

**FD-98**

SCAN FUNCTION

## RF Power Output <5W

- ✧ Standby time:100hours
- ✧ 3.7V/1200mAh Li-ion battery and USB charger
- ✧ 12.5kHz/25kHz compatibility

## Handheld Two-way radio

Built-in CTCSS/DCS



Quanzhou Licheng Feidaxin Electronics Co.,Ltd

[Http://www.feidaxin.com](http://www.feidaxin.com)

## 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 period of direct sunlight; Do not place it close to heating appliances.
- Do not operate the transceiver or charge the battery in an explosive atmosphere(gases, dust, fumes, etc).
- Do not place the transceiver in excessively dusty, humid, and/or wet areas.
- Turn OFF the transceiver while taking on fuel or while parked in a gasoline service station.

## SAFETY

It is important that operator is aware of, and understands, hazards common to the operation of any transceiver.



### CAUTION

- ▲ Explosive atmosphere(gases, dust, fumes, etc).
- ▲ Turn OFF the transceiver while taking on fuel or while parked in a gasoline service station.

## CONTENTS

<b>UNPACKING AND CHECKING EQUIPMENT</b>	<b>1-2</b>
<b>PREPARATION</b>	<b>3-7</b>
CHARGING Li-ion BATTERY	3-4
INSTALLING / REMOVING BATTERY	5
INSTALLING ANTENNA	6
INSTALLING BELT CLIP	6
INSTALLING SPEAKER / MICROPHONE COVER	7
INSTALLING EXTERNAL SPEAKER / MICROPHONE	7
<b>GETTING ACQUAINTED</b>	<b>8-10</b>
<b>BASIC OPERATION</b>	<b>11</b>
<b>AUXILIARY FUNCTIONS</b>	<b>12-14</b>
TIME-OUT TIMER (TOT FUNCTION)	12
BATTERY SAVE FUNCTION	12
BATTERY CAPACITY INDICATOR	12
LOW BATTERY ALARM	12
WIDE/NARROW BANDWIDTH SELECTION	13
VOICE FUNCTION	13-14
SCAN FUNCTION	14
CTCSS/DCS FUNCTION	14
<b>TROUBLESHOOTING GUIDE</b>	<b>15</b>
<b>FREQUENCY CHART</b>	<b>16</b>
<b>AFTERSALES SERVICE</b>	<b>17</b>



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.

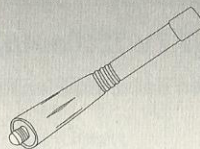
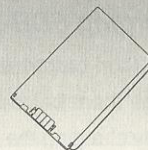
### Supplied accessories

ITEM	QUANTITY
Antenna	1
Li-ion Battery	1
Battery charger	1
Belt clip	1
User's manual	1

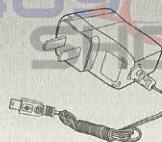
### Optional accessories

ITEM
Headset
Programming cable & software
Speaker / microphone
Car charger

Antenna

Li-ion Battery  
(3.7V/1200mAh)

Charger



Belt clip



User's manual



### Charging FDB-21 Li-ion battery(3.7V/1200mAh)

The Li-ion batteries are not charged when delivered. Please charge them before use.

Initially charging the battery after purchase or extended storage (longer than 2 months) will not bring the battery to its normal operating capacity. After repeating the charge/discharge cycle two or three times, the operating capacity will increase to normal.

#### NOTE:

- The battery can be charged by turning the transceiver off and on.

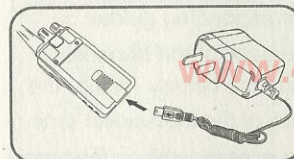
The transceiver can only work normally when you remove the charger.

- LED charging status indicator.

The LED color changes as the battery is charged. An empty battery is fully charged after about 2 hours.

Colour	State	Indication
Red	Illuminated	The battery is charging.
Green	Blinking	The battery is fully charged.
Green	OFF	

- The life of the battery is over when its operating time decreases even though it is fully and correctly charged. Replace the battery.
- Please only use the FDC charger and battery supplied. Or it may cause the life of the battery to shorten or the battery may be damaged.



1. Connect the USB charger cable to the transceiver.
2. Plug the AC plug into the power outlet.
3. After charging FDB-21 Li-ion battery for 2 hours, remove the charger from the transceiver. Unplug the AC plug from the power outlet.

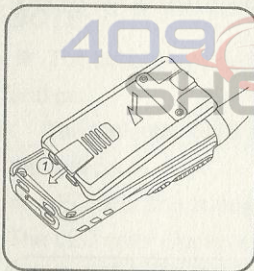


## Installing / removing battery pack

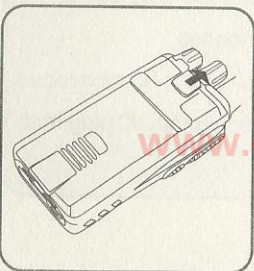
The average life of the supplied FDB-21 Li-ion battery is 6 hours. Average times are calculated by using 5% transmit time, 5% receive time, and 90% standby time.

