

Handheld two way radio

User Manual

Model name:FD-950

Brand name:FDX

FCC ID:ZS4FD-950

Thank you

Thank you for purchasing the  FD-950 FM transceiver. This FM transceiver is designed for those who require top-grade quality, performance and outstanding reliability under the most demanding conditions. We encourage you to read this manual thoroughly, so as to learn about the many exciting features of your new transceiver.

WARNING

- Government law prohibits the operation of unlicensed transceiver within the territories under government control.
- Illegal operation is punishable by fine or imprisonment or both.
- Any adjustment to your transceiver must be made by qualified technicians.

PRECAUTIONS

- Refer service to qualified technicians only.
- Do not modify or attempt to adjust this transceiver for any reason.
- Do not expose the transceiver to long periods of direct sunlight, nor place it close to heating appliances.
- Do not operate the transceiver or charge a battery pack in an explosive atmosphere (gases, dust, fumes, etc.).
- Do not place the transceiver in excessively dusty, wet areas, nor on unstable surfaces.
- Do not transmit with high output power for extended periods. The transceiver 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 transceiver. Turn off the transceiver while taking on fuel or while parked in gasoline service.
- ▲ If an abnormal odor or smoke is detected coming from the transceiver, switch OFF the power immediately and remove the battery pack from the transceiver. Contact your authorized **FDC** dealer, customer service, or service station.



CONTENTS

UNPACKING AND CHECKING EQUIPMENT 1-2

PREPARATION 3-8

CHARGING Li-ion BATTERY PACK 3-4

INSTALLING/REMOVING BATTERY PACK 5-6

INSTALLING ANTENNA 6

INSTALLING BELT CLIP 7

INSTALLING SPEAKER/MICROPHONE COVER 8

INSTALLING EXTERNAL SPEAKER/MICROPHONE 8

GETTING ACQUAINTED 9-10

BASIC OPERATION 11-12

AUXILIARY FUNCTIONS 13-16

TIME-OUT TIMER(TOT FUNCTION) 13

BATTERY SAVE FUNCTION 13

LOW BATTERY ALARM 13

BATTERY INDICATOR 13

VOX FUNCTION 14

SETTING WIDE/NARROW BANDWIDTH 14

BUSY CHANNEL LOCKOUT 14

CTCSS/DCS FUNCTION 14

KEY LOCK/UNLOCK FUNCTION 15

SCAN FUNCTION 15

TROUBLESHOOTING GUIDE 16

AFTERSALES SERVICE 18



UNPACKING AND CHECKING EQUIPMENT

Carefully unpack the transceiver. 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.

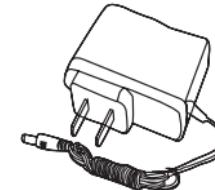
ITEM	QUANTITY
Antenna	1
Li-ion battery pack	1
Intelligent charger	1
AC power adaptor (wall charger)	1
Belt clip	1
User's manual	1

ITEM
Headset
Speaker / microphone
12V Car charger

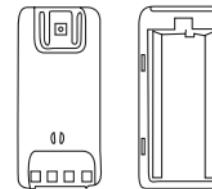
Standard Accessories:



Antenna



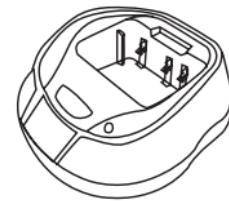
AC power adaptor (wall charger)



Li-ion battery pack (3500mAh)



Belt clip



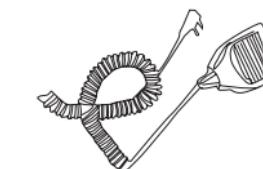
Intelligent charger



User's manual



Headset



Speaker/Microphone



12V Car charger

Optional Accessories:

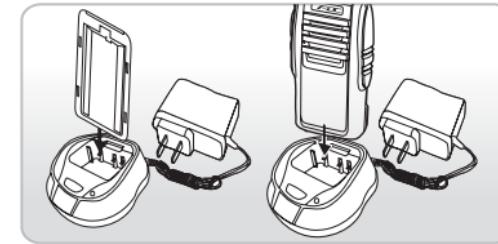
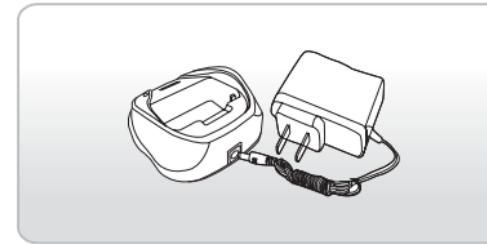
① Charging Li-ion battery pack

