



Kirisun Communication Co.,Ltd.



Professional Two-way Radio



PT3600

FM HANDHELD TRANSCEIVER

INSTRUCTION MANUAL



NOTE:

NOTE:

7PIZ-7124-E09A



INSTRUCTION MANUAL
PT3600
FM HANDHELD TRANSCEIVER

We are very grateful for your purchasing brand two-way radios produced by Kirisun Communications Incorporation.

We believe two-way radio, which always incorporates the latest technology, can bring great convenience to your life and work;

We also believe that the quality and function of two-way radio can meet your demands for reliable communication.

Notice to the User

Before using this radio, read this operating instruction carefully for safe and convenient usage. When you begin to use it, we deem that you have read this manual. Keep this manual in a safe place and make it available to other operators in case the product is passed on to other people.

When purchasing our product, please fill in the WARRANTY CARD with truth information, and ask for the valid proof of purchase so as to protect your legal rights.

Kirisun and our authorized partners own the intellectual property of all the parts of this product (include accessories). Any design and materials may not be modified, copied, extracted or translated without the authorization of Kirisun or its authorized parties.

Due to the update or modification of the product, Kirisun owns the right to change the specifications of software and hardware described in this manual without further notice. Specifications and information contained in this manual are for reference only.

Kirisun reserves the right to interpret the mistakes and

errors occurring in this manual, though all the contents are checked carefully.

Safety

Before using this radio, read this operating instruction carefully for safe and convenient usage.

This product can only be maintained by the professional technicians. Do not disassemble the radio by yourself.

To avoid of the problems caused by electromagnetic interference or electromagnetic compatibility, turn off the radio in any facilities where posted notices instruct you to do so, such as hospital and other health care facilities.

And when on board an aircraft, turn off the radio if instructed to do so too.

In the vehicle with an air bag, do not place the radio in the area over an air bag or in the air bag deployment area.

Turn off the radio before entering any area with a potentially explosive atmosphere or blasting caps.

Do not operate the radio, disassemble or charge the battery in the potentially flammable and explosive atmosphere (such as gas station, coal gas station, etc.).

Do not place the radio under the direct sunlight or near

the area with heating devices.

Do not place the radio in the area with great dust, moisture or drips, or on the unstable surface.

Contact us or your local dealer for help if you want to re-develop or modify the radio.

Do not use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.

Make sure the antenna is correctly installed when using.

The radio without antenna may cause damage in the process of transmission.

Keep the radio vertically and away from your mouth about 5cm in the process of transmission.

When worn on your body, make sure the antenna is at least 2.5cm away from your body in the process of transmission.

Battery

All batteries can cause property damage and/or bodily injury, such as burns, if a conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The conductive material may complete an

electrical circuit (short circuit) and become quite hot.

Excessive care in handling any charged battery, particular when placing it inside a pocket, purse, or other container with metal objects. To reduce the potentially damage, do not expose the battery in the fire, or disassemble and extrude the battery.

The maximum ambient temperature around the adapter or transformer for the charger should not exceed 40°C (104°F).

Turn off the radio when charging. If not, the battery's capacity will be affected.

Do not insert the battery pack into the charger when charging is not necessary. The continuous charging will shorten the battery's lifetime. Do not use the charger as the pedestal for the radio.

To realize the best performance of the battery, change the battery once a year.

Kirisun Communication Co.,Ltd.

