

3G-798

USER'S MANUAL



Thank you

To Customers

Thank you for purchasing the network radio.

Network radio is designed for those who require top-grade quality, performance and outstanding reliability under the most demanding conditions.

If you have mobile network coverage, you are connected. We believe that this radio will provide dependable communications.

We encourage you to read this manual thoroughly, so as to learn about the many exciting features of your new network radio.

PRECAUTIONS

- Refer service to qualified technicians only.
- Do not modify or attempt to adjust this radio for any reason.
- Do not expose the radio to long periods of direct sunlight, nor place it close to heating appliances.
- Do not operate the radio or charge a battery pack in an explosive atmosphere (gases, dust, fumes, etc).
- Do not place the radio in excessively dusty, wet areas, nor on unstable surfaces.
- Do not transmit with high output power for extended periods. The radio may overheat.
- Do not transmit until all RF connectors are secure and any open connectors are properly terminated



CAUTION

- ▲ It is important that the operator is aware of, and understands hazards common to the operation of any radio. Turn off the radio while taking on fuel or while parked in gasoline service.
- ▲ If an abnormal odor or smoke is detected coming from the radio, switch OFF the power immediately and remove the battery pack from the radio. Contact your authorized dealer, customer service, or service station.

CONTENTS

UNPACKING AND CHECKING EQUIPMENT	01
PREPARATION	02
① Charging the battery	02
② Installing / removing the battery	04
③ Installing antenna	05
④ Installing belt clip	06
⑤ Installing speaker / microphone jacks cover	06
⑥ Installing external speaker / microphone	07
⑦ Installing SIM card	07
GETTING ACQUAINTED	08
KEY FUNCTIONS	09
FUNCTIONS AND FEATURES	10
BASIC OPERATION	10
ADVANCED FUNCTIONS	11
1. Making Calls (In Phone Mode)	11
2. Answering / Ending Calls (In Phone Mode)	12
3. Intercom (In Radio Mode)	12
4. Phonebook	15
5. Call Center	15
6. Messages	15
7. Settings	16
8. Location Service	17
9. Sending SOS message	18
10. Dispatcher	18
PROGRAMMING GUIDE	19
AFTERSALES SERVICE	20
ANNOUNCEMENT	21

UNPACKING AND CHECKING EQUIPMENT

Carefully unpack and inspect the equipment. We recommend that you identify the items listed in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, file a claim with the carrier immediately.

Supplied accessories	ITEM	QUANTITY
	Antenna	1
	Li-ion battery	1
	Intelligent charger & adapter	1
	Belt clip	1
	USB data cable	1
	User's manual	1

Standard Accessories:



Antenna



Li-ion battery



Intelligent charger & adapter



Belt clip



USB data cable



User's manual

PREPARATION

① Charging the battery

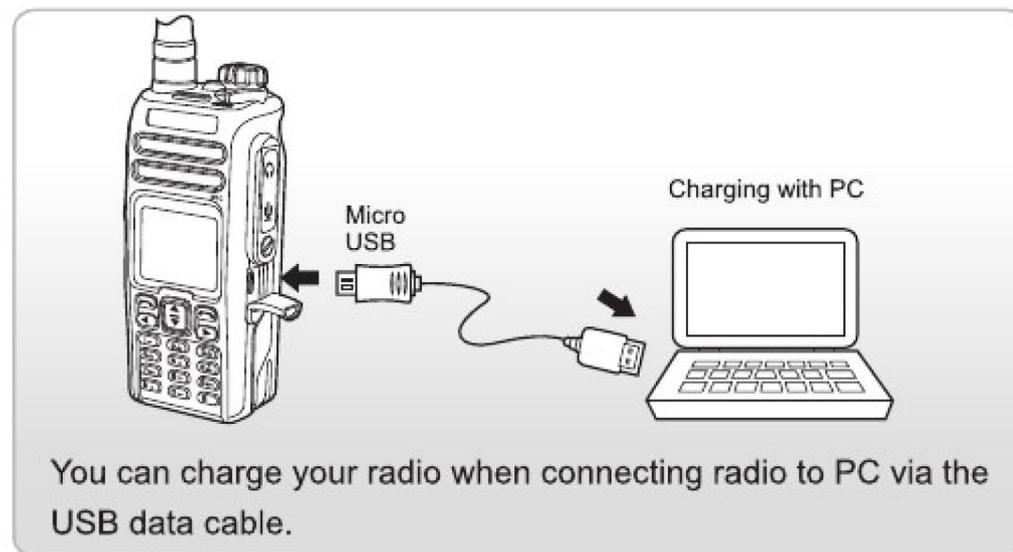
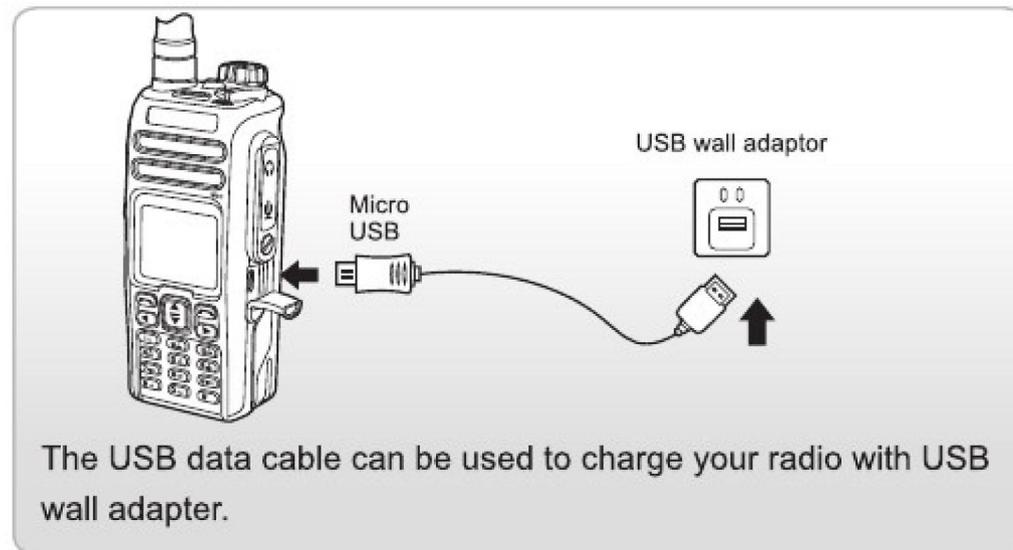
The Li-ion battery is not charged at the factory. When you first get your new radio, you will need to charge the battery. The battery takes up to 8 hours (generally less) to fully charge a completely flat battery. The charger will charge, with the radio still on, but it is recommended that it be turned off when charging for a quicker full charge. Li-ion batteries do not need to be cycled (fully discharged before recharging) like the old Ni-Cads which tended to form a memory. Li-ion batteries can be charged anytime.



CAUTION

- ▲ Use only approved chargers and cables. Use only the original battery that suits the charger. The use of unapproved accessories may damage your radio or cause the battery to explode.
- ▲ Disconnect the charger when the battery is fully charged.
- ▲ The battery life is over when its operating time decreases even though it is fully and correctly charged. Replace the battery.
- ▲ The battery must be kept in cool and dry place. Never leave the battery in the direct sunlight. Do not charge the battery or radio while it is wet.

• Connecting to USB data cable

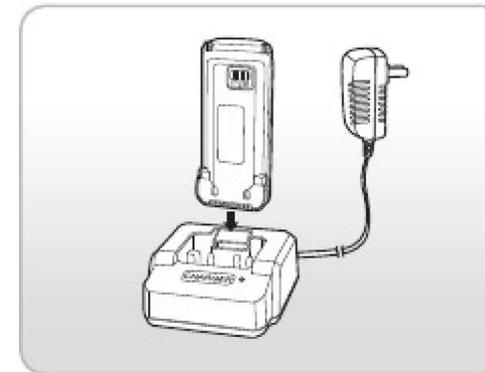


NOTE The supplied USB data cable can also be used as a programming cable.

• Connecting to intelligent charger

Make sure the battery is seated correctly in the charger, and the charger LED is ON.

The LED of the Desktop Charger will indicate RED for charging, and solid GREEN when fully charged. The battery can be charged by itself, without a radio attached, in the desktop charger.



