

Two way radio



USER'S MANUAL

Model name: TG-Q7

Brand name: Quansheng

FCC ID: XBPTG-Q7

USER'S MANUAL





QS TWO WAY RADIO

Thank you for purchasing this Radio.

We believe this easy-to-use radio will provide stable and reliable communication for you.

QS Radio incorporates the latest advanced technology.

As a result, we know that you will be pleased with the quality and features of this product.

PRECAUTIONS BEFORE USING

Please read the User's Manual before using. It gives you important information about how to operate the portable radio.

Please put the radio and accessories where the children can not reach.

Maintenance can only be performed by professional technicians.

Please use the standard battery pack and charger in order not to destroy the radio.

Please use the standard antenna, in order not to shorten the distance.

Do not expose the radio to sunlight for a long period of time, nor put it near the heat, nor use it in a high temperature environment.

Do not put it in extreme dust or wet nor on unsteady surfaces.

Keep it dry. (Rain or moisture will erode the electronic board).

Do not transmit when the antenna is not installed.

If you find bad smell or smog, please turn off the radio immediately. And take the battery off the radio, then contact with QS agent.

FEATURES

- PTT & headset
- Channel scan
- Time-out-timer(TOT)
- Low power alarm
- Squelch level adjustable
- CTCSS/DCS
- Busy channel lock

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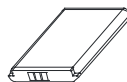
SUPPLIED ACCESSORIES

Carefully unpack the portable radio. We suggest that you check the following items before you throw away the packing materials.

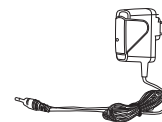
STANDARD SUPPLIED ACCESSORIES

ITEM	QTY
Portable radio	1
Li-ion battery pack(3.7V)	1
Battery charger	1
Belt clip	1
External headset	1
User's manual	1

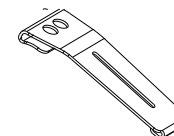
STANDARD SUPPLIED ACCESSORIES



Li-ion battery pack (3.7V)



Battery charger



Belt clip



External headset



User's manual

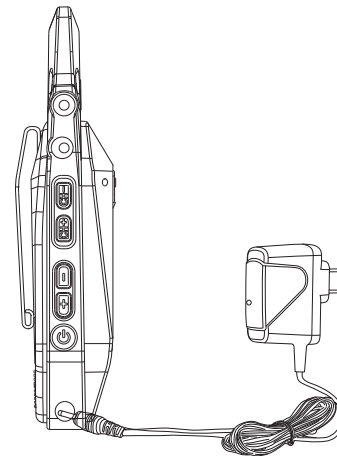
CHARGING NOTES (1)

Charging the Li-ion battery pack:

- Battery packs are not charged when they are shipped. Charge them before using.
- Initially charging the battery pack after purchase or extended storage (longer than 2 months) will not bring the battery pack to its greatest capacity, which can be done only after repeated charging and discharging two or three times.
- The average use time of battery pack is 15 hours
- After the battery is charged to its highest capacity, and then use it on the radio. If the radio still shows low power, please change a new battery pack.
- Do not short-circuit the battery terminals or throw the battery into fire.
- Never attempt to remove the casing from the battery pack.

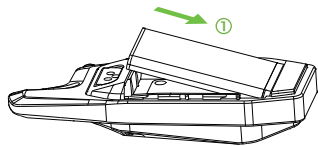
CHARGING NOTES(2)

- Insert the input plug into 110V power, supply the indicator turns red; insert the output plug into the battery jack, the indicator turns orange; when finishing charging, the indicator turns red again.



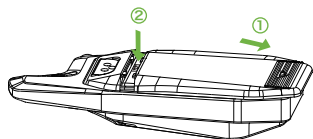
ATTACHING BATTERY PACK

- When attaching, take out the battery cover from the radio, put the battery into the radio aligning to the battery slot, then attach the battery cover.



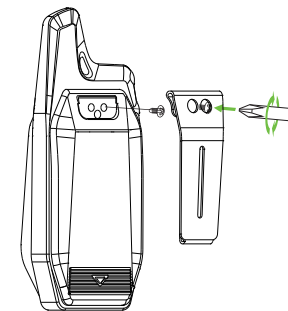
- When releasing, turn off the radio firstly.

- 1 Take out the battery cover;
- 2 Pull "UP" to take out the battery.



INSTALLING BELT CLIP

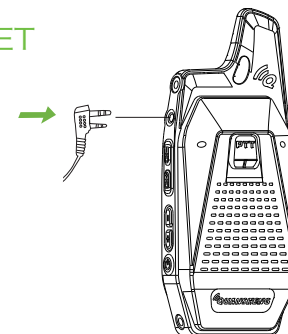
- Attach the belt clip to the radio as illustrated on the right.