Content	
1. Unpacking and Checking	2
2. Preparation	3
2.1 Charging the Battery	3
2.2 Installing/Removing the Battery	4
2.3 Installing the Antenna	5
2.4 Installing the External Speaker/MIC	5
2.5 Installing/Removing the Belt Clip	5
3. Radio Overview	6
4. Basic Operations	7
4.1 Switching On	7
4.2 Adjusting the Volume	7
4.3 Selecting a Channel	7
4.4 Sending a Call	7
4.5 Receiving a Call	7
5. Functions of Programmable Buttons	8
6. Scan Function	9
7. Auxiliary Functions	10
7.1 Time-Out Timer (TOT)	10
7.2 Busy Channel Lockout (BCL)	11
7.3 Battery Saving	11
7.4 Low Battery Warning	11

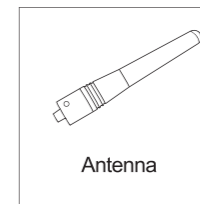
7.5 Monitor	11
7.6 CTCSS/DCS	11
7.7 PTT ID	11
8. Troubleshooting	12
9. Major Specifications	13
10. Status Setting	14

1. Unpacking and Checking

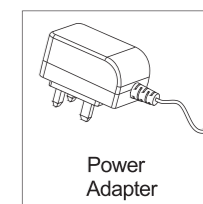
Unpack the radio carefully. We recommend that you check the radio and the supplied accessories listed in the following table before discarding the packing material. If any damage or loss has occurred during shipment, please contact the dealer without delay.

Supplied Accessories

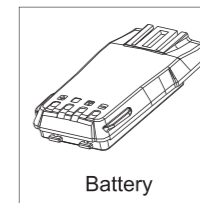
Item	Quantity
Antenna	1
Li-Poly Battery	1
Belt Clip	1
Charger	1
Power Adapter	1
Hand Strap	1
Instruction Manual	1



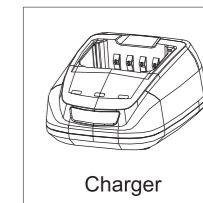
Antenna



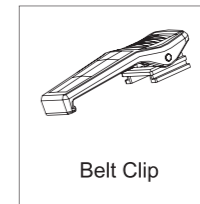
Power Adapter



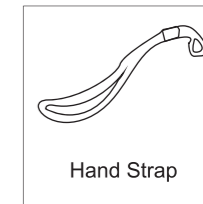
Battery



Charger



Belt Clip

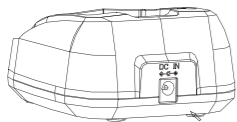


Hand Strap

2. Preparation

2.1 Charging the Battery

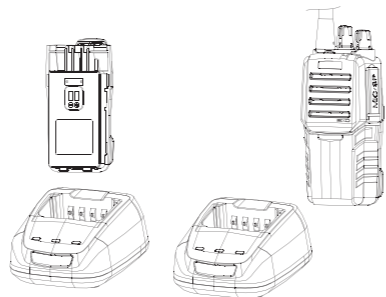
Plug the power adapter into an applicable AC outlet and connect the power adapter to the battery charger. The green LED will light up.



Insert the battery to be charged or the radio into the charging slot.

Make sure the battery is well connected with the charger. Then the red LED will light up, and the green LED will be out, which indicates that the charging starts.

After about 3~4 hours of charging, the red LED will be out, and the green LED will light up, which indicates that the battery is fully charged, then you can remove the battery from the charger.

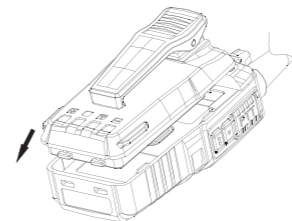


Note:

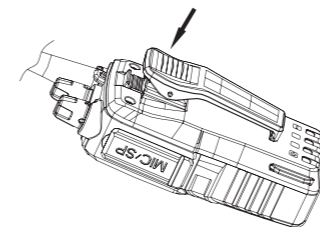
- The radio battery is not fully charged in the factory. Before the initial use, please charge the new battery.
- KB-31A Li-poly battery of Kirisun is applicable to this radio.
- When charging the battery for the first time after purchase or long-time storage (over 2 months), please repeat charging several times for the battery to achieve normal capacity.
- Do not recharge the battery if it has been fully charged or the radio is not in the low battery alarm state; otherwise, it will have bad effects on the battery's service life and performance. Remove the battery from the charger after charging.

