16.2x11cm 空白封面 Thanks for buying the transceiver.

This transceiver offers latest design, multi-functionality, stable performance and easy operation. We believe you will be pleased with the high quality and powerful functions.

READ THIS IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION BEFORE USING YOUR PORTABLE TWO-WAY RADIO.

PRECAUTIONS

This transceiver is with excellent design and advanced technology.

Please follow the below suggestions and warning to assist you to carry out the responsibilities on warranty terms, and learn the safety before using the transceiver.

- 1. Please keep the transceiver and accessories out of the reach of children.
- 2. Do not disassemble the transceiver to avoid the possibility of damaging by a non-professional.
- **3.** Please ONLY use supplied batterypack and charger to avoid the possibility of damaging the transceiver.
- 4. Please ONLY use supplied antenna to avoid the possibility of damaging the transceiver.
- 5. Neither expose the transceiver directly to the sunlight nor in the overheated places for a long time.
- **6.** Keep the transceiver away from the dusty or humid places.
- **7.** Clean the transceiver with a mild brush/cloth or detergents instead of the aggressive chemical material.
- 8. Do not transmit before well installing the antenna.
- **9.** If any abnormal odor or smoke is detected from the transceiver, please power it off immediately, then remove the batterypack from the transceiver. And contact your dealer.

NOTE \land

- >> All the above mentioned suggestions and warnings are compatible for all series transceivers and accessories.

 Please contact your dealer about any upset operation.
- >> Manufacturer is not responsible for any safety or operation problems, which are caused by using the incompatible accessories or parts.

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Learning Equipment

Main Features

- 1. Adaptable Frequency Range: different frequency ranges suitable for different countries or areas
- 2. Bandwidth(25KHz/12.5KHz)
- 3. CTCSS/DCS Scan
- 4. VOX
- **5.** 107 Groups of CTCSS, 50 Groups of DCS
- 6. Non-standard CTCSS/DCS supported
- **7.** Multi Sidekey Settings
- 8. Single Tone Pulse Frequencies
- 9. 2100Hz/1750Hz/1000Hz/1450Hz
- 10. 16 Groups of Channels, 256 memory channels
- 11. CH, FREQ. CH Name selectable

Specification

Whole Radio	
Frequency Range	Different frequency ranges suitable for different countries or areas:
Step	5KHz / 6.25KHz / 10KHz / 12.5KHz / 25KHz / 50KHz / 100KHz
Memory Channels	256
Work Mode	F2D / F3E
Work Temperature	-20°C∼40°C
Antenna Impedance	50Ω
Power Supply	7.4VDC
Weight	340g
Size	132×62×37(mm)

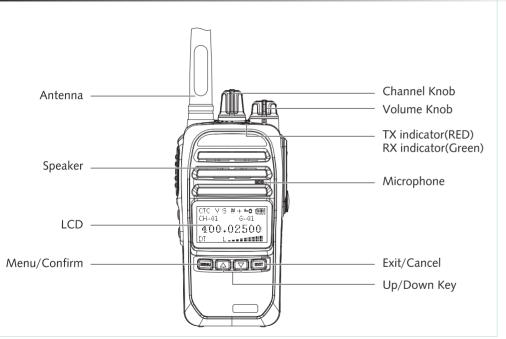
Specification

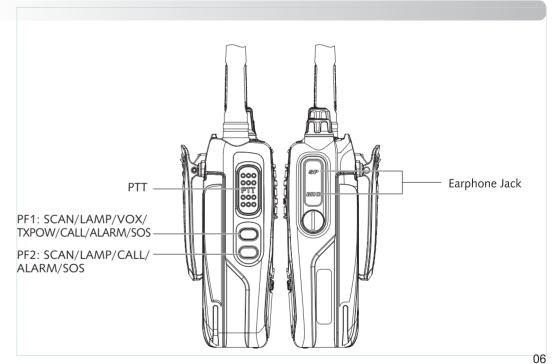
Receiver	Wide Band	Narrow Band
Adjacent Channel Selectivity	≤70dB	≤60dB
Inter-modulation	≤65dB	≤60dB
Spurious Response	≤70dB	≤70dB
Audio Response	+1~3dB (0.3~3KHz)	+1~3dB (0.3~2.55KHz)
Squelch Rate	≥45dB	≥40dB
Audio Distortion	≤!	5%
Output Power	≤50	0mW
Sensitivity	· · · · · · · · · · · · · · · · · · ·	F : 0.25μV SINAD)