The Li-ion battery pack is provided uncharged at the factory for safety purposes. Please charge them before use. It takes approximately 8 hours to charge an empty FDB-25 Li-ion battery pack. Initially charging the battery pack after purchase or extended storage (longer than 2 months) will not bring the battery pack to its normal operating capacity. After repeating the charge/discharge cycle two or three times, the operating capacity will increase to normal.

! CAUTION

- ▲ Please only use the **FDC** supplied battery and charger. Or it may cause the life of the battery pack to shorten or the battery pack may be damaged.
- ▲ Exceeding the specified charge period shortens the useful life of the Li-ion battery pack.
- ▲ The battery pack life is over when its operating time decreases even though it is fully and correctly charged. Replace the battery pack.
- ▲ The battery pack must be kept in cool and dry place. Never leave the battery pack in the direct sunlight.

• Connecting to an intelligent charger



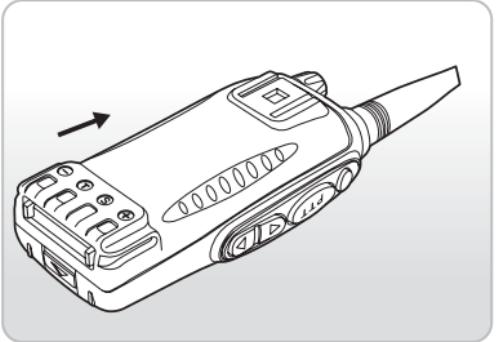
1. Plug the AC adapter cable into the adapter jack located on the rear of the charger.
2. Plug the AC adapter into AC outlet.
3. Insert the battery pack or transceiver with the battery pack into the intelligent charger.
 - * When charging begins, the LED on the charger lights RED.
 - * While charging, the green LED on the charger flashes.
 - * When the green LED on the charger turns on, it is fully charged.
4. When charging completes, unplug the AC plug from the power outlet.

②Installing/removing battery pack

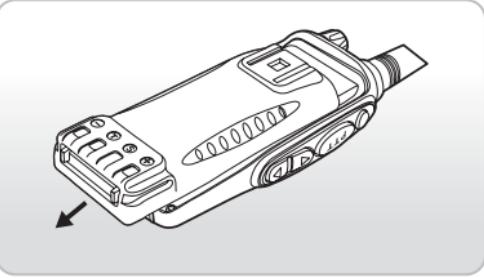
The average life of the supplied FDB-25 Li-ion battery pack is 9 hours. Average times are calculated by using 5% transmit time, 5% receive time, and 90% standby time.

NOTE

- ▲ Do not short the battery terminals or dispose of the battery by fire.
- ▲ Never attempt to remove the casing from the battery pack.

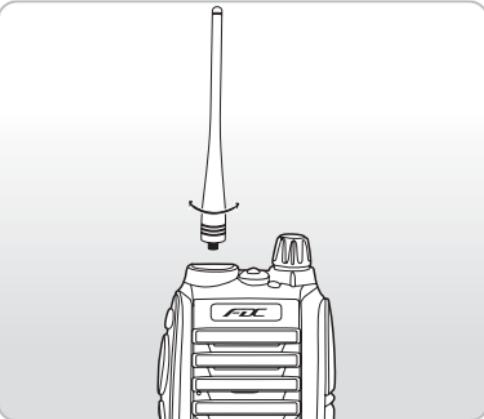


1. Match the grooves of the battery pack with the corresponding guides on the back of the transceiver.
2. Slide the battery pack along the back of the transceiver until the release latch on the base of the transceiver locks.



To remove the battery pack, pull down the release latch and slide the battery pack away from the transceiver.

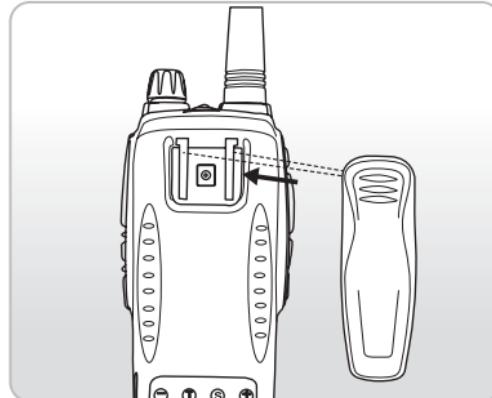
③Installing antenna



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.

