

3.5 Installing the Optional Speaker/ Microphone

Insert the Speaker/Microphone plug into the jacks of the versatile connector, and fix it with the supplied snail screw.



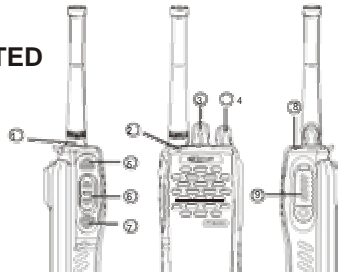
Notes:

- 1) Only use the KIRISUN Speaker/ Microphone.
- 2) KME-62A Speaker/Microphone is supplied for option.
- 3) The Speaker/Microphone is for option only. If you want to purchase one, please contact the local KIRISUN dealer.

4 GETTING ACQUAINTED

4.1 Transceiver Overview

1. Antenna
2. LED Indicator



Transmitting	Lights red
Receiving	Lights green when Carrier wave is present
Scanning	Flashes green. (Once per second.)
Read/Write frequency	Read frequency: flashes red; Write frequency flashes green.
Transmit code (DTMF /2-Tone/5-Tone)	Flashes orange after transmission. (Once per second.)
Decode (DTMF/KDC 1200/2-Tone/5-Tone)	Flashes orange within the effective time after receiving the correct code.
Low battery warning	Flashes red. (Once per second.) Alerts once every 30 seconds.
Wireless clone	Turn on the transceiver with PTT and side button 2 pressed, and lights orange. While in cloning the host transceiver flashes Red and the sub one lights green.

3. Channel Selector

Rotate to select channel 1-16.

4. Power/Volume Switch

Turn clockwise to switch on the transceiver.

Turn counterclockwise till a click is heard to switch off the transceiver.

Rotate to adjust the volume after turning on the transceiver.

5. Side Button 1

Programmable function button: Press it to activate the programm-

6. PTT (Push-to-talk)

To make a call, press and hold the PTT button, then speak into the microphone with normal voice.

Release the PTT button to receive.

7. Side Button 2

Programmable function button: Press it to activate the programmable auxiliary function. Its default setting is squelch off momentary.

8. Emergency Button

Press and hold it longer than the preset time to activate emergency alert function.

9. Microphone/Speaker Jacks

For connecting external Microphone/Speaker.

4.2 Programmable Auxiliary Functions

The dealer can program the Side Button 1 and Side Button 2 as one of the following auxiliary functions.

None (No Function)

Key Lock

Key Lock with Backup

Monitor

Monitor Momentary

Scan

Scan + Temporarily Delete

Squelch Off

Squelch Momentary

Temporarily Delete

CALL 1

CALL 2

Scrambler

5 Basic Operation

Switch On

Switch on the transceiver by turning the Power/Volume switch clockwise till a click is heard, then the transceiver will be in the state of stand by and you will hear a beep if the dealer has set it. If voice annunciation has been set, the current channel number will sound.

Turn the Power/Volume switch counterclockwise to switch off the transceiver.

Adjust Volume

Rotate the Power/Volume switch to adjust volume.

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

Note: If the dealer has set the function of the side buttons as Squelch Off or Squelch Off Momentary, press the side button to listen to the background noise and rotate the

Power/Volume switch to adjust volume.

Select a Channel

Rotate the channel selector to select a channel. Clockwise to increase the channel number; counterclockwise to decrease.

If voice annunciation has been set, the current channel number will sound.

Note: If a channel has not been opened by programming you

cannot use it. If you selected a channel not opened LED will lights red and flashes green, and warning tone sounds.

Make a Call

To make a call, press PTT, and speak in normal voice and please keep your mouth 1~2 inches away from the microphone to get the best voice quality. Release the PTT button to receive a call.

Receive a Call

Your dealer can set CTCSS, DCS, DTMF, KDC1200, 2-Tone and 5-Tone signaling on your radio channels by PC software. If you select a channel that has been preset with the tone signaling, you will not hear any other calls except those from your own system.