nd	Transmitter	Wide Band	Narrow Band			
	Modulation	on 16K F3E 11k				
	Adjacent Channel Power	≥70dB	70dB ≥60dB			
	Spurious	≥60dB	≥60dB			
Hz)	Audio Response	+1~3dB (0.3~3KHz)	+1~3dB (0.3~2.55KHz)			
	Max Frequency Offset	±5KHz	±2.5KHz			
	Frequency Stability	±2.5ppm				
	Audio Distortion	Audio Distortion ≤5%				

Structure Learning LCD Please refer to the description for the different icons. W/N Band -Shift direction Battery save — VOX — Keypad lockout CTC V S W + 🗝 📖 CTCSS/DCS Battery voltage -CH-01 G-01-Current channel Current channel group 400.02500 Current frequency -DT/QT — Status TX power -

Structure Learning





Basic Operations

Volume Adjust/Power-ON/OFF

- 1. Rotate the power switch / volume control knob clockwise to conduct the power supply. Then adjust the volume by rotating the knob. Rotate the knob counter-clockwise to power off.
- 2. Rotate the encoder knob to select the desired channel. Clockwise rotation can raise the channel number while counter-clockwise rotation lowers the number. The encoder also can hear the annoucement of the current channel number.

Ouick Search

Use the Up/Down button to quickly search the functions and parameter listed.

Channel Groups

There are 16 groups of channels selectable. Please rotate by channel knob.

Channel Number

It supports 256 memory channels selectable. Please use the Up/Down button to switch the channel.

Key lockout

Press EXIT key for 2 seconds to lock or unlock the keypad.

Single Tone Pulse

Press PTT+PF1 to send the frequency for single tone pulse.

07

Menu List and Operation Guide

Backlight (ABR) --- MENU 1

Feature Description: Set the backlight lighting time.

Option: OFF/1-30 seconds, Step: 1 second

Default: 10 seconds

Setting Frequency step (STEP) --- MENU 2

Feature Description: Set the VFO frequency step

Option: 5K/6.25K/12.5K/25K/50K/100K

Battery Save (SAVE) --- MENU 3

Turn OFF/ON the battery save

Option: ON/OFF
Default: ON

Default: 12.5K

_

Bandwidth (W/N) --- MENU 4

Feature Description: This transceiver can work in wide bandwidth FM(±25K) or narrow bandwidth FM

 $(\pm 12.5K)$

Selection: Wide/Narrow

Default: Wide

Uδ

Output Power (TXP) --- MENU 5

Function Description: Setting the output power

Option: HIGH/LOW

Default: HIGH

VOX (VOX) --- MENU 6

Function Description: The VOX does not have to press the [PTT] key each time when transmitting. Once the VOX circuit detects that you are talking to the microphone, the device will automatically enter the transmitting state. Please select the VOX gain when using it. In order to ensure the continuity of VOX detection, you can also set the voice control delay in menu 7.

Option: off/1-9 level

Default: Off

VOX Delay (VOX-DLY) --- MENU 7

Function Description: Set the delay time to turn off the PTT after the VOX transmission when VOX turn on.

Options: OFF / 1-5, 1 second per level.

Default: OFF

09

Squelch (SQL-LE) --- Menu 8

Feature Description: This function to make the speaker mute when there is no signal. If the squelch level setting is correct, it is only heard the sound truly receives the signal. The higher level the squelch requires the stronger signal.

Option: 0-9

Default: 5

Transmit prompt setting (ROGER) --- MENU 9

Function description: Set the prompt tone when the radio presses PTT to transmit and release PTT to end transmission.

Options: OFF / BOT (prompt tone when pressing PTT) / EOT (prompt tone when released PTT) / BOTH (both when pressed and released PTT Beep)

Default: OFF

Transmit Overtime Timer (TOT) --- MENU 10

Feature Description: Time out timer refers to set the limited time each transmitting.