2.2 Installing/Removing the Battery

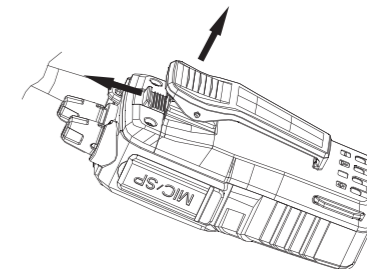
Match the two bulges at the bottom of the battery pack with the corresponding slots at the rear bottom of the radio.



Press the top part of the battery towards the radio to lock it in place until a click is heard.



To remove the battery pack, push the battery latch upwards, and then remove the battery away from the radio.



Note:

- Do not short-circuit the battery terminals or dispose battery in fire.
- Do not disassemble the battery casing by yourself.

2.3 Installing the Antenna

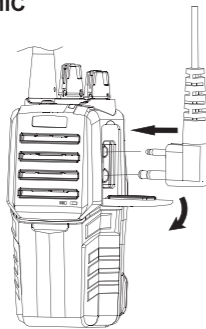
Hold the base of the antenna and turn the antenna clockwise into the connector on the top of the radio until secure.



2.4 Installing the External Speaker/MIC

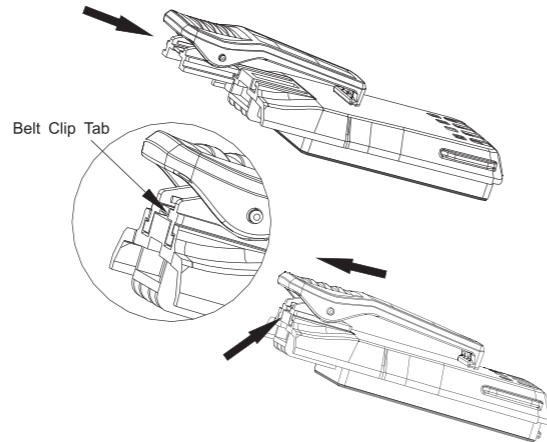
Open the cover for external speaker/MIC jacks, and then insert the external speaker/MIC plug into the jacks on the radio.

Note: When using the external speaker/MIC, the radio will not be waterproof.

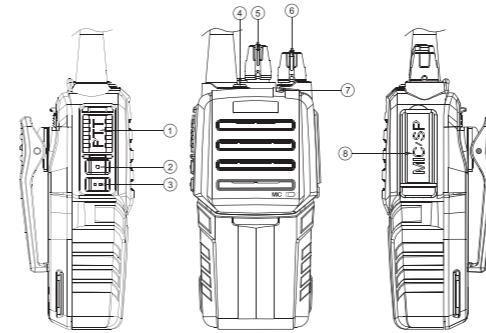


2.5 Installing/Removing the Belt Clip

Align the grooves of the belt clip with those on the rear of the battery. Then press the belt clip downwards until a click is heard. To remove the belt clip, use your fingernail or a tool to press the belt clip tab away from the battery. Then slide the belt clip upwards to remove it.



3. Radio Overview



① PTT (Push-To-Talk) Button

To make a call, press and hold the PTT button, then speak into the microphone. Release the PTT button to receive signals.

② Programmable Button 2

You can assign functions to this button through PC software.

③ Programmable Button 1

You can assign functions to this button through PC software.

④ Emergency Button

Press the button to activate warning tone. Press it again to exit the emergency alert state.

Note: When the warning tone sounds, all the other buttons are disabled.

⑤ Channel Selector Knob

Rotate it to select channel 1 – 16.

⑥ On-Off/Volume Control Knob

Turn clockwise until you hear a click to turn the radio power on. Turn counterclockwise until you hear a click to turn it off. Rotate it to adjust the volume after turning on the radio.

⑦ LED Indicator

Lights red while transmitting; lights green while receiving; flashes red when the radio is in low power while transmitting.