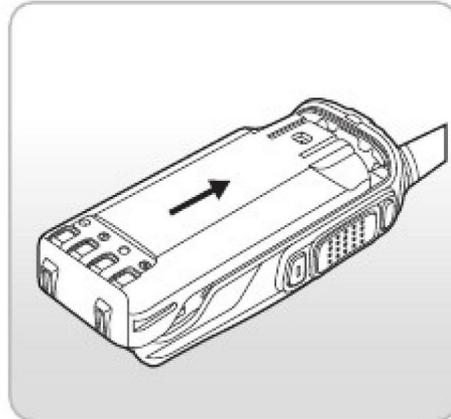
② Installing / removing the battery

If installing the battery into the radio, follow the battery installation guide carefully, as there is a simple and correct way to do it. Switch off the radio before installing or removing the battery. For long term storage, it is recommended that the battery be removed from the radio, and fully charged beforehand.

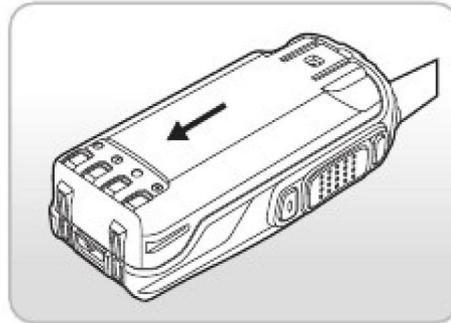
CAUTION

- ▲ Do not short-circuit the battery terminals, or discard in fire.
- ▲ Do not attempt to open the unit.
- ▲ Do not store a battery in a discharged state, as it can ruin the charging capacity of the battery.

1. Match the grooves of the battery pack with the corresponding guides on the back of the radio.
2. Gently push the battery pack along the back of the radio. The battery pack will click into the place until you hear a click.



To remove the pack, pull up and hold the release latch, and then slide the battery pack away from radio.



③ Installing antenna

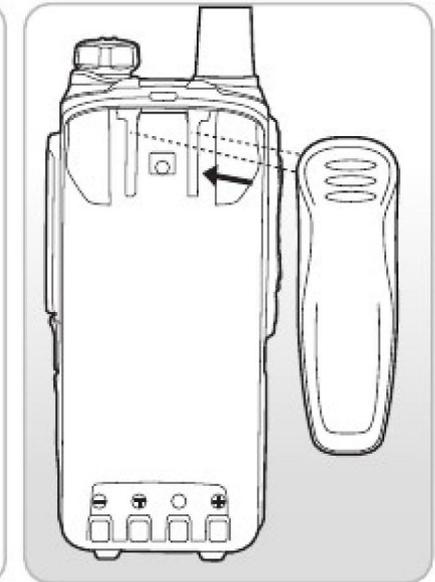
Screw the antenna into the connector on the top of the transceiver by holding the antenna at its base and turning it clockwise until secure. Don't over tighten.

NOTE: Do not use antenna as handle, keychain or SP / MIC hook, it will degrade the antenna performance and affect the function of the radio.



④ Installing belt clip

If necessary, you can install the supplied belt clip to the back of the radio.



⑤ Installing speaker / microphone jacks cover

If you are not using a speaker / microphone, install the cover over the speaker / microphone jacks.

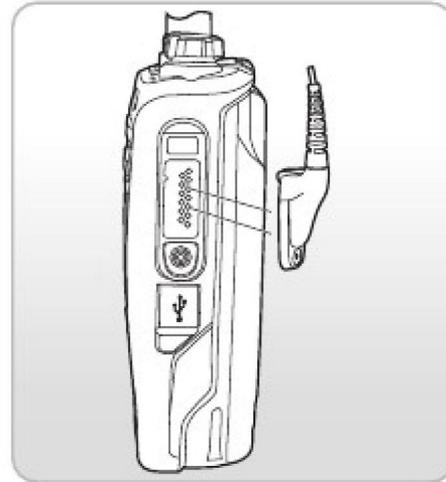
NOTE: To keep the radio rainproof, you must install the speaker / microphone cover.



⑥ Installing external speaker / microphone

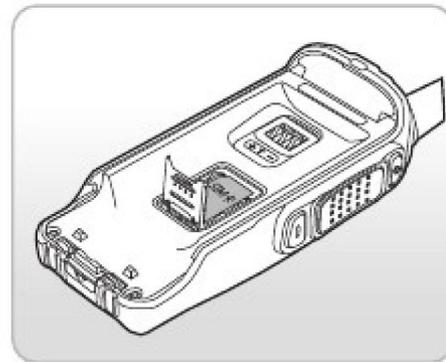
Insert the speaker / microphone plugs into the speaker / microphone jacks.