Selection: 15-900 seconds, step 15 seconds

Default: 30 seconds

Time Over Alarm (TOA) --- MENU 11

There is indication flashing as alarm when the time by TOT is closer.

Option: OFF/1S-10S

Default: Off

Voice Guide (VOICE) --- MENU 12

Feature Description: To open or close the menu operating prompt.

Option: OFF/ENGLISH/CHINESE

Default: ENGLISH

Beep(BEEP) --- MENU 13

Feature Description: Beep is an indication for checking the transceiver operation prompt, operation error

or fault.

Selection: On/Off

Default: On

Busy Channel Lockout (BCL) --- MUNU 14

Feature Description: If the selected channel or frequency is occupied by the other transceivers, when you press PTT key to transmit after activating this function, the transceiver will not transmit, in order to avoid the conflict with the other communicating transceivers.

Option: ON/OFF
Default: OFF

RX DCT (RX-DCT) --- MENU 15

Feature Description: Set DCS/CTCSS receive

Option: OFF/50 groups standard CTCSS/Non-standard 60.0-259.9Hz

105 groups DCS/Non-standard DCS(000-777)

Default: OFF

NOTE \land

>> Please go to software program the non-standard DCS/CTCSS. CTSCC/DCS positive code and DCS Reverse code are set by Tone menu then switch by PF2.

TX DCT (TX-DCT) --- MENU 16

Option: OFF/50 groups standard CTCSS/Non-standard 60.0-259.9Hz

Default: OFF

NOTE 🔨

>> Please go to software program the non-standard DCS/CTCSS. CTSCC/DCS positive code and DCS Reverse code are set by Tone menu then switch by PF2.

Scan Method (SC-REV) --- Menu 17

Feature Description: Set Scan method

Option: TO/CO/SE

Default: SE

TO: After searching signals, the transceiver will continue scanning if without any operation within 5 seconds. Press PTT key, the transceiver transmits the appointed channel by encoder. Scan will stop after transmitting.

CO: The transceiver will stop scanning when searching a signal. It will resume after 5 seconds when the signal disappears. Press PTT key, the transceiver will transmit the appointed channel by encoder. It will stop scanning after transmitting.

SE: Scan will stop when receiving a signal. Press PTT key, the transceiver will transmit the searched channel.

Default: TO

Mute Mode (SP-MUTE) --- MENU 18

Feature Description: This function is to set the mute mode to activate the speaker in receiving mode.

Option: QT/QT*T/QT+T

QT: When the transceiver is set to this mode, all signals on the same QT frequency will activate the speaker.

QT*T: When this mode is active, only those signals which either meet QT requirements or DTMF requirements will activate the speaker.

QT+T: only those signals which both satisfy the requirements of QT andwhose DTMF carrier wave signal also match the transceiver will activate the speaker in this mode.

Default: QT

DTMF Sidetone (DTMF-ST) --- MENU 19

Feature Description: In transmission mode, the transceiver transmits ANI ID code or DTMF code, if the speaker can receive the DTMF tone.

Option: OFF/DT-ST/ANI-ST/DT+ANI

Default: OFF

Caller ID Transmission Mode (PTT-ID) --- MENU 20

Feature Description: This function is to select the caller iD transmission mode.

Option: OFF/BOT/EOT/BOTH

BOT: Transmitting caller ID when pressing PTT key. EOT: Transmitting caller ID when releasing PTT key.

BOTH: Transmitting caller ID when pressing or releasing PTT key.

Default: OFF

Caller ID Edit (ID-EDIT) --- MENU 21

Feature Description: This function is to edit caller ID of the transceiver.

Option: Numerals(0-9)

Default: 101

Editing Methods: a. Via supplied wouxun programming software

b. Via Keypad

Keypad editing: When the two-way radio is in standby, press the MENU key to enter the menu, and press the up/down key to select the menu 21 "ID-EDIT", press the MENU key to enter the ID code edit, press the up/down key to select the 0-9 digits, press the side key PF2 to select the next digit to edit, press the MENU key confirms the edit of the identity code.