### CAUTION:

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

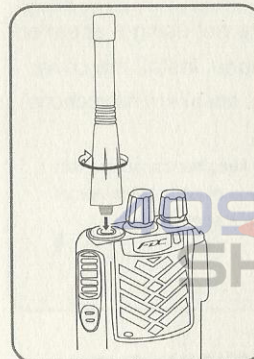


1. Match the four grooves of the battery with the corresponding guides on the back of the transceiver.
2. Slide the battery along the back of the transceiver until the release latch on the base of the transceiver locks.



To remove the battery, pull back on the release latch and slide the battery away from the transceiver.

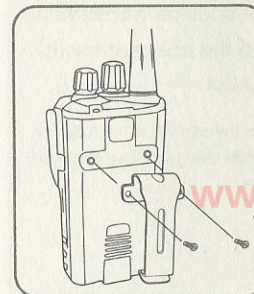
## Installing antenna



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.

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

## Installing belt clip

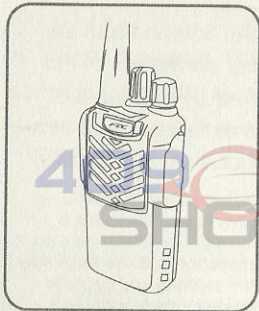


If necessary, attach the belt clip using the two supplied screws.

### CAUTION:

- ▲ Do not use glue which is designed to prevent screw loosening when installing the belt clip, as it may cause damage to the transceiver. Acrylic ester, which is contained in these glues, may crack the transceiver's back panel.

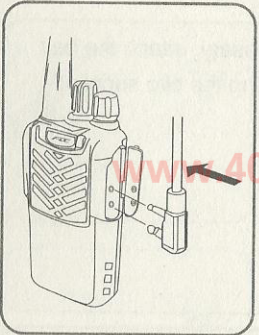
## Installing speaker / microphone cover



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

**NOTE:** To keep the transceiver rain resistant, you must install rainproof speaker/microphone cover.

## Installing external speaker / microphone

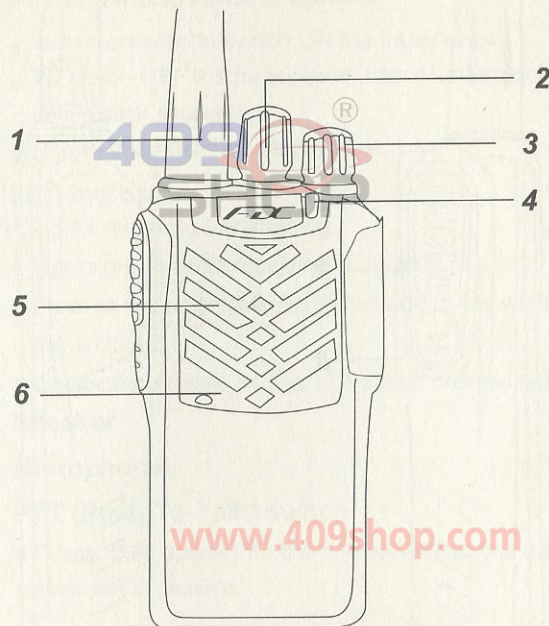


Insert the speaker/microphone plugs into the speaker/microphone jacks.

**NOTE:** The transceiver is not fully rain resistant while using external speaker/microphone.

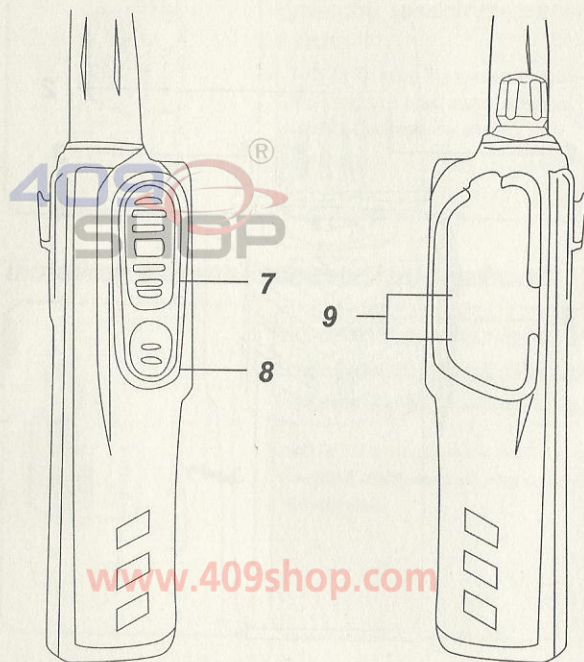
04

## GETTING ACQUAINTED



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### 1. Antenna

### 2. Channel selector

Rotate to select channels 1~16.

