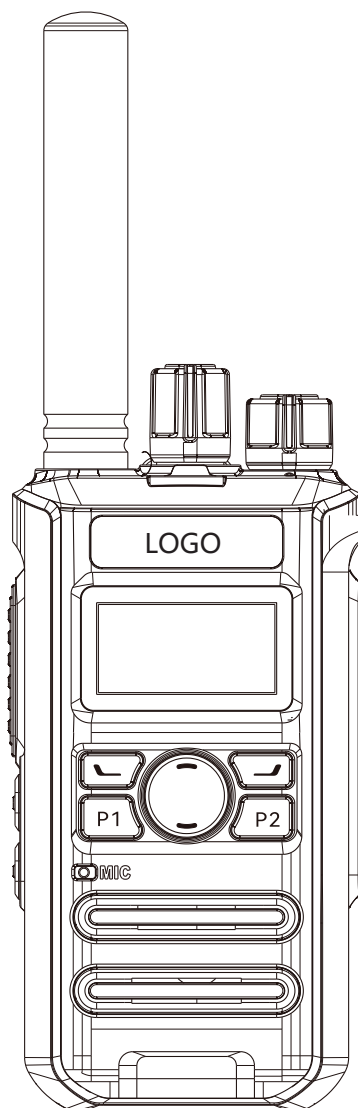




DP300
User's Manual

Unboxing and Product Inspection

Thank you for choosing our TWO WAY RADIO. Before using the product, please:

- Check the product packaging and contents for any signs of damage.

Charging Instructions and Precautions

Please use the designated charger provided by our company to charge the battery, and follow the methods below.

Note: Please turn off the radio before charging.

- Insert the charger plug into a power outlet.

Desktop Charger: Insert the battery or the radio (with battery installed) into the desktop charger. Ensure the battery contacts align properly with the charger contacts.

- The red indicator of the charger stays on, and the device displays []. The red LED remains steady on.
- When the device displays [], and the red light on the charger turns green, indicating that the battery is fully charged.
- Once charging is complete, unplug the charger from the power outlet and remove the battery.
- Type-C Charging: Connect the Type-C cable to the battery's Type-C charging port.
- The device displays [], and the red LED remains steady on.
- When the device displays [], the LED changes from red to steady green, indicating that the battery is fully charged.
- When the battery level indicator on the screen is flashing, the battery is charging. When it stops flashing, the battery is fully charged.

Battery Information

- The battery is not fully charged at the factory. Please charge it before first use.
- When charging for the first time after purchase or after long-term storage (over two months), the battery may not reach full capacity.
- Full capacity can be achieved after two or three complete charge/discharge cycles.

Once the battery is fully charged, please stop charging and remove it from the charger. Otherwise, overcharging may shorten or damage the battery life.



Notes:

- The ambient temperature during charging should be between 5°C and 40°C. Charging outside this temperature range may result in incomplete charging. In cold weather, please prepare spare batteries. Do not discard unusable batteries, as they may still work at room temperature.
- When the battery contacts are covered with dust or stains, it may affect charging or normal use. Please clean the contacts before charging.
- Turn off the radio before charging, as leaving it on may interfere with proper charging.
- Do not charge the battery or radio when they are wet. Ensure they are dry before charging.
- If the battery capacity cannot be restored to normal operating capacity after being properly charged, it means that the battery life has expired. Please replace the battery.

Suitable Battery Type

Use only the specified batteries from our company for charging. Using other types of batteries may result in explosion and cause personal injury.

Safety Precautions

- Do not dispose of batteries in fire.
- Do not dismantle the battery pack casing without authorization.

Battery Storage

- Batteries naturally self-discharge. If the battery will not be used for more than 90 days, please fully charge it before storage to prevent damage from excessive self-discharge.
- After storing for a period, please recharge the battery to avoid capacity loss due to excessive self-discharge. It is recommended to recharge the battery after 6 months of storage.
- Please store the battery in a cool, dry place at room temperature to reduce self-discharge.

Installing/Removing Accessories

Installing/Removing the Battery Pack

Note:

- Do not short-circuit the battery terminals or dispose of the battery in fire.
- Do not attempt to remove the battery pack shell.
- Do not install the battery pack in hazardous environments, otherwise, sparks may cause an explosion.

Installation: Insert the battery pack into the radio's battery compartment and push it forward until you hear a "click."

Removal: Ensure the radio is turned off, then pull down the battery clasp at the bottom of the radio. Push the battery downward to release the top part of the battery from the radio.

Installing the Antenna

Hold the antenna base and screw it clockwise into the top interface of the radio until it is securely tightened.