Caller ID Transmission Delay (ID-DLY) --- MENU 22

Feature Description: The time distance between pressing PTT key and starting to transmit caller ID.

Option: OFF/100ms-3000ms, each 100ms per level.

Default: 1000ms

Ringing Time (RING) --- MENU 23

Feature Description: The lasting time for ringing before speaking when receiving the signals.

Option: OFF/1-10s, each 1s per level.

Default: 5s

Offset Setting (OFFSET) --- MENU 24

Feature Description: Setting on the Frequency Offset.

Option: 000. 00000-999. 99750MHz

Default: 000. 00000MHz

Frequency Shift Direction (SFT-D) --- Menu 25

Feature Description: This function is to set the transmission frequency is higher(+) or lower(-) than the reception frequency.

Selection: Off/+/-

Channel Name (CH-NAME) --- MENU 26

Feature Description: Name Editing for memory channels.

Option: 26 Capital and Lower-case Letters, 0-9 Arabic Numbers and Special Characters.

Default: None

Editing: 1. Editable via programming software or through the keypad manually.

Editing through the keypad.

Editing through the keypad: In standby, press menu and up/down to choose Menu 26"CH-NAME".

Then press menu enter the channel name editing, press up/down choose 26 Capital and Lower-case Letters, 0-9 Arabic Numbers and Special Characters.

Press sidekey PF2 choose next position, press menu confirm the editing.

Channel Memory (MEM-CH) --- MENU 27

Feature Description: Save the specified channels to the radio and get it quicker if needed.

Option: 256 memory channels

Default: CHGP1/CH1

Channel Delete (DEL-CH) --- MENU 28

Delete the channel you don't need.

Option: 16 channels in 16 groups

Default: CHGP01 CH01

Keyboard editing: When the transceiver is in standby, press the MENU to enter, press the up/down button to select the menu 28 "DEL-CH", press the MENU button to enter the channel delete, and press the up/down button to select the current channel group. For 1-16 channels, rotate the channel knob to select the 1-16 channel group, and press the MENU key to confirm the editing of the channel deletion.

NOTE 🛆

>> Note: When the current channel selected by pressing the up and down keys is an empty channel, NULL will be displayed at the back.

Priority Channels (PRI-CH) --- MENU 29

Feature Description: Choose and set the programming channels as priority channel.

Option: 16 channels in 16 groups

Default: CHGP01 CH01

Two-way operation keyboard editing: When the two-way radio is in standby, press the MENU key to

enter the menu, and press the up / down key to select the menu 29 "PRI-CH", press the MENU button to enter the editing of the priority channel, press the up/down button to select the 1-16 channels in the current channel group, and rotate the code Select the 1-16 channel group, and press the MENU button to confirm the editing of the priority channel.

NOTE 🛆

>> When the current channel selected by pressing the up and down keys is an empty channel, NULL will be displayed at the back.

Priority Scan (PRI-SCN) --- MENU 30

Feature Description: Switch for turning ON or OFF to scan the priority channels.

Option: ON/OFF
Default: OFF

Single Tone Setting (S-Tone) --- MENU 31

Feature Description: Set the single tone

Option: 1000Hz/1450Hz/1750Hz/2100Hz

Default: 1750Hz

Feature Description: It is the save modes for the detected CTCSS/DCS tones in the frequency mode.

Option: RX-CT, T-CT, RT-CT

R-CT: Stored in the receiver after scanning the CTCSS/DCS.

T-CT: Stored in the transmission after scanning the CTCSS/DCS.

RT-CT: Stored in the receiving and transmitting after scanning the CTCSS/DCS.

Default: R-CT

Power on message (PONMSG) --- Menu 33

Function description: Set the screen displayed when the radio is turned on.

Option: WELCOM / BATT-V

Default: WELCOM

NOTE \land

>> WELCOM interface can be edited by programming software.

Scan Add (SCN-ADDA) --- Menu 34

Function Description: Setting the programming channels to be on the list of the scanning channels.