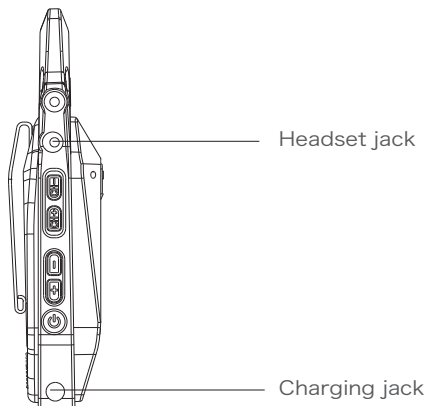
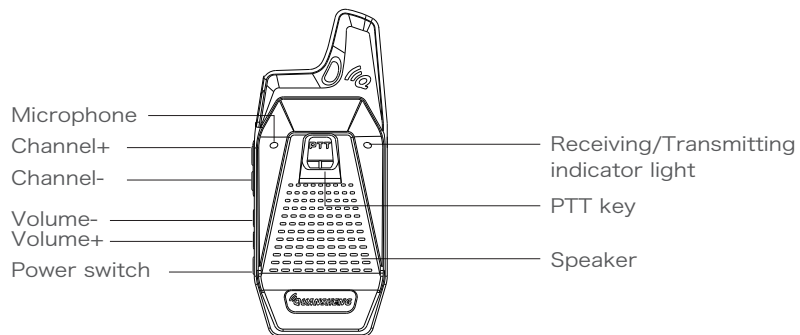
INSTALLING EXTERNAL HEADSET

- Insert the headset plug into the headset jack.

NOTE: Please use the specified headset to make sure good communication.



DIAGRAM



BASIC OPERATION

Power switch

- Press “Power switch” more than 2 seconds, the power is on. Operate again, the power is off.
- Transmitting
 - 1 Press and hold “PTT” key, then speak into the microphone in normal speaking tone. Please keep the microphone 2.5cm away from your lips to make sure good communication with the receiver.
 - 2 Press “PTT” in the headset, then speak normally to make sure good communication with the receiver.
 - 3 Release “PTT” key to receive signals.

Channel up(+) /down(-) key

- Press key “CH+” or “CH-” to choose your desired channel, and there will be voice prompt of the current channel number.
- press key “CH+” or “CH-” more than 2s to scan upwardly or downwardly.

Volume “+” “-”

- Press key “+” or “-”, the volume is turned up or down, and there will be voice prompt of the current channel number.

Indicator

- Transmitting: Red LED Light
- Receiving: Green LED Light
- Standby: Green LED Light glitters every 5 seconds.

FUNCTION INSTRUCTION

Channel Scan

- 1 Press key "CH+" or "CH-" more than 2s to scan upwardly/downwardly.
- 2 Set it in the " Scan appending" via programming.
- 3 Press "PTT" to exit.

Note: When the scanning radio receives the signal, it stops in this channel if you press "PTT" ; It keeps scanning after the signal disappear in 5s if you do not press "PTT" .

Time-Out-Timer (TOT)

To limit the calling time, the radio will stop transmitting, and you will hear the warning tone if it transmits over the set time.

Low Power Alarm

Audibel tone will remind you when the battery is exhausted.

FUNCTION INSTRUCTION

Squelch Level Adjustable

It helps to minimize interference from undesired weak signals and helps weak signals to be heard.

CTCSS/DCS

Set up work groups/users with unique CTCSS/DCS to prevent disturbance in the same frequency.

CTCSS: 50 groups DCS: 208 groups.

Busy Channel Lock

When it is on, it is forbidden to transmit if receiving the signals.

You will hear "Beep" when press "PTT" .

CTCSS

01	67.0	18	118.8	35	183.5
02	69.3	19	123.0	36	186.2
03	71.9	20	127.3	37	189.9
04	74.4	21	131.8	38	192.8
05	77.0	22	136.5	39	196.6
06	79.7	23	141.3	40	199.5
07	82.5	24	146.2	41	203.5
08	85.4	25	151.4	42	206.5
09	88.5	26	156.7	43	210.7
10	91.5	27	159.8	44	218.1
11	94.8	28	162.2	45	225.7
12	97.4	29	165.5	46	229.1
13	100.0	30	167.9	47	233.6
14	103.5	31	171.3	48	241.8
15	107.2	32	173.8	49	250.3
16	110.9	33	177.3	50	254.1
17	114.8	34	179.9		

DCS

01	D023N	19	D116N	37	D225N	55	D325N
02	D025N	20	D122N	38	D226N	56	D331N
03	D026N	21	D125N	39	D243N	57	D332N
04	D031N	22	D131N	40	D244N	58	D343N
05	D032N	23	D132N	41	D245N	59	D346N
06	D036N	24	D134N	42	D246N	60	D351N
07	D043N	25	D143N	43	D251N	61	D356N
08	D047N	26	D145N	44	D252N	62	D364N
09	D051N	27	D152N	45	D255N	63	D365N
10	D053N	28	D155N	46	D261N	64	D371N
11	D054N	29	D156N	47	D263N	65	D411N
12	D065N	30	D162N	48	D265N	66	D412N
13	D071N	31	D165N	49	D266N	67	D413N
14	D072N	32	D172N	50	D271N	68	D423N
15	D073N	33	D174N	51	D274N	69	D431N
16	D074N	34	D205N	52	D306N	70	D432N
17	D114N	35	D212N	53	D311N	71	D445N
18	D115N	36	D223N	54	D315N	72	D446N

