122N
21	D125N	22	D131N	23	D132N	24	D134N	25	D143N
26	D145N	27	D152N	28	D155N	29	D156N	30	D162N
31	D165N	32	D172N	33	D174N	34	D205N	35	D212N
36	D223N	37	D225N	38	D226N	39	D243N	40	D244N
41	D245N	42	D246N	43	D251N	44	D252N	45	D255N
46	D261N	47	D263N	48	D265N	49	D266N	50	D271N
51	D274N	52	D306N	53	D311N	54	D315N	55	D325N
56	D331N	57	D332N	58	D343N	59	D346N	60	D351N
61	D356N	62	D364N	63	D365N	64	D371N	65	D411N
66	D412N	67	D413N	68	D423N	69	D431N	70	D432N
71	D445N	72	D446N	73	D452N	74	D454N	75	D455N
76	D462N	77	D464N	78	D465N	79	D466N	80	D503N
81	D506N	82	D516N	83	D523N	84	D526N	85	D532N
86	D546N	87	D565N	88	D606N	89	D612N	90	D624N
91	D627N	92	D631N	93	D632N	94	D645N	95	D654N
96	D662N	97	D664N	98	D703N	99	D712N	100	D723N

101	D731N	102	D732N	103	D734N	104	D743N	105	D754N
106	D023I	107	D025I	108	D026I	109	D031I	110	D032I
111	D036I	112	D043I	113	D047I	114	D051I	115	D053I
116	D054I	117	D065I	118	D071I	119	D072I	120	D073I
121	D074I	122	D114I	123	D115I	124	D116I	125	D122I
126	D125I	127	D131I	128	D132I	129	D134I	130	D143I
131	D145I	132	D152I	133	D155I	134	D156I	135	D162I
136	D165I	137	D172I	138	D174I	139	D205I	140	D212I
141	D223I	142	D225I	143	D226I	144	D243I	145	D244I
146	D245I	147	D246I	148	D251I	149	D252I	150	D255I
151	D261I	152	D263I	153	D265I	154	D266I	155	D271I
156	D274I	157	D306I	158	D311I	159	D315I	160	D325I
161	D331I	162	D332I	163	D343I	164	D346I	165	D351I
166	D356I	167	D364I	168	D365I	169	D371I	170	D411I
171	D412I	172	D413I	173	D423I	174	D431I	175	D432I
176	D445I	177	D446I	178	D452I	179	D454I	180	D455I
181	D462I	182	D464I	183	D465I	184	D466I	185	D503I
186	D506I	187	D516I	188	D523I	189	D526I	190	D532I
191	D546I	192	D565I	193	D606I	194	D612I	195	D624I
196	D627I	197	D631I	198	D632I	199	D645I	200	D654I
201	D662I	202	D664I	203	D703I	204	D712I	205	D723I
206	D731I	207	D732I	208	D734I	209	D743I	210	D754I

Appendix F. - CTCSS Table

CTCSS CHART (Hz)

Number	Frequency	Number	Frequency	Number	Frequency	Number	Frequency	Number	Frequency
1	67.0	2	69.3	3	71.9	4	74.4	5	77.0
6	79.7	7	82.5	8	85.4	9	88.5	10	91.5
11	94.8	12	97.4	13	100	14	103.5	15	107.2
16	110.9	17	114.8	18	118.8	19	123.0	20	127.3
21	131.8	22	136.5	23	141.3	24	146.2	25	151.4
26	156.7	27	159.8	28	162.2	29	165.5	30	167.9
31	171.3	32	173.8	33	177.3	34	179.9	35	183.5
36	186.2	37	189.9	38	192.8	39	196.6	40	199.5
41	203.5	42	206.5	43	210.7	44	218.1	45	225.7
46	229.1	47	233.6	48	241.8	49	250.3	50	254.1

Appendix G.- NOAA Weather Radio Frequency List (US, CAN)

Channel Number	RX Frequency MHz	Weather Channel	Channel Number	RX Frequency MHz	Weather Channel
117	162.550	WX1	123	162.525	WX 7
118	162.400	WX 2	124	161.650	WX 8
119	162.475	WX 3	125	161.775	WX 9
120	162.425	WX 4	126	161.750	WX 10
121	162.450	WX 5	127	162.000	WX 11
122	162.500	WX 6	---	---	---

Disclaimer

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