Optional: 16 channels in 16 channel groups

Default: CHGPO1 CH01

Two way radio editing: When the two way radio is in standby, press the MENU button to enter the menu, press the up/down button to select the 34 menu "SCN-SDD", press the MENU button to enter the scan and edit, and press the up/down button to select For 1-16 channels, select the 1-16 channel group by channel knob, and press the MENU key to confirm the edits added by scanning.



>> When the current channel selected by pressing the up and down keys is an empty channel, NULL will be displayed at the back.

Scanning group number (SCN-GP) --- Menu 35

Function description: The two-way radio stored 256 channels into 16 groups, each group has 16 channels.

The channel scan group can be set to specify which group of channels to scan when the walkie-talkie starts scanning.

Options: ALL1-16

Default: ALL

Scanning CTCSS/DCS (SCN-CD) --- MENU 36

Feature Description: Selection for CTCSS or DCS scanning.

Option: CTCSS Scanning, DCS Scanning

Default: CTCSS Scanning

NOTE \land

- >> CTCSS/DCS scanning only operates in the receiving state. During subtone scanning, you can switch between CTCSS/DCS positive code / DCS reverse code by pressing the side key PF2.
- >> When the CTCSS/DCS is recognized, it will stop at this subtone code. At this time, you can press MENU to confirm and save. The CTCSS/DCS save mode can be set through menu 32 " QT Save (SC-QT)".

Auto Lockout (AUTO LOCK) --- MENU 37

Keypad will be locked after 30 seconds.

Option: ON/OFF Default: OFF

Lock Mode (LOCKMODE) --- MENU 38

Feature Description: Settings about locking the radios in different modes.

Option: Key/KEY+PTT/KEY+ENC/ALL.

KEY: Lock the keyboard, it locks the keypad including the side keys PF1, PF2 and PF3

KEY+PTT: Lock the keyboard, it locks the keypad and encoders including the side keys PF1, PF2 and PTT. KEY+ENC: Lock the keyboard, it locks the keypad and PTT including the side keys PF1, PF2 and Channel knob.

AAL: Lock the all, it locks the above all options.

Default: KEY

ID Groups (CALL-ID) --- MENU 39

Feature Description: Setting the groups for calling.

Option: 1 to 20 groups

Default: Group 1

Setting stopwatch timer (SECOND) --- MENU 40

Function description: Set the radio stopwatch function on or off.

Options: ON / OFF Default: OFF



>> When the stopwatch function is turned on, press the EXIT key to turn on/off the stopwatch timing.

Side Key PF1 Setting --- Menu 41

Function description: Set to define the function of radio side keys.

Options: SCAN/LAMP/VOX/TXPOW/CALL/ALARM/SOS

Default: Short press Scan Long press: SOS

NOTE \land

>> The long / short press function can be set separately.

Side Key PF2 setting --- Menu 42

Function description: Set to define the function of radio side keys.

Options: SCAN /LAMP / CALL / ALARM / SOS Default: Short press: /LAMP Long press: Squelch

NOTE \land

>> Long press is only enabled for the squelch function by default.

Repeating Reception (RPT-RCT) --- MENU 43

Feature Description: It is the reception confirmation when the receiving repeater is off during the transceiver is receiving the repeating signals.

Option: ON/OFF

Default: OFF

Voltage Detect (DC-VLT) --- MENU 44

It detects the voltage status.

Tone Scanning Detect (QT-SW) --- MENU 45

Check the detected tones are compatible when scanning.

Option: ON/OFF
Default: OFF

Channel Mode (CH-MDF) --- MENU 46

Switching work mode.

Option: FREQ/CHFREQ/CH/NAME

Default: CH

Reset (RESET) --- MENU 47

Reset the parameters on the radios.

Option: VFO/ALL

Default: VFO

VFO: All the menus are back to factory settings.

ALL: All the parameters and menu are back to factory settings.

Specification Sheet

Appendix 1

CTCS	SS								
1	67.0	11	94.8	21	131.8	31	171.3	41	203.5
2	69.3	12	97.4	22	136.5	32	173.8	42	206.5
3	71.9	13	100.0	23	141.3	33	177.3	43	210.7
4	74.4	14	103.5	24	146.2	34	179.9	44	218.1
5	77.0	15	107.2	25	151.4	35	183.5	45	225.7
6	79.7	16	110.9	26	156.7	36	186.2	46	229.1
7	82.5	17	114.8	27	159.8	37	189.9	47	233.6
8	85.4	18	118.8	28	162.2	38	192.8	48	241.8
9	88.5	19	123.0	29	165.5	39	196.6	49	250.3
10	91.5	20	127.3	30	167.9	40	199.5	50	254.1

Specification Sheet

Appendix 2

DC	S									76	D454N	92	D624N
1	DN017	16	D072N	31	D156N	46	D252N	61	D346N	77	D455N	93	D627N
2	D023N	17	D073N	32	D162N	47	D255N	62	D351N	78	D462N	94	D631N
3	D025N	18	D074N	33	D165N	48	D261N	63	D356N	79	D464N	95	D632N
4	D026N	19	D114N	34	D172N	49	D263N	64	D364N	80	D465N	96	D645N
5	D031N	20	D115N	35	D174N	50	D265N	65	D365N	81	D466N	97	D654N
6	D032N	21	D116N	36	D205N	51	D266N	66	D371N	82	D503N	98	D662N
7	D036N	22	D122N	37	D212N	52	D271N	67	D411N	83	D506N	99	D664N
8	D043N	23	D125N	38	D223N	53	D274N	68	D412N	84	D516N	100	D703N
9	D047N	24	D131N	39	D225N	54	D306N	69	D413N	85	D523N	101	D712N
10	D050N	25	D132N	40	D226N	55	D311N	70	D423N	86	D526N	102	D723N
11	D051N	26	D134N	41	D243N	56	D315N	71	D431N	87	D532N	103	D731N
12	D053N	27	D143N	42	D244N	57	D325N	72	D432N	88	D546N	104	D732N
13	D054N	28	D145N	43	D245N	58	D331N	73	D445N	89	D565N	105	D734N
14	D065N	29	D152N	44	D246N	59	D332N	74	D446N	90	D606N	106	D743N
15	D071N	30	D155N	45	D251N	60	D343N	75	D452N	91	D612N	107	D754N

Trouble Shooting

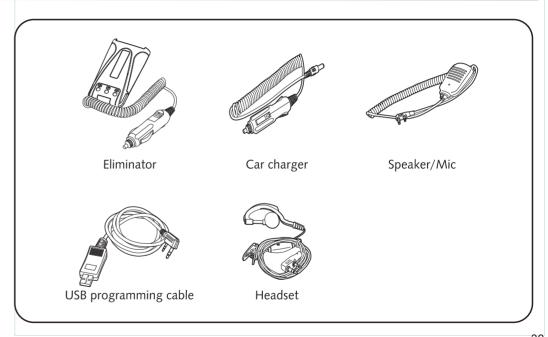
Please double check the transceiver according to the trouble shooting in the following table before recognizing the transceiver as the fault. And please rest the whole transceiver if the following problems happen often in order to correct the improper operations.

PROBLEM	SOLUTION
Cannot be powered on.	 Please change a new battery or re-change as the battery may be out of change. Please take out the battery and re-install as the battery may be installed incorrectly.
The time for battery working is not so long as usual.	 Please change a new battery as the battery life is over. Make sure the battery is fully charged before taking it out of the charger.
The indicator on the transceiver keeps flashing green, but there is no audio heard.	 Make sure the volume is clear enough for communication. Check whether the programmed CTCSS or DCS is compatible during the communication. Make sure the mute mode is correct setting.

Trouble Shooting

PROBLEM	SOLUTION
The keypad is useless.	Check whether the keypad is programmed to keylock.Check whether there are any keys stuck.
The transceiver automatically transmit even there is no press on PTT.	>> Check whether VOX is on, and the level is too low.
Some functions are not able to be programmed.	>> Check whether the transceiver works in the channel mode as some functions should be programmable via software.
There is other audio interrupted when communication.	>> Change the CTCSS or DCS.

Optional accessories



Announcement

We endeavors to achieve the accuracy and completeness of this manual, but is not liable for any possible omission and printing errors. All the above specifications are subject to change us without prior notice.

Version: KG-978-2003