NOTE: The radio is not fully rainproof while using external speaker / microphone.

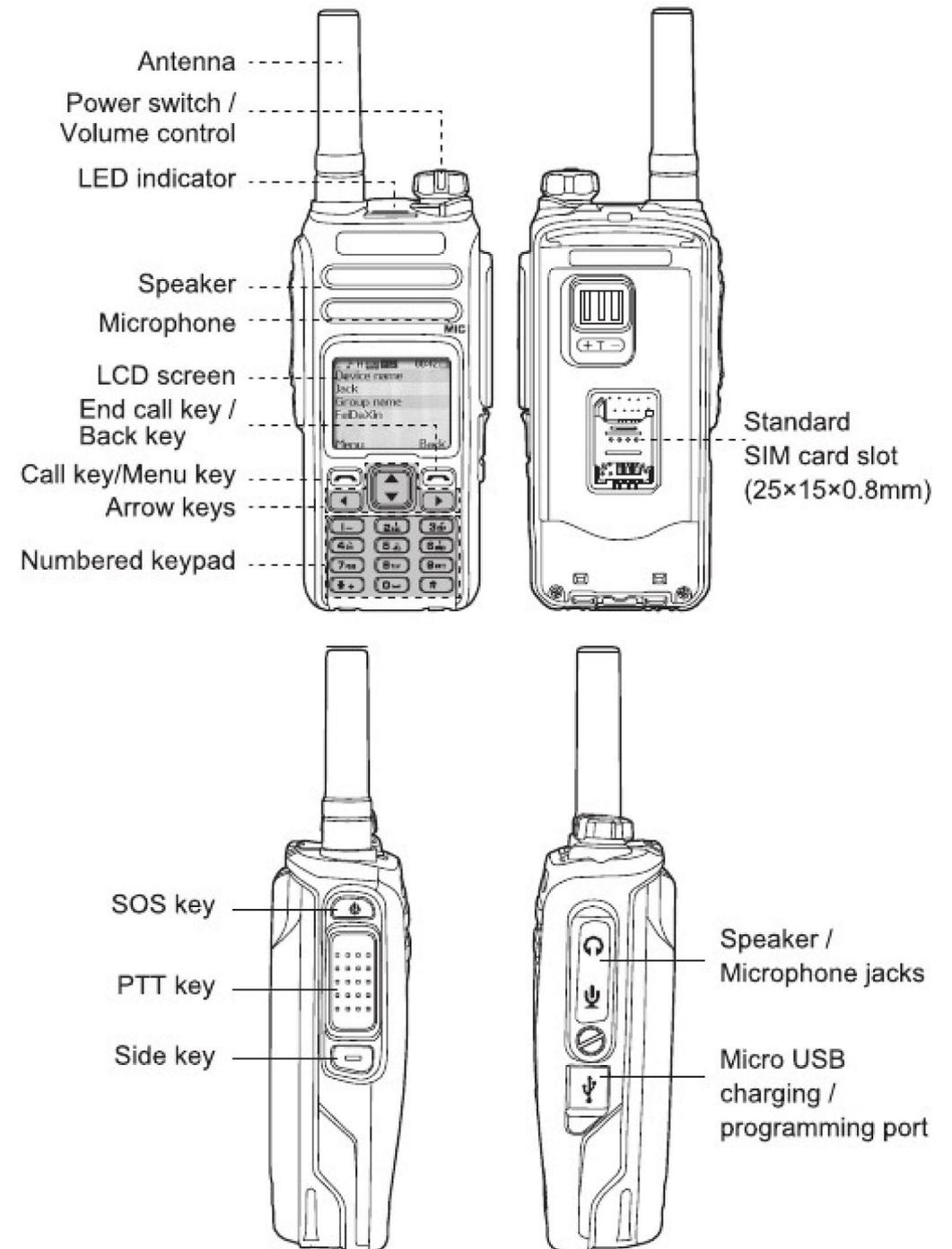


⑦ Installing SIM card

Make sure your radio is off.
Remove the battery.
Hold your SIM card with the metal contacts facing down and slide it until you hear a click.