If the channel you select hasn't been in any of these signaling types, you can hear any call (not limit to the members in your system.)

6 Advanced Operations

6.1 Key Lock (Backup)

1) Press and hold the side button set as key lock for 1 second to activate or inactivate key lock. When Key Lock is active, the following keys are locked:

Channel Selector, Scan Button, Scan + Temporarily Delete Button, Temporarily Delete Button and Scrambler button.

2) If the side button has been set as Backup, Key Lock will remain active even after the transceiver is turned on again. If Backup function has not been set, Key Lock will be canceled

after turning on the transceiver again.

6.2 Monitor/ Squelch Off

Monitor, Monitor Momentary, Squelch Off, and Squelch Off Momentary functions can enable you to listen to the signals unable be heard while in normal operations, or can be used to adjust the selected channel's volume.

Monitor: Press the monitor button once to inactivate CTCSS, DCS, DTMF, KDC1200, 2-Tone and 5-Tone signaling, and press it again to return to normal operation.

Monitor Momentary: Press and hold the monitor button to inactivate CTCSS, DCS, DTMF, KDC1200, 2-Tone and 5 Tone signaling, and release it to return to normal operation. **Squelch Off** : Press the button once to listen to background noise, and press it again to return to normal operation.

Squelch Off Momentary : Press and hold the button to listen to background noise, and release it to return to normal operation.

6.3 Scan

While in scanning, the transceiver checks every channel and stops on the channel on which a signal is detected until that signal disappears. If the delay time between signal disappearing and continuing scanning has been preset, the transceiver will remain on that channel in the delay time if a signals received .

Only when there are two channels added in the scan list and



the scan function has been activated, the transceiver can start scanning.

- 1) Press the button set as "Scan" or "Scan + Temporarily Delete" to start scanning.
- 2) The transceiver will start scanning from the current channel and scan channels one by one in the consequence of channel No. and the LED flashes green.
- 3) When a signal is detected on a channel, scanning pauses and LED lights green.
- 4) You can select a channel to make a call by pressing the PTT button during anytime of scanning.
- 5) Press again the button set as "Scan" or "Scan + Temporarily Delete" to end scanning.

Priority Scan

During scanning, if the priority channel has been set on the transceiver, when the priority channel receives a signal the transceiver will automatically switch to the priority channel even the normal channel is receiving signals at that time. And the transceiver will stay on the priority channel till that signal disappears. The dealer can set the delay time between signal disappearing and continuing scanning.

Temporarily Delete

When scanning pauses on a channel, press and hold the button programmed as "Temporarily Delete" or "Scan + Temporarily Delete" for 1 second to delete this channel temporarily from the scanning list.

Note:

of scanning channels is less than 2, you cannot delete any channel, either.

After exiting scanning mode and entering it again, the temporarily deleted channel will be added in the scanning list again.

6.4 CALL 1/CALL 2

If the dealer has programmed DTMF, KDC1200, 2-Tone or

5-Tone signaling on the current channel, press the programmable side button (CALL 1 or CALL 2) to send the stored DTMF, KDC1200, 2-Tone or 5-Tone code.

While in transmitting LED lights red; and after transmission except KDC1200 LED flashes orange till the effective time expire, within which you can receive calls from other transceivers.

6.5 Scrambler (Backup)

Scrambler offers voice security. This function set on both communication parties can avoid other transceivers using the same frequency to acquire your private information. When pressing the side button programmed as Scrambler, the third party is unable to listen to your talking voice clearly.

If Scrambler Backup option is not activated, the transceiver will not be in Scrambler state after it is switched on once again, whereas the Scrambler state will be stored.

6.6 VOX

without manual operations. This function can only be set by the

dealer, and you have to be equipped with the specified headset earphones.