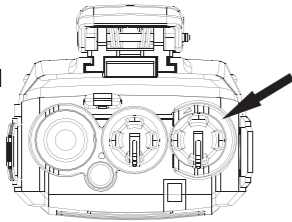
⑧ External Speaker/MIC Jacks

For connecting external speaker/MIC. Open the MIC/SP cover to see the jacks. ⑦

4. Basic Operations

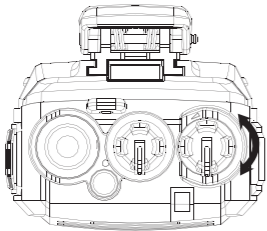
4.1 Switching On

Turn the On-Off/Volume Control Knob clockwise until a click is heard to switch on the radio. The radio will make a sound of “Di...” If programmed, the current channel number will be announced.



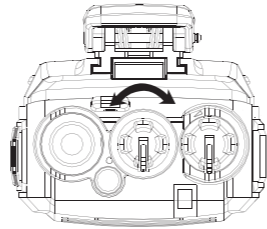
4.2 Adjusting the Volume

Turn the On-Off/Volume Control Knob to adjust the radio volume.



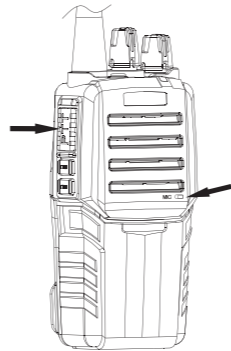
4.3 Selecting a Channel

Turn the channel selector knob to your desired channel. If voice annunciation has been set, the radio will announce the current channel number. You will hear voice from the speaker while receiving valid signals.



4.4 Sending a Call

To make a call, press and hold the PTT button and speak to the microphone in normal voice. Please keep your mouth 3 - 8 cm away from the microphone.



4.5 Receiving a Call

Adjust the volume to a proper level. Release the PTT button to receive a call.

5. Functions of Programmable Buttons

Long Press Duration: Amount of time that the radio-user is required to press (and hold down) a button, for the press to be interpreted by the radio as a long press. A short press is defined as any button-press that is shorter than the duration.

The dealer can assign one of the following auxiliary functions to the long press or short press of the programmable button 1 and programmable button 2:

- None: No function is assigned.
- Monitor Momentary

Press and hold the preprogrammed Monitor Momentary button to open squelch for monitoring the transmission on the channel whether the CTCSS/DCS, audio squelch conditions match or not. Release it to exit monitor mode.

- Monitor

Press the preprogrammed Monitor button to open squelch for monitoring the transmission on the channel whether the CTCSS/DCS, audio squelch conditions match or not. Press it again to exit monitor mode.

- Squelch Off Momentary

Press and hold the preprogrammed Squelch Off Momentary

button to open squelch momentarily, and release it to resume normal operation.

- Squelch Off

Press the preprogrammed Squelch Off button to open squelch, and press it again to resume normal operation.

- Channel Annunciation

Press the preprogrammed Channel Annunciation button, the current channel number can be heard.

- Scan

Press the preprogrammed Scan button to start scanning (the scan list should be effective), press it again during the scanning to stop scanning.

- High/Low Power Switch

Press the preprogrammed High/Low Power Switch button to switch the current channel power between high and low.

- Battery Check

Press the preprogrammed Battery Check button, the current battery power level can be heard. There are four levels in all. Level 4 indicates that the battery power is full, and level 1 indicates that the battery power is low.

- Squelch Adjust

Press the preprogrammed Squelch Adjust button to change the current squelch level, and the squelch level after the change can

be heard.

- VOX

VOX function enables you to use the radio without manual operations. This function can only be set by the dealer, and you have to be equipped with the specified earphones.

Before using VOX, you must set VOX gain level. Such setting enables the radio to identify the voice volume. If the microphone is too sensitive, the background noise will trigger the radio to transmit. If the microphone is not sensitive enough, it cannot receive your voice when you speak. Make sure to adjust the VOX gain level to proper sensitivity.