GETTING ACQUAINTED



KEY FUNCTIONS

KEY	DESCRIPTION
Power switch / Volume control	<ul style="list-style-type: none"> ▲ Turn clockwise to switch ON the radio until you hear a click. ▲ Turn counterclockwise fully to switch OFF the radio until you hear a click. ▲ Rotate to adjust the volume level.
SOS Key	<ul style="list-style-type: none"> ▲ Short press SOS key to send SOS message to Dispatcher, selected group or group members.
PTT Key	<ul style="list-style-type: none"> ▲ Press PTT key, then speak into the microphone to call a station. Release it to receive.
Side Key	<ul style="list-style-type: none"> ▲ Press this key, quick access to Friends List.
Menu Key (Call Key)	<ul style="list-style-type: none"> ▲ In standby mode, press Menu key to enter MainMenu function setting. ▲ In dial pad mode, press Menu key to make or answer a call. End call with the press of the Back key. ▲ In radio mode, press Menu key to enter radio menu function setting.
Back Key (End call Key)	<ul style="list-style-type: none"> ▲ In standby mode, press Back key to add a new contact. ▲ In menu operation, press Back key to return to previous menu. ▲ Short press Back key to delete the character before the cursor when editing message. ▲ Long press Back key to delete all characters before the cursor when editing message. ▲ Back key, also used as end call key.
Numbered Keypad	<ul style="list-style-type: none"> ▲ Make a phone call in standby mode. ▲ Editing numbers and characters. ▲ Numeric 0 key, also used as an space key. ▲ Press " # " key to switch input method (Chinese Pinyin, Bihua, numeric and English).
Arrow Keys (Navigation keys)	<ul style="list-style-type: none"> ▲ Arrows keys used to operate the menu of your radio. It is made up of four keys: the left arrow (back arrow), up arrow, down arrow, and the right arrow (forward arrow). ▲ Choose the desired word or number appears by arrow keys when editing message. ▲ Move the text cursor on the screen to insert or remove text.

FUNCTIONS AND FEATURES

SMS Function	1.77" TFT-LCD Display Screen
Phone Call Function	Direct to radio USB charging option
SOS Alarm Function	Dispatch of Management Platform
User Authority Setting	Network Signal Strength Prompt
Alarm Clock Function	Support WCDMA / GSM / GPRS network
Up To 96 Hours Standby	Selective Calls, Group Calls and All Calls
Support 200 Group Names	Ultra High Capacity 5200mAh Li-ion Battery
Real Time Personal Tracking	GPS Position and GPS Track View (Optional)

BASIC OPERATION

Switching ON / OFF

When you first power on the radio after you purchase it or reset it to factory settings, you need to perform settings before using it.

A. Switch ON the radio.

The boot animation shows up on the LCD screen.

After login successfully, device name and group name will display on the LCD screen.

B. Switch OFF the radio.

The shutdown animation shows up on the LCD screen.

NOTE

Make sure the SIM card is in your radio and the battery is charged.

If the low voltage is detected. The radios warns it by flashing RED LED and beep.

ADVANCED FUNCTIONS

1. Making Calls (In Phone Mode)

There are many ways to make a call with your radio and they are all easy to do.

1.1. Calling from the dialer

- A. Press Back key to return to standby mode.
- B. In standby mode, enter phone numbers with the numeric keypad.
Press Back key to delete wrong digits.
- C. Press Menu key to make a call.

1.2. Calling from your calling history

- A. Press Menu key → ▲/▼ key to access to Call center → Call history → Missed calls, Dialed calls and Received calls.
- B. Choose the phone numbers by pressing ▲/▼ key.
- C. Press Menu key again to view the call history and make a call.

1.3. Calling from your contacts

- A. In standby mode, press Back key to access to Contacts.
- B. Choose the contact you want to call.

1.4. Calling from your phonebook.

- A. In standby mode, press Menu key → ▲/▼ key to access to Phonebook → Contacts.
- B. Choose the contact you want to call.

NOTE

To make international calls, press and hold “*/+” key to enter the “+”, then enter the phone number.

2. Answering / Ending Calls (In Phone Mode)

- A. Press Menu key to answer the call.
- B. Press Back key to end the call.

3. Intercom (In Radio Mode)

There are 2 options to access to Intercom.

- A. In standby mode, press Menu key → ▲/▼ key to access to Intercom.
- B. Press PTT key to access to Intercom.