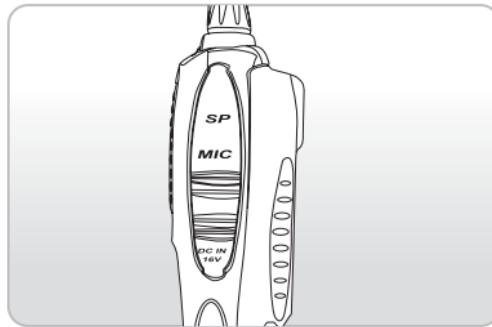
NOTE: The antenna is neither a handle, a key ring retainer, nor a speaker/microphone attachment point. Using the antenna and degrade your transceiver's performance.

④Installing belt clip



If necessary, you can install the supplied belt clip to the transceiver.

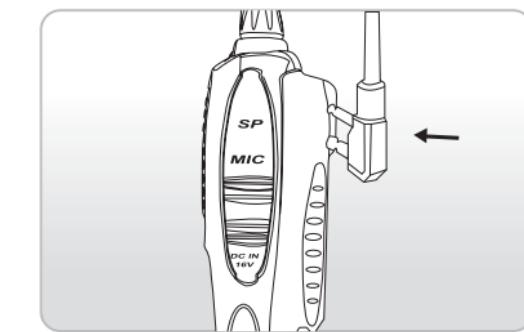
⑤Installing speaker/microphone jacks cover



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

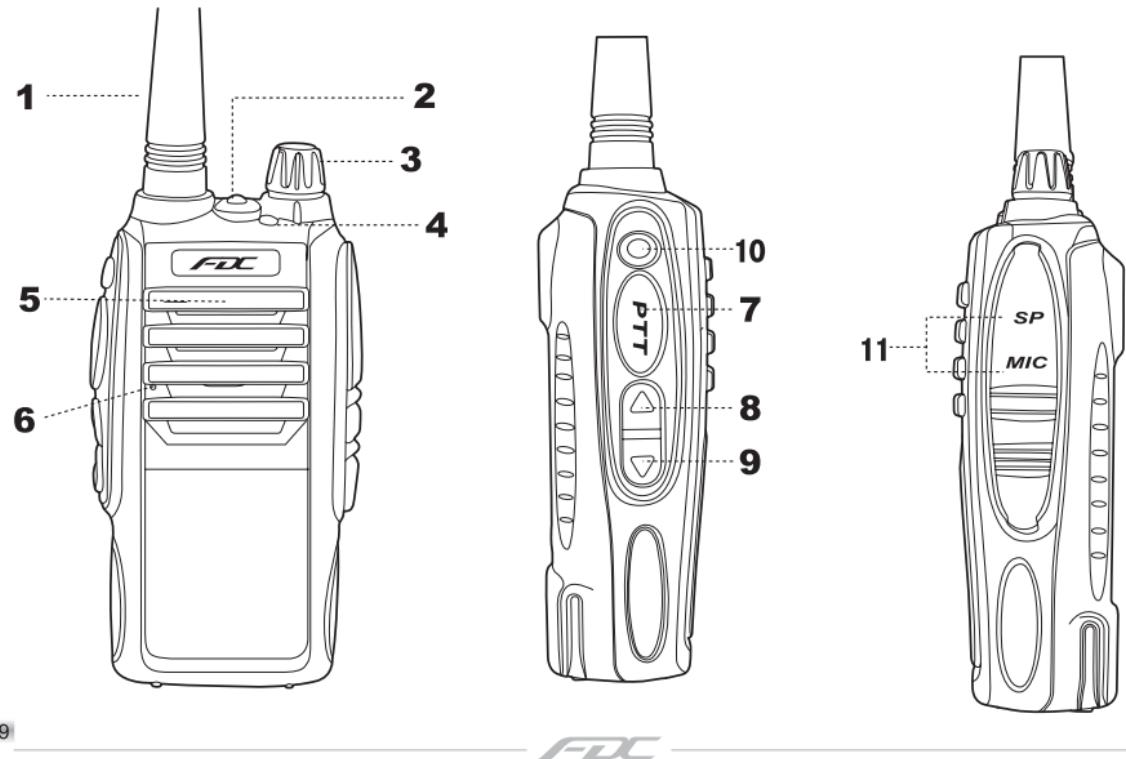
NOTE: To keep the transceiver waterproof, you must install the speaker/microphone cover.