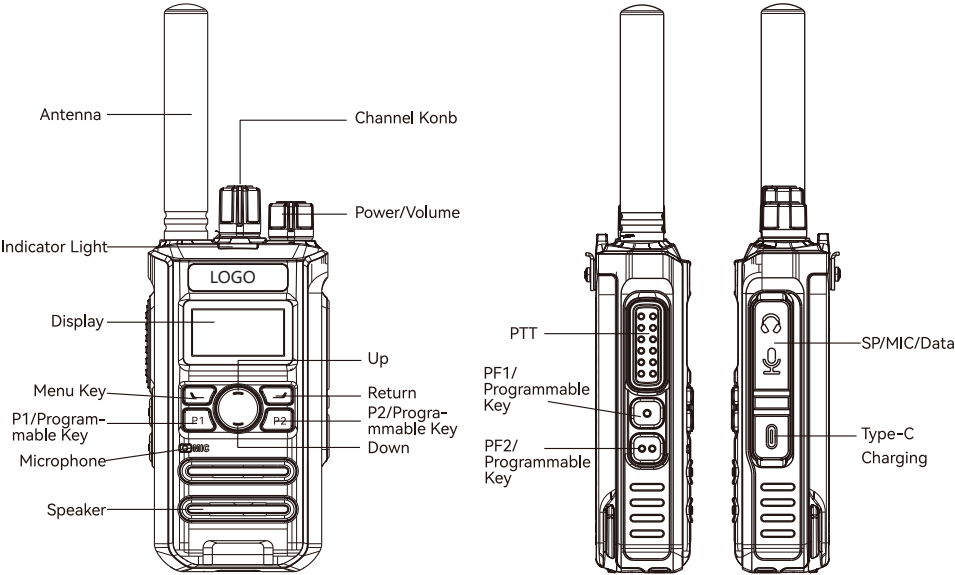
Installing/Removing the Belt Clip

If necessary, you can lock the included belt clip into the screw holes on the back of the battery pack for easy carrying.
To remove the belt clip, just unscrew the two screws.

Installing the Shoulder Strap

Thread the shoulder strap through the middle loop of the radio.

Getting to Know the Device



Character Description

Number	Character	Character description
1	v	VOX
2		Analog channel
3		Digital channel
4		Keyboard lock
5		Battery level display
6		Transmit and receive signals
7	CH	Channel
8	01	Number of channel
9	Zone ONE	Zone

Basic Operations

Power On/Off

- Power On: Rotate the [power switch/volume control] clockwise until you hear a "click." The screen lights up and announces the current channel.
- Power Off: Rotate the [power switch/volume control] counterclockwise until you hear a "click" to turn off the radio.

Note:

If your radio is not turning on, please check the battery. Ensure the battery is charged and correctly installed.

If your radio still does not power on, please contact the distributor.

Adjusting the Volume

When the radio is powered on, rotate the power switch/volume control to adjust the volume.

Rotate clockwise to increase the volume and counterclockwise to decrease the volume.

PTT Key (Push-to-Talk)

To make a call, press and hold the [PTT] key while speaking into the microphone at a normal volume. Keep the microphone 3-4 cm from your lips.

Release the [PTT] key to receive. Adjust the volume as needed for optimal listening.

PF1 Key (Programmable Key)

Short press: No function, Scan on/off, Permanent Monitoring, Talk Around On/Off, High/Low Power, One-Touch Call 1-5, VOX on/off, Companding on/off, Lone Worker, Receiver-Only On/Off, Digital/Analog Switching, Key Lock, Zone Switching, Encrypt On/Off. The default setting is Lone Worker

Long press: No function, Scan on/off, Instant Monitoring, Permanent Monitoring, Talk Around On/Off, High/Low Power, Emergency Alarm, One-Touch Call 1-5, VOX On/Off, Companding On/Off, Lone Worker, Receiver-Only On/Off, Digital/Analog Switching, Key Lock, Zone Switching, Encrypt On/Off. The default setting is Zone Switching

PF2 Key (Programmable Key)

Short press: No function, Scan on/off, Permanent Monitoring, Talk Around On/Off, High/Low Power, One-Touch Call 1-5, VOX On/Off, Companding On/Off, Lone Worker, Receiver-Only On/Off, Digital/Analog Switching, Key Lock, Zone Switching, Encrypt On/Off. The default setting is High/Low Power

Long press: No function, Scan on/off, Instant Monitoring, Permanent Monitoring, Talk Around On/Off, High/Low Power, Emergency Alarm, One-Touch Call 1-5, VOX On/Off, Companding On/Off, Lone Worker, Receiver-Only On/Off, Digital/Analog Switching, Key Lock, Zone Switching, Encrypt On/Off. The default setting is Permanent Monitoring