### 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 green while receiving a signal.
- Flashes red when the battery voltage is low while transmitting.
- Lights orange while setting 12.5/25kHz channel spacing.

### 5. Speaker

### 6. Microphone

### 7. PTT (Push-To-Talk) switch

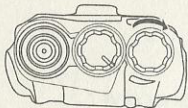
- Press, then speak into the microphone to call a station.
- Release to receive.

### 8. Monitor key

- Press and hold to turn the squelch ON, and the LED lights green.
- Release to return to normal.

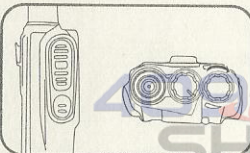
### 9. Speaker/microphone jacks

## 05 BASIC OPERATION

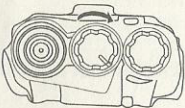


Switch ON the transceiver by turning the **POWER** switch/**VOLUME** control clockwise.

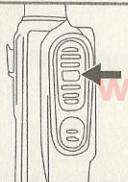
- The voice function is activated.



Adjust the volume by pressing and holding the **Monitor** key, then rotating the **Power** switch/**Volume** control.



Rotate the **Channel** selector to select your desired channel. While switching to another channel, you can hear the voice announcement of the current number.



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.

Release the **PTT** switch to receive.

## 06 AUXILIARY FUNCTIONS

### 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

The battery save function decreases the amount of power used when a signal is not being received and no operation are being performed. FDB-21 Li-ion battery standby time is about 90 hours.

While the channel is not busy and no operation is performed for 8 seconds, battery save turns on.

While receiving signal and operating the transceiver, battery save turns off automatically.

### BATTERY CAPACITY INDICATOR

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

- Flashing 4 times indicates the capacity is the full charged capacity.
- Flashing green thrice indicates the capacity is above



90% of the full charged capacity.

- Flashing green twice indicates the capacity is about 50% of the full charged capacity.

- Flashing green once indicates the capacity is low.

## LOW BATTERY ALARM

Low battery warning alerts you when the battery needs to be recharged or replaced.

When the battery power is too low, the RED LED light shines and a beep sounds to alarm you to charge the battery or fit a new one.

## WIDE/NARROW BANDWIDTH SELECTION (12.5kHz/25kHz)

### 1. How to set 12.5 kHz channel spacing

- Rotate the channel selector to channel 8.
- Press **PTT** key and turn ON the power.
- Flashing orange (twice) when it is programmed.

### 2. How to set 25 kHz channel spacing

- Rotate the channel selector to channel 7.
- Press **PTT** key and turn ON the power.
- Flashing orange (once) when it is programmed.

**PS:** The channel spacing is 25 kHz from the factory.

Wide/narrow bandwidth can be set by the programming software.

## VOICE FUNCTION

- **CHINESE VOICE:** Rotate the **channel** selector to channel 1. Press **PTT** key and **Monitor** key, and turn

ON the power.

- **ENGLISH VOICE:** Rotate the **Channel** selector to channel 2. Press **PTT** key and **Monitor** key, and turn ON the power.
- **CANCEL VOICE FUNCTION:** Rotate the **Channel** selector to channel 3. Press **PTT** key and **Monitor** key, and turn ON the power.

## SCAN FUNCTION

Rotate the **channel** selector to channel 16. The transceiver can scan all 16 channels.

- Press **Monitor** key or **PTT** key in scan mode, the transceiver will stop scanning for 5 secs before resuming scan.
- If signal appears in scan mode, the transceiver will stop on that channel for 5 secs. If you don't want to transmit, scanning will normally resume.

## 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.

<b>Problem</b>	<b>Solution</b>
No power.	<ol style="list-style-type: none"> <li>1. The battery may be dead. Recharge or replace the battery</li> <li>2. The battery may not be installed correctly. Remove the battery and install it again.</li> </ol>
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.	<ol style="list-style-type: none"> <li>1. Make sure you are using the same frequency and Quiet Talk tone as the other members in your group.</li> <li>2. Other group members may be too far away. Make sure you are within range of the other transceiver.</li> </ol>
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.

Model Name: FD- \_\_\_\_\_

Serial Number: \_\_\_\_\_

<b>Channel</b>	<b>Transmit Frequency</b>	<b>Receive Frequency</b>	<b>QT/DQT</b>
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			



# 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 fee.
- 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:**



VHF / UHF FM Transceiver

泉州飞达信电子有限公司

Quanzhou Feidaxin Electronics Co., Ltd