DCS

73 D452N	91 D627N	109 D032I	127 D132I
74 D454N	92 D631N	110 D036I	128 D134I
75 D455N	93 D632N	111 D043I	129 D143I
76 D462N	94 D654N	112 D047I	130 D145I
77 D464N	95 D662N	113 D051I	131 D152I
78 D465N	96 D664N	114 D053I	132 D155I
79 D466N	97 D703N	115 D054I	133 D156I
80 D503N	98 D712N	116 D065I	134 D162I
81 D506N	99 D723N	117 D071I	135 D165I
82 D516N	100 D731N	118 D072I	136 D172I
83 D523N	101 D732N	119 D073I	137 D174I
84 D526N	102 D734N	120 D074I	138 D205I
85 D532N	103 D743N	121 D114I	139 D212I
86 D546N	104 D754N	122 D115I	140 D223I
87 D565N	105 D023I	123 D116I	141 D225I
88 D606N	106 D025I	124 D122I	142 D226I
89 D612N	107 D026I	125 D125I	143 D243I
90 D624N	108 D031I	126 D131I	144 D244I

DCS

145 D245I	163 D346I	181 D464I	199 D662I
146 D246I	164 D351I	182 D465I	200 D664I
147 D251I	165 D356I	183 D466I	201 D703I
148 D252I	166 D364I	184 D503I	202 D712I
149 D255I	167 D365I	185 D506I	203 D723I
150 D261I	168 D371I	186 D516I	204 D731I
151 D263I	169 D411I	187 D523I	205 D732I
152 D265I	170 D412I	188 D526I	206 D734I
153 D266I	171 D413I	189 D532I	207 D743I
154 D271I	172 D423I	190 D546I	208 D754I
155 D274I	173 D431I	191 D565I	
156 D306I	174 D432I	192 D606I	
157 D311I	175 D445I	193 D612I	
158 D315I	176 D446I	194 D624I	
159 D325I	177 D452I	195 D627I	
160 D331I	178 D454I	196 D631I	
161 D332I	179 D455I	197 D632I	
162 D343I	180 D462I	198 D654I	

SPECIFICATIONS

GENERAL

Frequency range	UHF:400-470MHz
Rated voltage	DC3.7V(Rechargeable Li-ion battery)
Memory channel	99Channels
Antenna impedance	50Ω
Working manner	Same frequency single operation or different frequency single operation
Dimensions	89mmX46mmX20mm

TRANSMITTER

Output power	2W
Modulation	11KΦ F3E
Maximum frequency deviation	≤2.5KHz
Spurious radiation	<7.5uW
Preemphasis character	6dB/Per fold
Emission current	≤ 1.3A
CTCSS/DCS deviation	0.375KHz±50Hz
Modulation sensitivity	12mV
Modulation distortion	≤5%

RECEIVER

Sensitivity	-123dBm/-121dBm(12dB SINAD)
Modulation receiver bandwidth	5KHz
Audio frequency power	160mv/32Ω
Audio distortion	10%
Blocking	≥85dB
Intermodulation	60dB
Adjacent channel selectivity	70/50dB
Spurious rejection	≥65dB

All stated specifications are subject to change without notice or obligation.

SAFETY TRAINING INFORMATION



Your Fujian Nanan Quansheng Electronics Co., Ltd. radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as “Occupational Use Only”, meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards. This radio is NOT intended for use by the “General Population” in an uncontrolled environment.

This radio has been tested and complies with the FCC RF exposure limits for “Occupational Use Only”. In addition, your Fujian Nanan Quansheng Electronics Co., Ltd. radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

- ▮ FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- ▮ American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- ▮ American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields— RF and Microwave.



The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to assure that this radio operates with the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

During transmissions, your Fujian Nanan Quansheng Electronics Co., Ltd. radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. **DO NOT** operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Occupational/Controlled Use

The radio transmitter is used in situations in which persons are exposed as consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

Attention:

This radio complies with IEEE and ICNIRP exposure limits for occupational/controlled RF exposure environment at operating duty factors of up to 50% and is authorized by the FCC for occupational use only. An appropriate warning label is affixed to all units. In order to comply with RF exposure requirements, a minimum distance of 2.5cm must be maintained when held-to-face, and body-worn operations are restricted to the approved original accessories (belt clip).

Do not use this device when antenna shows obvious damages