P1 Key (Programmable Key)

Short press: No function, Scan on/off, Permanent Monitoring, Talk Around On/Off, High/Low Power, One-Touch Call 1-5, VOX On/Off, Companding On/Off, Lone Worker, Receiver-Only On/Off, Digital/Analog Switching, Key Lock, Zone Switching, Encrypt On/Off. The default setting is Digital/Analog Switching

Long press: No function, Scan on/off, Instant Monitoring, Permanent Monitoring, Talk Around On/Off, High/Low Power, Emergency Alarm, One-Touch Call 1-5, VOX On/Off, Companding On/Off, Lone Worker, Receiver-Only On/Off, Digital/Analog Switching, Key Lock, Zone Switching, Encrypt On/Off. The default setting is Emergency Alarm

P2 Key (Programmable Key)

Short press: No function, Scan on/off, Permanent Monitoring, Talk Around On/Off, High/Low Power, One-Touch Call 1-5, VOX On/Off, Companding On/Off, Lone Worker, Receiver-Only On/Off, Digital/Analog Switching, Key Lock, Zone Switching, Encrypt On/Off. The default setting is Scan on/of

Long press: No function, Scan on/off, Instant Monitoring, Permanent Monitoring, Talk Around On/Off, High/Low Power, Emergency Alarm, One-Touch Call 1-5, VOX On/Off, Companding on/off, Lone Worker, Receiver-Only On/Off, Digital/Analog Switching, Key Lock, Zone Switching, Encrypt On/Off. The default setting is Key Lock

Operation & Description

LED Indicator

The LED indicator shows the radio's operational status.

Red LED: The radio is transmitting a signal.

Green LED: The radio is receiving a signal.

Function Description & Operation Instructions

1.Setting

(1) VOX

①VOX Level

The VOX level can be turned off or set to Level 1-3, with Level 1 being the lowest and Level 3 the highest.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select VOX, then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose "Off" or the desired level (Level 1-3).
- e. Press the [] key to confirm and save, then press the [] key to exit.

②VOX Delay

VOX Delay can be set to 0.5 seconds, 1 second, 1.5 seconds, 2 seconds, 2.5 seconds, 3.0 seconds, 3.5 seconds, 4.0 seconds, 4.5 seconds, or 5.0 seconds.

This setting determines how long the microphone remains active after you stop speaking to prevent cutting off the last words.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "VOX Delay", then press [] to enter the sub-menu.
- d. Press the [] or [] key to choose the desired delay time (0.5S-5S)
- e. Press the [] key to confirm and save, then press the [] key to exit.

(2) TOT

①TOT PreWarn

The TOT PreWarn setting allows you to set a pre-warning time from 1 second to 10 seconds, indicating how many seconds before the transmission limit is reached to remind you that you will be restricted from transmitting.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "TOT", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to select "TOT PreWarn", then press [] to enter the sub-menu.
- e. Press the [] or [] key to choose the desired pre-warning time(1S-10S)
- f. Press the [] key to confirm and save, then press the [] key to exit.

②Tx Time

Transmit time can be set from 0 seconds to 300 seconds, in intervals of 15 seconds.

This setting limits the transmit time to avoid prolonged long-term occupancy, which could reduce the lifespan of the device.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "TOT", then press [] to enter the sub-menu.
- d. Press the [] or [] key to select "Tx Time", then press [] to enter the sub-menu.
- e. Press the [] or [] key to choose the desired transmit time (0S-300S)
- f. Press the [] key to confirm and save, then press the [] key to exit.

(3) Tone Set

①All Tones

You can turn All Tones on or off.

Turn Off: Disables all tones.

Turn On: Enables all selected tones.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Tone Set", then press [] to enter the sub-menu.
- d. Press the [] or [] key to select "All Tones", then press [] to enter the sub-menu.
- e. Press the [] or [] key to choose "Turn Off" or "Turn On".
- f. Press the [] key to confirm and save, then press the [] key to exit.

②Keypad Tones

You can turn Keypad Tones on or off.

Turn Off: No keypad tone will sound when a key is pressed.

Turn On: A tone will sound when a key is pressed.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Tone Set", then press [] to enter the sub-menu.
- d. Press the [] or [] key to select "Keypad Tones", then press [] to enter the sub-menu.
- e. Press the [] or [] key to choose "Turn Off" or "Turn On".
- f. Press the [] key to confirm and save, then press the [] key to exit.