⑥Installing external speaker/microphone



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

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



1. Antenna

2. LED flashlight

3. Power switch/volume control

- Turn clockwise to switch ON the transceiver.
- To switch OFF the transceiver, turn counterclockwise until a click sounds.
- Rotate to adjust the volume level.

4. LED indicator

- Lights red while transmitting.
- Lights blue while receiving a signal.

5. Speaker

6. Microphone

7. PTT (Push-to-Talk) switch

- Press, then speak into the microphone to call a station. Release to receive.

8. ▲ Up key

- Short press---Select operating channel (Channel Up button)
- Long press----Lock/Unlock ▲ / ▼ key

9. ▼ Down key

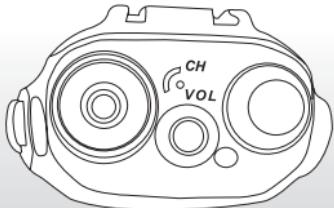
- Short press---Select operating channel (Channel Down button)
- Long press----Monitor function
Long press the Down key for 2 seconds to turn on the squelch, release to return to normal.

10. Orange key

- Short press----Turn ON/OFF LED flashlight
- Long press---Scan function (See page 15)

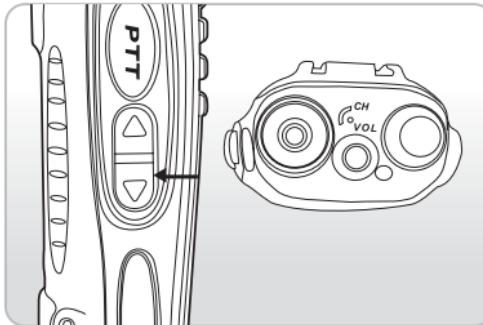
11. Speaker/Microphone jacks

BASIC OPERATION

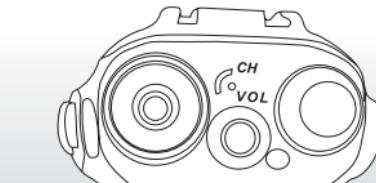


Switch ON the transceiver by turning the POWER switch/VOLUME control clockwise.

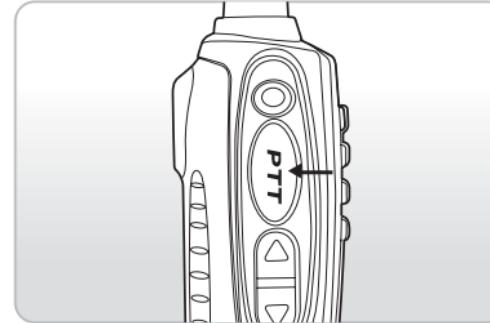
- If the voice function is activated, the voice prompt "Power on" will sound and the current channel number will be annunciated in the preset language.



Adjust the volume by long pressing and holding the ▼ key, then rotating the Power switch/VOLUME control.



Short press ▲ / ▼ key to select your desired channel. While switching to another channel, if the voice function is activated, you can hear the voice annunciation of the current channel number.
The transceiver has 99 memory channels.



To make a call, press and hold the PTT switch, then speak into the microphone using your normal speaking voice.

- Release the PTT switch to receive.

TIME-OUT TIMER(TOT FUNCTION)

The purpose of the Time-out Timer is to prevent any single person from using a channel for an extended period of time. If you continuously transmit for a long time, the transceiver will stop transmitting and a tone will sound. To stop the tone, release the PTT switch. You can press the PTT switch again to resume transmitting.

BATTERY SAVE FUNCTION

When the channel is not busy and no operation is performed for 10 secs., battery save function turns on. While receiving signal and operating the transceiver, battery save function turns off automatically.

LOW BATTERY ALARM

Low battery warning alerts you when the battery needs to be recharged or replaced. If the voice function is activated, the voice prompt "VOLTAGE LOW" will sound when the battery power is too low.