6. Scan Function

(this function can be disabled by the dealer)

If the scan function is enabled, you can press the preprogrammed Scan button to start scanning and press it again to stop scanning.

Explanations:

- After scan pauses, there are two ways to resume scanning:

(1) Time operate: After pausing on an active channel, the radio will resume scanning after a preprogrammed delay. The scan delay time can be preset from 0.5 to 5 seconds.

(2) Carrier operate: After pausing on an active channel, the radio will resume scanning after a preprogrammed delay after the channel becomes inactive. The scan delay time can be preset from 0.5 to 5 seconds.

- The revert channel during scan can be designated through PC software. There are following options available:

(1) Last Rx channel:

When pressing the PTT button during scanning, the radio will transmit from the last channel that received a call.

(2) Designated Tx channel:

When pressing the PTT button during scanning, the radio will transmit from the selected channel.

(3) Priority channel (the priority channel must be set)

When pressing the PTT button during scanning, the radio will transmit from the priority channel in the scan list.

(4) Last Tx channel:

When pressing the PTT button during scanning, the radio will transmit from the last channel that transmits signals.

(5) Selected channel:

When pressing the PTT button during scanning, the radio will transmit from the channel selected by the channel selector knob.

- You can choose to set one of the following 3 operations when the channel is switched during scanning:

(1) No operation.

(2) Scan the current channel: The scanning will pause on the current channel, and the pause time will be the Dropout Delay Time. However, this channel will not be added to the scan list.

(3) Exit scanning.

- Power-on scanning: If this function is enabled, the radio will start scanning after the radio power is turned on.

7. Auxiliary Functions

7.1 Time-Out Timer (TOT)

(1) TOT Function

The time-out-timer can prevent the user from continuously talking overlong and prevent the radio from heating due to continuous transmitting.

If you continuously transmit longer than the preset TOT time, the radio will make an alert tone and stop transmitting. To stop the warning tone, release the PTT button.

(2) TOT Pre-alert

The radio will make an alert tone in advance before the TOT terminates the transmission. After the alert tone, when the time of transmission exceeds the preset time, the TOT timer will act.

(3) TOT Rekey Time

A period in which the radio is forbidden to transmit after its overtime activity.

During the period, if the PTT button is pressed, an alert tone will be sounded, and the transmission is forbidden.

(4) TOT Reset Time

The time delay from releasing the PTT button to the resetting of the timer is limited.

The countdown will go on if the time after releasing the PTT key is shorter than the reset time.

7.2 Busy Channel Lockout (BCL)

If the channel on which a user attempts to transmit is being used by another party, BCL function restricts the transmission in order to avoid interfering with the other parties' communication, and the radio will make an alert tone, and returns to the receiving state.

7.3 Battery Saving

The battery saving function can reduce power consumption of the radio when no signal is received and no operation is conducted (no button is pressed and no knob is turned).

If the radio hasn't receive any signal or no operation is being conducted for 8 seconds, the radio will enter Battery Saving Mode. When a signal is received or any operation occurs, the radio will exit the Battery Saving Mode automatically.

7.4 Low Battery Warning

When the battery voltage drops too low while transmitting, the LED flashes red, low battery warning tone sounds, and the radio stops transmitting. You need to recharge or change the battery.

7.5 Monitor

When there is no signal received, the radio's squelch circuit will mute the speaker automatically so that the background noise will not be heard by the user. You can press and hold the preprogrammed Monitor button to open squelch manually. This function is especially useful when you need to adjust the volume level or to receive weak signals.

When the Monitor button is pressed and held, the LED indicator lights green, and the radio is in the monitoring state.