③Ana TxPremit (Analog channel)

You can turn Ana TxPremit on or off.

Turn Off: No tone will sound when transmitting on an analog channel.

Turn On: A "beep" will sound when transmitting on an analog channel.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Tone Set", then press [] to enter the sub-menu.
- d. Press the [] or [] key to select "Ana TxPremit", then press [] to enter the sub-menu.
- e. Press the [] or [] key to choose "Turn Off" or "Turn On".
- f. Press the [] key to confirm and save, then press the [] key to exit.

④Dig TxPremit (Digital channel)

You can turn Dig TxPremit on or off.

Turn Off: No tone will sound when transmitting on a digital channel.

Turn On: A "beep" will sound when transmitting on a digital channel.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Tone Set", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to select "Dig TxPremit", then press [] to confirm and enter the sub-menu.
- e. Press the [] or [] key to choose "Turn Off" or "Turn On".
- f. Press the [] key to confirm and save, then press the [] key to exit.

⑤Ana Roger (Analog channel)

You can turn Ana Roger on or off.

Turn Off: No tone will sound when the reception of a conversation on an analog channel ends.

Turn On: A tone will sound when the reception of a conversation on an analog channel ends.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Tone Set", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to select "Ana Roger", then press [] to confirm and enter the sub-menu.
- e. Press the [] or [] key to choose "Turn Off" or "Turn On".
- f. Press the [] key to confirm and save, then press the [] key to exit.

⑥Dig Roger (Digital channel)

You can turn Dig Roger on or off.

Turn Off: No tone will sound when the reception of a conversation on a digital channel ends.

Turn On: A tone will sound when the reception of a conversation on a digital channel ends.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Tone Set", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to select "Dig Roger", then press [] to confirm and enter the sub-menu.
- e. Press the [] or [] key to choose "Turn Off" or "Turn On".
- f. Press the [] key to confirm and save, then press the [] key to exit.

(4) Talk Around

(Temporarily enable this feature; switching channels or restarting will automatically disable Talk Around mode.)

In off-frequency mode, when disabled, it operates in relay mode, requiring relay conversion for communication. When enabled, it functions as Talk Around mode, switching to direct mode, and the transmission frequency will become the reception frequency.

(Both units need to turn on the Talk Around simultaneously)

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Talk Around", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose "Turn Off" or "Turn On".
- e. Press the [] key to confirm and save, then press the [] key to exit.

(5) Back light

The backlight can be set to either continuous on or a duration between 1S and 120S.

Continuous (Cont): The backlight stays on continuously.

1S-120S: This setting allows you to choose the duration for which the screen stays lit.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Back light", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose "Cont" or desired 1S-120S screen brightness duration.
- e. Press the [] key to confirm and save, then press the [] key to exit.

(6) Squelch (Analog channel)

The squelch level can be set to constant open or Level 1-9.

SQL Open: The squelch is always on.

Level 1-9: Level 1 is the lightest squelch, and Level 9 is the strongest.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Squelch", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose "SQL Open" or "Level 1-9".
- e. Press the [] key to confirm and save, then press the [] key to exit.

(7) Key Lock

① On-off

Key Lock Switch

Off: Disables the key lock mode.

On: Enables the key lock mode.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Key Lock", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to select "On-off", then press [] to confirm and enter the sub-menu.
- e. Press the [] or [] key to choose "Off" or "On";
- f. Press the [] key to confirm and save, then press the [] key to exit.

② Key Lock Time

Key Lock Time: Between 10S and 120S.

10S-120S: This is the duration for automatic key lock.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Key Lock", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to select "Key Lock Time", then press [] to confirm and enter the sub-menu.
- e. Press the [] or [] key to choose the desired 10S-120S key auto-lock time.
- f. Press the [] key to confirm and save, then press the [] key to exit.

(8) Key Lock Mode

There are three modes to choose from: KEY, KEY+CH, KEY+CH+PTT

KEY: Locks only the keypad.

KEY+CH: Locks both the keypad and the channel.

KEY+CH+PTT: Locks the keypad, channel, and PTT.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Key Lock Mode", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose "KEY", "KEY+CH" or "KEY+CH+PTT"
- e. Press the [] key to confirm and save, then press the [] key to exit.

(9) CH-Mode

There are three channel modes to choose from: "NAME", "CH", "FREQ"

NAME: Display the custom channel name.

CH: Display the Zone and channel number, such as "Zone 2 CH-01".

FREQ: Display the frequency information.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "CH-Mode", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose desired mode from "NAME", "CH" or "FREQ"
- e. Press the [] key to confirm and save, then press the [] key to exit.

(10) LED Indicator

LED indicator light can be turned off or on.

Turn Off: The receive and transmit indicators will not light up.

Turn On: The transmit indicator will light red, and the receive indicator will light green.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "LED Indicator", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose "Turn Off" or "Turn On".
- e. Press the [] key to confirm and save, then press the [] key to exit.

(11) Language

Language options: Chinese or English.

Chinese: The menu will display in Chinese.

English: The menu will display in English.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Language", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose "Chinese" or "English".
- e. Press the [] key to confirm and save, then press the [] key to exit.

(12) Mic Gain

①Dig Gain (Digital channel)

The MIC gain (Digital channel) is selectable from 0 to 15 levels.

Level 0 turns off the microphone, and Level 15 provides the maximum gain.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Dig Gain", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose desired 0-15 gain level.
- e. Press the [] key to confirm and save, then press the [] key to exit.

②Ana Gain (Analog channel)

The MIC gain (Analog channel) is selectable from 0 to 15 levels.

Level 0 turns off the microphone, and Level 15 provides the maximum gain.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Ana Gain", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose desired 0-15 gain level.
- e. Press the [] key to confirm and save, then press the [] key to exit.

③EP Dig Gain (Digital channel)

The MIC gain (Digital channel) is selectable from 0 to 15 levels.

Level 0 turns off the microphone, and Level 15 provides the maximum gain.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "EP Dig Gain", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose desired 0-15 gain level.
- e. Press the [] key to confirm and save, then press the [] key to exit.

④EP Ana Gain (Analog channel)

The MIC gain (Analog channel) is selectable from 0 to 15 levels.

Level 0 turns off the microphone, and Level 15 provides the maximum gain.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "EP Ana Gain", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose desired 0-15 gain level.
- e. Press the [] key to confirm and save, then press the [] key to exit.

(13) Exit Time

Exit Time: Selectable between 5S, 10S, and 15S.

The Exit Time refers to the time it takes for the device returns to standby mode without any operation after pressing the [] key to enter the menu screen.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Setting", then press [] to confirm and enter the sub-menu.

- c. Press the [○] or [○] key to select "Exit Time", then press [↵] to confirm and enter the sub-menu.
- d. Press the [○] or [○] key to choose desired 5S-15S exit time;
- e. Press the [↵] key to confirm and save, then press the [↵] key to exit.

2. Zone

Zone Name: Used to set a zone alias.

Zone Number: Users can select a zone number to add different selected members.

Channel Number: Display the channels in the current Zone.

- a. In standby mode, press the [↵] key to enter the menu.
- b. Press the [○] or [○] key to select "Zone", then press [↵] to confirm and enter the sub-menu.
- c. Press the [○] or [○] key to choose Zone1 or Zone2.
- d. Press the [↵] key to confirm and save, then press the [↵] key to exit.

3. Radio info

The Radio info includes Radio id and Firmware.

Radio id: Check the ID number of the device.

Firmware: Check the firmware version number of the device.

- a. In standby mode, press the [↵] key to enter the menu.
- b. Press the [○] or [○] key to select "Radio info", then press [↵] to confirm and enter the sub-menu.
- c. Press the [○] or [○] key to choose to check "Radio id" or "Firmware".
- d. Press the [↵] key to exit.

4. Contact (Digital Mode)

Contact Name: Used to set an alias for the corresponding member in the list. Input range: 1-14 characters.

Call ID (Number): Used to assign an ID number to the corresponding member in the list. Input range: 1-16776415. The default value is the corresponding number for each row.

Call Type: Used to select the call type for the corresponding member in the list. Available options: Individual Call, Group Call, All Call. There can be only one All Call in the entire contact type.

(1) All Call

All Call has a viewing function.

View: View All Call ID Channel.

- a. In standby mode, press the [↵] key to enter the menu.
- b. Press the [○] or [○] key to select "Contact", then press [↵] to confirm and enter the sub-menu.
- c. Press the [○] or [○] key to select "All call", then press [↵] to confirm and enter the sub-menu.

- d. Press the [] or [] key to select "View".
- e. Press the [] key to confirm and activate the corresponding function.

(2) Group Call

Group call has a view function.

View: View the group call ID channel.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Contact", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Group call", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to select "View".
- e. Press the [] key to confirm and activate the corresponding function.

(3) Individual Call

Individual Call options: View, Disable, Enable, Call Alert, Radio Check.

View: View the Individual Call ID channel.

Disable: The disabled device will not be able to send or receive signals and will be unable to operate any functions.

Enable: The disabled device will be activated upon receiving a matching activation command and will restart to return to normal operation.

Call Alert: The called device will emit a "beep-beep-beep" sound to alert you. To cancel the sound, press the [PTT] key.

Radio Check: Send the detection command to the receiver. If the contact can be received, it will beep. If the contact is not set correctly or the other party is offline, it will prompt "Send failed".

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Contact", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Individual call", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose View, Disable, Enable, Call Alert, Radio Check.
- e. Press the [] key to confirm and activate the corresponding function

5. Encrypt

Encrypt Mode: Selectable between ARC4 and AES256 encryption.

ARC4 Encrypt: A 10-digit key consisting of Arabic numerals and capital letters A, B, C, D, E, F.

AES256 Encrypt: A 64-digit key consisting of Arabic numerals and the letters A, B, C, D, E, F.

Edit the program to set the ARC4 and AES256 keys.

Encrypt setting includes On-Off and Encrypt List.

(1) On-Off

Selectable between Off and On

Off: The selected encrypt list is invalid.

On: The selected encrypt keys will take effect.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Encrypt", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "On-Off", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose "On" or "Off".
- e. Press the [] key to confirm and save, then press the [] key to exit.

(2) Encrypt List

Encryption Switch: Selectable between None and Code 1-10.

None: No encrypt key.

Code 1-10: You can choose from Code 1-10.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Encrypt", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Encrypt List", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose "None" or "Code 1-10".
- e. Press the [] key to confirm and save, then press the [] key to exit.

6. Call Log

(1) Outgoing

Selectable between Out List and Delete All.

Out List: View the records of dialed contacts.

Delete All: Delete all dialed record information.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Call Log", then press [] to confirm and enter the sub-menu.
- c. Press the [] or [] key to select "Outgoing", then press [] to confirm and enter the sub-menu.
- d. Press the [] or [] key to choose the desired "Out List" or "Delete All".
- e. Press the [] key to view or delete Out List, then press the [] key to exit.

(2) Missed

Selectable between Missed List and Delete All.

Missed List: View the records of missed calls.

Delete All: Delete all missed call records.

- a. In standby mode, press the [] key to enter the menu.
- b. Press the [] or [] key to select "Call Log", then press [] to confirm and enter the sub-menu.

- c. Press the [○] or [○] key to select "Missed List", then press [↵] to confirm and enter the sub-menu.
- d. Press the [○] or [○] key to choose the desired "Missed List" or "Delete All".
- e. Press the [↵] key to view or delete Missed List, then press the [↵] key to exit.

(3) Call Answered

Selectable between Income List and Delete All.

Income List: View the records of incoming calls.

Delete All: Delete all incoming call records.

- a. In standby mode, press the [↵] key to enter the menu.
- b. Press the [○] or [○] key to select "Call Log", then press [↵] to confirm and enter the sub-menu.
- c. Press the [○] or [○] key to select "Income List", then press [↵] to confirm and enter the sub-menu.
- d. Press the [○] or [○] key to choose the desired "Income List" or "Delete All".
- e. Press the [↵] key to view or delete Income List, then press the [↵] key to exit.

7. Message

(1) Quick Text

Predefined message content set by the program, which is convenient for direct access to the text content.

- a. In standby mode, press the [↵] key to enter the menu.
- b. Press the [○] or [○] key to select "Message", then press [↵] to confirm and enter the sub-menu.
- c. Press the [○] or [○] key to select "Quick Text", then press [↵] to confirm and enter the sub-menu.
- d. Press the [○] or [○] key to choose desired Quick Text, then press the [↵] menu key to view the full content.
- e. Press the [↵] menu key again to select the send list, and press the up [○] or down [○] key to select the all call, group call or individual call sending mode.

(2) Inbox

Selectable between Inbox List and Delete All.

Inbox List: View received message contents.

Delete All: Delete all inbox contents.

- a. In standby mode, press the [↵] key to enter the menu.
- b. Press the [○] or [○] key to select "Message", then press [↵] to confirm and enter the sub-menu.
- c. Press the [○] or [○] key to select "Inbox", then press [↵] to confirm and enter the sub-menu.
- d. Press the [○] or [○] key to select "Inbox List" or "Delete All".
- e. Press the [↵] menu key to view received message contents or delete the messages, then press the [↵] key to exit.

(3) Outbox

Selectable between Outbox List and Delete All.

Outbox List: View the sent message contents.

Delete All: Delete all outbox contents.