BATTERY INDICATOR

The battery indicator shows the power state of the transceiver. Turn ON the power, the LED indicator will indicate the battery capacity.

- Flashing blue(3 times) indicates the battery is fully charged.
- Flashing blue(2 times) indicates the power is above 50%.
- Flashing blue(1 time) indicates the power is low.

VOX FUNCTION

VOX operation allows you to transmit hands-free. When VOX function is turned ON, the LED on the panel lights red, and you do not need to press PTT key to transmit. The transmitting operation will somewhat be delayed, and the voice signal information may be not transmitted at the first beginning, since there needs time for VOX circuit to detect the voice signal.

NOTE: The higher level of VOX is set, the lower volume is needed.

BUSY CHANNEL LOCKOUT

BCLO is used to prevent the transmitting on a channel or frequency that somebody else is currently using. When turned ON, you cannot transmit even if you press PTT key while another party is using the channel or frequency. Release PTT key, the transceiver will be back to the receiving mode.

CTCSS/DCS FUNCTION

Some channels may have pre-programmed CTCSS/DCS tones. A CTCSS/DCS tone is a subaudible tone which allows you to ignore(not hear) calls from other parties who are using the same channel. When you receive a signal that has a tone different from the one set up in your transceiver, you will not hear the signal. Likewise, signals that you transmit will only be heard by parties whose CTCSS/DCS tone matches the tone set up in your transceiver.

⑨ KEY LOCK/UNLOCK FUNCTION

This transceiver has automatic lock and manual lock selectable. You can select keylock mode via programming software.

- Automatic Lock: When the Automatic Lock is on, there are no operations for 6 seconds, the ▲ / ▼ key will be locked automatically. Long press ▲ key for 2 seconds to unlock it.
- Manual Lock: When the Manual Lock is on, long press ▲ key for 2 seconds, a beep sounds and lock the ▲ / ▼ key. Long press ▲ key for 2 seconds again to unlock it.

⑩ SCAN FUNCTION

Long press Orange key for 2 seconds, the transceiver will start scanning all those programmed channels.

This transceiver has three scan modes.

TO: The transceiver continues scanning if there are no any operations for 3 seconds after receiving signals.

CO: The transceiver pauses scanning when receiving signals, and continues scanning 3 seconds after receiving signals.

SE: The transceiver stops scanning when receiving signals.

In the scan mode:

- Press PTT key to exit the scan mode.
- Press ▲ / ▼ key or long press Orange key for 2 seconds to exit the scan mode.

06

TROUBLESHOOTING GUIDE

Problem	Solution
No power.	1. The battery may be dead. Recharge or replace the battery. 2. The battery may not be installed correctly. Remove the battery and install it again.
Battery power dies shortly after charging.	The battery life is finished. Replace the battery with a new one.
Cannot talk to or hear other members in your group.	1. Make sure you are using the same frequency and Quiet Talk tone as the other members in your group. 2. Other group members may be too far away. Make sure you are within range of the other transceiver.
Other voices(besides group members) are present on the channel.	Change the Quiet Talk tone. Be sure to change the tone on all transceivers in your group.

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:
Model:

Ser.No:
Date:



Professional FM Transceiver

Quanzhou Feidixin Electronics Co., Ltd.

NOTE: Features & specifications are subject to change without notice.
FDC is not responsible for unintentional for errors or omissions on its packaging.



SAFETY TRAINING INFORMATION



Your Quanzhou Feidixin Electronics Co.,Ltd radio generators RF electromagnetic energy during transmit mode. This radio is designed for and classified as "Occupational Use Only", meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards. This radio is NOT intended for use by the "General Population" in an uncontrolled environment. This radio has been tested and complies with the FCC RF exposure limits for "Occupational Use Only". In addition, your Quanzhou Feidixin Electronics Co.,Ltd radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

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



To ensure you're your expose to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines

Electromagnetic Interference/Compatibility

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

Occupational/Controlled Use

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

Attention:

This radio complies with IEEE and ICNIRP exposure limits for occupational/controlled RF exposure environment at operating duty factors of up to 50% and is authorized by the FCC for occupational use only. An appropriate warning label is affixed to all units.

In order to comply with RF exposure requirements, a minimum distance of 2.5cm must be maintained when held-to-face, and body-worn operations are restricted to the approved original accessories (belt clip).

Do not use this device when antenna shows obvious damages!