7.6 CTCSS/DCS

CTCSS/DCS tones may have been pre-programmed on some radio channels. A CTCSS/DCS tone is a sub-audible tone, which allows you to ignore (not hear) calls from other irrelevant parties who are using the same channel. When you receive a signal that has a tone different from the one set on your radio, you will not hear the signal. Likewise, signals that you transmit will only be received by parties whose CTCSS/DCS tones are the same as yours.

Note: Using a CTCSS/DCS channel doesn't mean your calls are private. If other parties' CTCSS/DCS tones are identical with yours, they can hear your calls.

7.7 PTT ID

PTT ID uses DTMF code. The preset DTMF sequence can be sent at the beginning of the transmission or at the end of the transmission. It is used to notify the identity of the callers to the monitoring center, or used to activate the repeater.

The encoder sequence and the encoder type can be set for each channel. There are 16 groups of sequences for your selection.

PTT ID Keydown Code: The radio will send DTMF sequence when the PTT button is pressed.

PTT ID Dekey Code: The radio will send DTMF sequence when the PTT button is released.

8. Troubleshooting

No.	Problem	Causes and Solutions
1	The radio cannot be switched on or no display after being switched on.	A. The battery power may be insufficient. Please recharge or replace the battery pack. B. The battery pack may not be installed properly. Please remove the battery pack and install again.
2	The battery power consumes quickly after charging.	A. The battery life is finished. Please replace it with a new battery pack.
3	Cannot talk to or hear other group members.	A. Make sure the CTCSS/DCS signal is the same as that of your group members. B. The radio is out of effective communication range.
4	Other voices from non-group members are heard on the channel.	A. Change the CTCSS/DCS signal, and make sure to change the CTCSS/DCS signal of all radios in your group.

No.	Problem	Causes and Solutions
5	The communication range is too short.	<p>A. Make sure the antenna is well connected.</p> <p>B. Make sure the antenna is the original supplied one.</p> <p>C. Check if the battery power is in normal state.</p> <p>D. Ask your local dealer to adjust the squelch level.</p>

9. Major Specifications

Model	PT3600	
Frequency	136-174MHz VHF 400-470MHz UHF	
RF power	4W(UHF)	5W(VHF)
Tx clusters and harmonics	<-70dB	
Frequency stability	±5ppm	
Max. deviation	±5KHz(W)/ ±2.5KHz(N)	
Rx sensitivity	≤0.18μV	
Channel selectivity	>60dB	
Intermodulation	>60dB	
Max. audio power	≥1000mW	
Channel number	16(15+S)	
Power supply	DC 7.4V	
External dimension	47mm×107mm×33mm	
Weight	225g (with battery and antenna)	

10. Status Setting (by the dealer)

Model: _____ Serial No.: _____

1. Channel setting

Channel No.	Tx frequency	Rx frequency	CTCSS/DCS
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

2. The way to resume scanning after its pause:

 Time Operate
 Carrier Operate

3. Revert channel:

 Selected Channel
 Selected Channel or Currently Working Channel
 Priority Channel
 Priority Channel or Currently Working Channel
 Last Called Channel
 Last Working Channel+Currently Working Channel

4. Squelch

 ON OFF

5. TOT

 ON OFF



DECLARATION OF CONFORMITY



We, Kirisun Communication Co.,Ltd.,
3rd Floor, Building A, Tongfang Information Harbour, No.11
Langshan Road, Nanshan District, Shenzhen 518057, P.R.China.

Declare on our sole responsibility that this equipment complies with the essential requirements of the Radio and Telecommunication Terminal Equipment Directive, 1999/5/EC, and that any applicable Essential Test Suites measurement has been performed.

Description of equipment: FM MOBILE Transceiver
Model No.: PT3600

This compliance is based on conformity with the following harmonised standards or documents:

- (1). EN 60950
- (2). EN 301 489-1/-5
- (3). EN 300 086-1/-2

Shenzhen, 25 Jun 2008
Place and date of issue

WenLiang, Fu
General Manager

Signature
Kirisun Communication Co.,Ltd.

NOTE:

NOTE:

NOTE:
