Manuals+ — User Manuals Simplified.

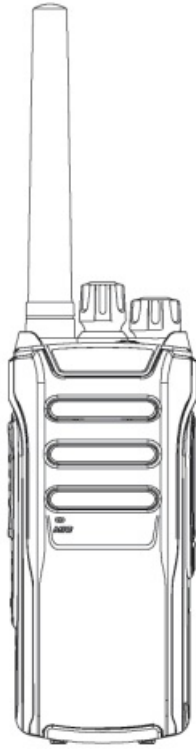# WANNETON WLT-Q10 Two Way Radio User Manual

Contents

WANNETON WLT-Q10 Two Way Radio

Main features

- TX&RX Frequency range GMRS
- High and Low Power Selection
- 99 channels
- Channel monitor
- 205 Privacy Codes (39 CTCSS Codes& 166 DCS codes)
- TOT (Time out timer)
- Vocal tuning
- Battery save
- Battery low alert
- 2Pin Kenwood accessory jack

Note: "Range may vary depending on environmental andlor topographical conditions.

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

Selection of the operational channel
Rotate the Encoder/channel knob to scroll up or down the channel list till you select the desired channel.
Refer to the table of frequencies. Moreover, the reception frequency could be different (duplex channels) from the transmission frequency or it could be the same (simplex channels). Normally communications among vessels can only take place on simplex channels.

Power On/Off and Volume adjustment
Rotate the Power/Volume knob clockwise to turn the radio on.
Rotate the control clockwise lcounter-clockwise to adjust the volume level as you prefer.
TO tun the radio off, rotate the control counter-clockwise till you hear a mechanical "click".

PTT Transmission
To communicate, all radios in your group must be set to the same channel.
Briefly press the SK1 key to enable the Monitor feature in order to make sure that the frequency is not busy, then press and hold PTT key.
Release the PTT key to receive.
Only one user at a time can talk during radio communications. Therefore, it is important not to transmit when you are receivinga communication and use the transmission mode sparingly to allow other users to talk.
Transmission consumes a significant amount of energy and should therefore be used sparingly to prolong the battery life.
If you are unable to contact a station that you have no problems in receiving, the station may be using CTCSS tones or DCS codes.

Programmed Key
It is possible to set different functions for [SK1. ISK2] keys.

OFF	No Function
Monitor	Monitor the weak signal or the signal with unmatched ID.
Scan	Scan on/off
Alarm	Long press the key to start alarm, short press again to exit the alarm
Channel Lock	Channel lock/ Channel unlock

Monitor
The Monitor feature is for excluding (opening) the Squelch, in order to listen to signals that are too weak to keep the Squelch permanently opened.
Before using the Monitor function, pre-program the SK1 or SK2 keys as Monitor keys through thee CPS programming software. Press and hold the pre-programmed Monitor key to activate the monitor function.

Scan

1. To begin scanning, press and hold the SCAN key for 3 seconds. Your radio will beep twice alerting you that the radio has entered the scan mode.

2. When in Scan Mode, the radio wil rapidly scan through all programmed channels and will pause on any active channel. While Scan Function is active the Green LED will flash to indicate that the radio is scanning.

3. After stopping on an active channel, scanning will resume once there has been 10 seconds of no activity on the channel.

4. To reply to a received transmission when the Scan Mode is enabled, press and hold the PTT button (on radio or headset accessory) while the radio is paused on the active channel, the radio will then transmit on the active channel's frequency. The radio will remain on the active channel for 10 seconds after the PTT key is released.

5. To transmit on the frequency selected by the Channel Knob while Scan Mode is enabled, the user will verify that the radio is not receiving a transmission, then presS PTT key (on radio or headset accessory). Once the PTT button is released the radio will go back into scanning after 4 seconds of inactivity.

6. To exit Scan Mode, the user will Long Press (3 seconds) the SCAN key The radio will emit a single beep, alerting the user that the radio has exited the Scan Mode.

Squelch
The Squelch function suppresses noises on free channels and allows to receive even weak signals.
The radio has 10 different Squelch levels that can be set by programming software: 0 means that the Squelch is turned of; from level 1 to level 9 you will have different levels of noise reduction. The higher is the level, the louder will be the Squelch.
By default, the Squelch level of radio is set on level 4, Make sure you do not set an excessively high squelch level

because in this case you may not be able to receive weaker signals. On the other hand an excessively low Squelch value could enable the Squelch even when no signals are present. Squelch must always be adjusted when no signals are present.

VOX

The VOX feature enables hands free conversations without using PTT: just speak in the direction of the microphone and the communication will be automatically activated.
The VOX sensitivity can be adjusted in 9 different levels (1.9) through the programming software:
Level 2 is set by default and has the lowest VOX sensitivity, 9 is the lowest one.
With the programming software you can enable/disable the VOX feature and select the sensitivity levels.
CPS programming path: program > VOX> VOX Level

Turn on the VOX

a. When the VOX function is enabled on your radio.
Talking to the MIC will automatically tum on the transmitter and send the voice. Stop talking, the radio automatically stops transmitting and waits for reception.
b. When you use the microphone with the headset. To use the voice control function, the VOX gain must be adjusted, and the VOX gain must be set, so that the radio can distinguish the sound level.
If the microphone is too sensitive, ambient noise can cause the radio to stat transmitting. If the microphone is not sensitive enough, the radio cannot pick up your voice. Be sure to adjust the VOX gain level to make the call go smoothly.

Note: The radio has the function of manually turn on the VOx. Press and hold the SK2 and PTT keys to turn on the radio. Repeat this operation to turn off the VOX function.