NOTE

Users have their own call priority, the administrator can set up and modify the user's call priority. Higher priority user can interrupt users with lower priority at any time.

3.1. Transmitting

- A. Press PTT key to initiate a call, lights RED while transmitting, and the screen displays “my turn to talk.”
- B. Press PTT key to quit talk and go back to standby. The screen displays “idle status.”
- C. If a higher priority user initiates a call, you will exit the transmit mode and enter the receive mode.

3.2. Receiving

- A. Lights blue while receiving, the screen displays the other's user name.
- B. If your call priority is higher than the other's call priority. You can press PTT key to initiate a call, you will exit the receive mode and enter the transmit mode.

3.3. Select Group

- A. Press Menu key to enter Select Group.
- B. Press ▲/▼ key to select the desired group.
- C. Press Menu key to enter Group and check Group Member by pressing ▲/▼ key.
- D. Press Back key to return and press PTT to initiate a call.

NOTE

You need to wait for the voice prompt to finish to enter the transmit mode.

3.4. Selective Call

The radio has two options to make selective call.

► Via Group Member

Please follow the below setting steps.

- A. Press Menu key to enter Select Group.
- B. Press ▲/▼ key to select the desired group you want to invite.
- C. Press Menu key to Enter Group.
- D. Press ▲/▼ key to check the group member.
- E. Press Menu key to select the desired group member, the screen displays "MARK". The selected group members are shown in green color.
- F. Press Menu key again, the screen displays "Invite Session". Press Menu key to set up a Temp Group.
- G. Press PTT key to initiate a call.
- H. Press Back key to return to the current group.

NOTE

Group Member: The group can be set up to display group members in SMART-PTT Dispatcher Software.
The radio allows up to 200 members in a group.
The radio allows each member to join 200 groups.
Only online users can be selected.z

► Via Friends List

Please follow the below setting steps.

- A. Press Side key to enter Friends List.
- B. Press ▲/▼ key to check and select the desired contacts you want to invite.
- C. Press Menu key to select the desired contacts, the screen displays "MARK". The selected group members are shown in green color.
- D. Press Menu key again, the screen displays "Invite Session". Press Menu key to set up a Temp Group.
- E. Press PTT key to initiate a call.
- F. Press Back key to return to the current group.

NOTE

You can set up the friends list in SMART-PTT Dispatcher Software.
It allows up to 200 contacts in your radio.
To invite session, the user must add each other to their Friends list.
Only online users can be selected.

4. Phonebook

- A. In standby mode, press Menu key → ▲/▼ key to access to Phonebook.
- B. You can add a new contact, search for a contact, assign a speed dial key and create a caller group.
- C. You can check storage status, edit, copy, move, delete the contacts, etc.
- D. You can sharing contacts' information. Check the contacts your want to share, you can send vCard by MMS or Bluetooth.

5. Call Center

In standby mode, press Menu key → ▲/▼ key to access to the Call Center.

- A. Call history
You can check the missed calls, dialed calls, received calls, delete call logs, etc.
- B. Call setting
You can set caller ID, call waiting, call divert, call barring, line switching and other advanced settings (Auto redial, IP dial, call time reminder, auto quick end, etc) .

6. Messages

In standby mode, press Menu key to access to the Message interface.

- A. Create message
 - a. Type your message.
 - b. Enter recipient's numbers or name, or add from contacts.
 - c. Send your SMS / MMS.
- B. Inbox: Save the received messages.
- C. Outbox: Save the failed sent messages.

- D. Sent: Save the successfully sent messages.
- E. Draft: Save the editing SMS which haven't been sent.
- F. You also can use buttons under the menu to execute other settings.

7. Settings

In standby mode, press Menu key to access to the settings interface. It includes: Profiles, Display, Phone settings, Security, Connectivity, Version Info. You can adjust the settings as you like.

- A. Display setting
 - Wallpaper: Select a background image for the home screen.
 - LCD backlight: Adjust the brightness the screen and set the length of time of inactivity before the screen turns off.
- B. Phone setting
 - Time and date: Set the time, date, time zone, update with time zone, and format.
 - Language (English / Chinese): Select a language from the list given.
 - Auto Lock: Set the auto lock time of keypad, or turn it off when idle.

NOTE

Unlock the keypad by pressing Menu key → “#” key.

- C. Security setting
 - Factory reset: Restore the radio to its original manufacturer settings. A factory reset should be performed with caution, as it effectively destroys some data and settings stored in the radio.
- D. Connectivity setting
 - The configuration software can configure APN connection. To ensure the radio can connect the internet properly, there is no

need to change the default setting. If the configuration APN is not available, please consult the network supplier of SIM card for more information. The configuration information maybe various according to the different network suppliers and network types.

8. Location Service

If the radio is built-in GPS module, the status bar at the top of the screen shows "GPS". You can check the radio's current location information directly.

In standby mode, press Menu key → ▲/▼ key to access to Location Service.

- A. Positioning success: The LCD displays "GPS positioning success", also the GPS coordinates will be displayed on the screen.
- B. Positioning: The LCD displays "Positioning, Please wait".
- C. "No GPS device" shows on the screen, which means your radio is not built-in GPS module. And there is not "GPS" in the status bar.

► Checking GPS Information

Open the SMART-PTT Dispatch software, login to the account which you want to check GPS information. (Please contact your dealer for the account and password.)

- A. Select the desired group first.
- B. Select the member you would like to check.
- C. Double click the user name, then choose "View on map".
- D. In the Map mode, if the selected user is online and its current location is successfully located, the user name and icon can be displayed in the map. You can access to track the user's history location and time.

9. Sending SOS Message

With Emergency SOS key, you can quickly and easily call for help and alert your contacts of an emergency situation.

- A. Short press SOS key to make an emergency call send SOS message to Dispatcher, selected group or group members. Your radio will show "SENDING SOS..." on the LCD screen. Short press SOS key again to exit.
- B. The radios of other users will hear the alarm signal and receive your radio's location information, including device name, SOS, xx.xxxxxx(Latitude); xxx.xxxxxx(Longitude). This will only work if your radio's current location is successfully located. Press PTT key to pause it.

10. Dispatcher

- A. In standby mode, press Menu key → ▲/▼ key to access to Dispatcher.
- B. Press ▲/▼ key to selected the message you want to check.
- C. Press Menu to check the text message from Dispatcher.
- D. Send message: Use SMART-PTT Dispatcher software, you can send text message to online users. For more information, please refer to the operation manual of SMART-PTT dispatcher.
Received messages limit: 80
Delete old messages: it will automatically delete old message when storage limits are reached.

NOTE

If the radio receives a message containing "SOS" from SMART-PTT dispatcher station, it will automatically trigger SOS alarm.

PROGRAMMING GUIDE

Programming Guide (Via USB programming cable)

Please follow the below setting steps.

- A. Download, unzip and install the FD-798W programming software.
- B. After a successful installation of programming software, click Finish to exit Setup. And " Setup-MediaTek Driver Packages " will appear on your computer screen. Click Next to continue the installation. Setup has finished installing MediaTek Dreiver Packages on your computer, click Finish to exit Setup.
- C. Power on the radio. Connect the radio to your PC by using USB data cable.
- D. Right click on My Computer, and select Properties. Inside the System Properties, select Device Manger, double click Ports (COM & LPT), check USB Debug Port (COM xx).
- E. Open the FD-798 programming software, Select the correct COM Port.
- F. Set the parameter accordingly. (Account & password, URL and APN)
- G. Click Write and wait for the Finished message to appear.
- H. The radio will power off automatically when finished message appears.
- I. Unplug the radio and switch on the radio.

AFTERSALES SERVICE

Warranty Period

The warranty period is one year from the date the radio is sold. (It's invalid without the seal of agents.)

Free Maintenance

The seller provides free maintenance for the nature breakups in the warranty period.

Paid Maintenance

Under the following conditions, the seller will charge the maintenance fee:

- When the maintenance is beyond the warranty period, the seller will charge reasonable maintenance free.
- The breakups are caused by nature disasters.
- The breakups are caused by customers. (or their deliberate intentions.)
- The breakups are caused by the mishandling or operation unpermitted.
- The breakups are caused by using the nonstandard battery packs.

Agent:

Ser.No:

Model:

Date:

ANNOUNCEMENT

WE endeavor to achieve the accuracy and completeness of this manual, but it is still not perfect for any possible omissions or printing errors. All the above functions and design are subject to be updated without prior notice due to continuous development.