- a. In standby mode, press the [↵] key to enter the menu.
- b. Press the [○] or [○] key to select "Message", then press [↵] to confirm and enter the sub-menu.
- c. Press the [○] or [○] key to select "Outbox", then press [↵] to confirm and enter the sub-menu.
- d. Press the [○] or [○] key to select "Outbox List" or "Delete All".
- e. Press the [↵] menu key to view sent message contents or delete messages, then press the [↵] key to exit.

CDC/DCS

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	100.0	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

DCS CODELIST									
Number	DCS-N	Number	DCS-N	Number	DCS-N	Number	DCS-N	Number	DCS-N
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

DCS CODELIST									
Number	DCS-N	Number	DCS-N	Number	DCS-N	Number	DCS-N	Number	DCS-N
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

Technical Specifications

General Specifications	
Channel Spacing	12.5KHz
Operating Voltage	DC 7.4V
Operating Temperature	-20~+55°C
Antenna Impedance	50Ω
Output Power	5W
Transmitter Section	
Frequency	400-480MHz
FM Noise	-40dB@12.5kHz
Adjacent Channel Power	-60dB@12.5kHz
Modulation	FM,4FSK
Vocoder	AMBE+2TM
4FSK Digital Modulation	12.5kHz (data only) 7K60FX;12.5kHz (data+voice) 7K60FX
Modulation Limitation	2.5kHz@12.5kHz
Audio Response	+1 ~ -3dB
Rated Audio Distortion	≤3 %
Digital Protocol	ETSITS102361-1.-1.3
Transmitter Section	
Analog Radio Sensitivity	0.35uV/-116dBm (12dB SINAD) ;0.22uV/-120dBm (12dB SINAD)
Digital Radio Sensitivity	0.3uV/-117.4dBm (5% BER) ;0.22uV/-117.4dBm (1% BER)
Audio Response	+1 ~ -3dB
Receiver Spurious Emission	≤-57dBm@30MHz ~ 1GHz; ≤-47dBm@1GHz ~ 12.75GHz
Rated Audio Distortion	≤3% (Type)

CAUTION

Changes or modifications not expressly approved by the party responsible for compliance may void the user's authority granted by the local government radio management departments to operate this radio and should not be made. To comply with the corresponding requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services. Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the local government radio management departments equipment authorization for this radio could violate the rules.

Radio License

Governments keep the radios in classification. TWO WAY RADIO are only operated on authorized radio frequencies that are regulated by the local radio management departments (such as FCC, ISED, OFCOM, ANFR, BFTK, Bundesnetzagentur, and so on.). The detailed classification and the use of your TWO WAY RADIO, please contact the local government radio management departments. Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.

FCC compliance information

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference. (Licensed radios are applicable)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (Other devices are applicable)

(1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and 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.

CE compliance information

(Simple EU declaration of conformity) Quanzhou Chierda Electronic Telecom Co., Ltd. declares that the radio equipment type is in compliance with the essential requirements and other relevant provisions of RED Directive 2014/53/EU and the ROHS Directive 2011/65/EU;

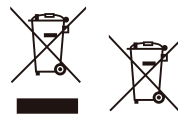
Restriction on putting into service

This product may be used in following countries and regions, including: Belgium (BE), Bulgaria (BG), Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and United Kingdom (UK). For the intended country of use, please refer to the package.

This radio equipment contains frequency bands that are subject to licensing procedures before it is allowed to be operated. Please make sure you have a valid radio license or amateur radio operator permit before use.

Disposal

The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that all electrical and electronic products, batteries, or accumulators must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws and rules in your area.



RF exposure Safety

This TWO WAY RADIO uses electromagnetic energy in the radio frequency (RF) spectrum to provide communications between two or more users over a distance. RF energy, which when used improperly, can cause biological damage. Please refer to the following websites for more information on what RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits: <http://www.who.int/en/>

Transmit no more than the rated duty factor 50% of the time. Transmitting necessary information or less, is important because the radio generates measurable RF energy exposure only when transmitting in terms of measuring for standards compliance. For users who wish to further reduce their exposure, some effective measures to reduce RF exposure include:

- Reduce the amount of time spent using your wireless device.
- Use a speakerphone, earpiece, headset, or other hands-free accessory to reduce proximity to the head (and thus head exposure).

While wired earpieces may conduct some energy to the head and wireless earpieces also emit a small amount of RF energy, both wired and wireless earpieces remove the greatest source of RF energy (handheld device) from proximity to the head and thus can greatly

reduce total exposure to the head.

- Increase the distance between wireless devices and your body.
- This radio is designed for and classified as "Occupational/Controlled Use Only".

Occupational/Controlled environments are defined as locations where there is exposure that may be incurred by people who are aware of the potential of exposure, for example, as a result of employment or occupation. It means a radio must be used only by individuals aware of the hazards, and the ways to minimize such hazards; Not intended for use in a General population/uncontrolled environment.

Hand-held Mode

To control your exposure and ensure compliance with the Occupational/Controlled environment exposure limits, always adhere to the following procedure:

SAR tests are conducted using standard operating positions accepted by FCC with the device transmitting at its highest certified power level in all tested frequency bands, although the SARs determined at the highest certified power level, the actual SAR level of the device while operating can be well below the main value. Before a new model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the exposure limit established by the FCC. Tests for each product are performed in positions and locations as required by the FCC. For body worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with and accessory designated for this product or when used with and accessory that contains no metal.

To maintain compliance with FCC RF exposure guidelines hold the transmitter and antenna at least 25mm from your face and speak in a normal voice, with the antenna pointed up and away from the face. Use of non-approved antennas, batteries, and accessories may cause the radio to exceed the FCC RF exposure guidelines. Transmit no more than the rated duty factor of 50% of the time. To transmit (talk), push the Push-To-Talk (PTT) button. To receive calls, release the PTT button. Transmitting 50% of the time, or less, is important because the radio generates measurable.

Electromagnetic Interference/Compatibility

Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility. During transmissions, your 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, such as hospitals or healthcare facilities.

- Persons with pacemakers, implantable cardiovascular defibrillators (ICDs) or other active implantable medical devices should consult with their physicians regarding the potential risk of interference from radio frequency transmitters, such as portable radios (poorly shielded medical devices may be more susceptible to interference).

- Turn the radio OFF immediately if there is any reason to suspect that interference is taking place.
- Do not carry the radio in a chest pocket or near the implantation site, and carry or use the radio on the opposite side of the body from the implantable device to minimize the potential for interference. Hearing Aids: Some digital wireless radios may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

- Other Medical Devices: If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

Turn off your radio in the following conditions:

- Turn off your radio prior to entering any area with a potentially hazardous or explosive atmosphere. Only radio types that are especially qualified should be used in such areas as "Intrinsically Safe".

Note: the areas with potentially explosive atmosphere referred to above include blasting caps, blasting areas, inflammable gas, dust particles, metallic powders, grain powders, fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles (such as grain, dust or metal powders) and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often – but not always posted.

Use of Communication Devices While Driving

- Always check the laws and regulations on the use of radios in the areas where you drive. Use of Communication Devices, for example, mobile radio, may not be allowed.
- Give full attention to driving and to the road.
- Use hands-free operation, if available.
- Pull off the road and park before making or answering a call, if driving conditions or regulations so require.
- Do not place a portable radio in the area over an airbag or in the airbag deployment area. The radio may be propelled with great force and cause serious injury to occupants of the vehicle when the airbag inflates.

Protect your hearing

- Use the lowest volume necessary to do your job. Turn up the volume only if you are in noisy surroundings.
- Limit the amount of time you use headsets or earpieces at high volume.
- When using the radio without a headset or earpiece, do not place the radio's speaker directly against your ear.
- Use carefully with the earphone may be possible excessive sound pressure from earphones and headphones can cause hearing loss. CAUTION: Exposure to loud noises from any source for extended periods of time may temporarily or permanently affect your hearing. The louder the radio's volume, the less time is required before your hearing could be affected. Hearing damage from loud noise is sometimes undetectable at first and can have a cumulative effect.

Batteries Safety

- WARNING: KEEP NEW OR OLD USED BATTERIES OUT OF REACH OF CHILDREN.
- Charging should only take place in a well ventilated area and when someone is about to be aware and react to a potential issue. To reduce risk of fire, a battery should not be charged for more than 8 hours and disconnect charger from line voltage (AC outlet) by removing main plug even if the battery is not completely charged. Don't leave a device unattended while charging. Disconnect the charger when the device is fully charged; do not overcharge the device.
- In the event of a battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice immediately.



- Since batteries are sensitive to high temperatures when storing them, keep them in a cool and dry place. The recommended temperature should be between +10 °C and +25 °C and never exceed +30 °C . Batteries should therefore not be stored next to radiators or boilers nor indirect sunlight. Extremes of humidity (below 35% and above 95% relative humidity for sustained periods should be avoided since they are detrimental to both batteries and packing. Although the storage life of batteries at room temperature is good, storage is improved at lower temperatures provided special precautions are taken. Also, accelerated warming is harmful.

Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas;
A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.

- The plug of the adapter is considered a disconnect device. The socket-outlet shall be installed near the equipment and shall be easily accessible.