CTCSS/DCS tones

CTCSS and DCS tones are similar to access codes and enable the radio to communicate only with the users that are tuned on the same channel and have set the same code. For each channel, you can set up to 50 CTCSS tones and 232 DCS codes.

The CTCSS/DCS tones are a sort of "access codes" and enable the radio to communicate only with the other users set on the same frequency and on the same CTCSS/DCS tone. Undesired signals coming from other stations set on the same frequency but with different CTCSS/DCS tones won't be received.

CTCSS tones

67.0	69.3	71.9	74.4	77.0	79.7	82.5	85.4	88.5	91.5
94.8	97.4	100.0	103.5	107.2	110.9	114.8	118.8	123.0	127.3
131.8	136.5	141.3	146.2	151.4	156.7	159.8	162.2	165.5	167.9
171.3	173.8	177.3	179.9	183.5	186.2	189.9	192.8	196.6	199.5
203.5	206.5	210.7	218.1	225.7	229.1	233.6	241.8	250.3	254.1

DCS tones

D017N	D023N	D025N	D026N	D031N	D032N	D036N	D043N	D047N	D050N
D051N	D053N	D054N	D055N	D065N	D071N	D072N	D073N	D074N	D114N
D115N	D116N	D122N	D125N	D131N	D132N	D134N	D135N	D143N	D145
D152N	D155N	D156N	D162N	D165N	D172N	D174N	D205N	D212N	D217N
D223N	D225N	D226N	D243N	D244N	D245N	D246N	D251N	D252N	D254N
D255N	D261N	D263N	D265N	D266N	D271N	D274N	D305N	D306N	D311N
D315N	D325N	D331N	D332N	D343N	D345N	D346N	D351N	D356N	D364N
D365N	D371N	D411N	D412N	D413N	D423N	D425N	D431N	D432N	D445N
D446N	D452N	D454N	D455N	D462N	D464N	D465N	D466N	D503N	D506N
D516N	D523N	D526N	D532N	D534N	D546N	D565N	D606N	D612N	D624N
D627N	D631N	D632N	D645N	D654N	D662N	D664N	D703N	D712N	D723N
D731N	D732N	D734N	D743N	D754N	D765N				
D017I	D023I	D025I	D026I	D031I	D032I	D036I	D043I	D047I	D050I
D051I	D053I	D054I	D055I	D065I	D071I	D072I	D073I	D074I	D114I
D115I	D116I	D122I	D125I	D131I	D132I	D134I	D135I	D143I	D145
D152I	D155I	D156I	D162I	D165I	D172I	D174I	D205I	D212I	D217I
D223I	D225I	D226I	D243I	D244I	D245I	D246I	D251I	D252I	D254I
D255I	D261I	D263I	D265I	D266I	D271I	D274I	D305I	D306I	D311I
D315I	D325I	D331I	D332I	D343I	D345I	D346I	D351I	D356I	D364I
D365I	D371I	D411I	D412I	D413I	D423I	D425I	D431I	D432I	D445I
D446I	D452I	D454I	D455I	D462I	D464I	D465I	D466I	D503I	D506I
D516I	D523I	D526I	D532I	D534I	D546I	D565I	D606I	D612I	D624I
D627I	D631I	D632I	D645I	D654I	D662I	D664I	D703I	D712I	D723I
D731I	D732I	D734I	D743I	D754I	D765I				

Appendix A. – Technical Specifications

General Part

Frequency Range	GMRS
Working temperature	-10℃ to +40℃
Operation Voltage	DC 7.4 V ±10%
Operation Mode	Simplex
Dimensions	14mm×61mm×30mm (without Antenna)
Weight	230g (Battery pack included)
Antenna Impedance	50ohm

Transmitter Part

FM Modulation	11K0F3E@12.5KHz
Adjacent Channel Power	60dB @ 12.5KHz
Transmission current	≤1600mA

Receiver Part

Receive Sensitivity	0.25μV (12dB SINAD)
Adjacent Channel Selectivity	≥55dB@12.5KHz
Inter Modulation and Rejection	≥55dB@12.5KHz
Conducted Spurious Emission	≤-57dB@12.5KHz
Rated Audio Power Output	1W @16 ohms
Receive current	≤380mA
Rated Audio Distortion	≤5%

NOTE: AI specifications may be modified without prior notice or liability.

AppendixB.- Trouble shooting guide

Phenomena

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.

Important Safety Information

To make the most of this radio, it must be used properly.
Please read the installation and operating instructions carefully before using the radio. Special attention must be paid to the WARNING and NOTICE statements in this manual.

Note:
This radio complieswith IEEE and iCNIRP exposure limits for General Population/Uncontrolled Environments RF exposure emvironment at operating duty factors of up to 50% and is authorized by the FCC for General Population use only. An appropriate warning lable is affixed to all units. In order to comply with RF exposure requirements, a minimum distance of 2.5 cm must be maintained when held-to-face, and body-worn operations are restricted to the approved original acessories (belt clip), a minimum distance of 0 cm. Do not use this device when antenna shows obvious damages.

FCC Statement

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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules.
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Verification of harmful interference by this equipment to radio or television reception can be determined by turning it off and then on. The user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING:
MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERRAL LA.

Documents / Resources

WANNETON WLT-Q10 Two Way Radio [pdf] User Manual
WLT-Q10, WLTQ10, 2AUMTWLT-Q10, 2AUMTWLTQ10, WLT-Q10 Two Way Radio, Two Way Radio