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

- 1) Connect the headset earphones with the transceiver.
- 2) Turn off the transceiver, and then turn it on again and press Side Button 1 at the same time.
- 3) Hold Side Button 1 till a beep sounds and LED lights orange, then release Side Button 1, and the transceiver will announce VOX gain level.
- 4) Press Side Button 1 to increase VOX gain level; press Side Button 2 to decrease it.
VOX gain level can be adjusted between level 1 ~10 and OFF. When adjusting gain level, the transceiver will announce VOX gain level. If OFF is selected, beep tone will sound.
- 5) Press PTT to store the setting. After a beep, the transceiver announces new VOX gain level.
- 6) Turn off the transceiver, and turn it on again, and then
VOX function is activated.

6.7 Wireless Clone

The dealer can enable or disable this function by programming.

You can clone programming data to or from

seconds, and turn on the transceiver at the same time entering Clone Mode.

1) When the clone slaves enter clone mode, LED lights orange and you will hear voice annunciation

Clone

When release buttons, voice annunciation Channel 1 sounds.

2) When the Clone master enters clone mode, LED lights orange and you will hear voice annunciation

Clone

When release buttons, voice annunciation Channel 1 sounds.

3) Select on the Clone master the channel number identical with that on the Clone slaves. You can select clone channel by pressing Side Button 1 or Side Button 2.

4) Press the PTT button on the Clone master to transmit data and LED flashes red.

The Clone Slaves begin to receive cloning data and LED

lights green.

When the data transfer is completed, the Clone master sounds confirming beep.

5) After the data transfer the Clone master cannot be set as Clone Slave to receive data from other transceivers.

6) The cloning rate has been automatically set at a low value 1200bps.

6.8 Emergency Alert

If Emergency Alert has been set on the transceiver by programming, you can make emergency calls.

1) Press and hold the emergency alert button.

According to the delay time preset on the transceiver, the

power

time required for holding the button may be different.

When the transceiver enters emergency call mode, it will switch to the emergency channel automatically, and starts transmitting according to the dealer's setting. Transmitting and receiving recycle can be set by your local dealer.

2) To exit the emergency call mode, press again and hold the emergency call button.

If the repeating times of emergency call has expired, the transceiver exits emergency call mode automatically and returns to normal operation mode.

7 Auxiliary Functions

7.1 Time-out Timer (TOT)

Time-out timer can prevent any caller from occupying one certain channel for an extended period of the time.

If the transceiver is continuously transmitting longer than the time preset by the dealer, the transceiver will stop transmitting and warning tone sounds, and please release the PTT button. The dealer can program the warning alarm before TOT action.

7.2 Battery Saving

The dealer can activate or inactivate this function by programming.

If the battery saving function is active, 10 seconds after the transceiver doesn't receive any signals or no operation is being conducted, the transceiver enters battery saving mode. When a signal is received or any operation occurs, it exits battery saving mode automatically.

consumption.

7.3 Low Battery Warning

Low battery warning tone sounds and LED flashes red when the battery power goes below a certain value, and you need to recharge or change the battery. In low battery status transmission is prohibited.

7.4 Voice Annunciation of Channel Number

The dealer can activate or inactivate this function by programming.

While switching to another channel, you can hear the voice annunciation of the current channel number. Four combinations are available: Chinese Male, English Male, Chinese Female and English Female.

7.5 Busy Channel Lockout (BCL)

Busy Channel Lockout can prevent you from interfering other transceivers that using the same channel.

If you press the PTT button when the channel is busy, the transceiver with BCL function active will make warning sound and transmission is prohibited. To stop the warning sound, please release the PTT button and the transceiver returns to receiving mode.

- 1) Carrier wave: When the channel you select is busy, the transceiver is unable to transmit.
- 2) CTCSS/DCS: When the channel you select is busy and programmed CTCSS/DCS signal is not detected, the transceiver is unable to transmit.

3) Option signaling: When the channel you select is busy before valid option signaling matches, or when the channel you select is busy and programmed CTCSS/DCS signal is not detected before valid option signaling matches, the transceiver is unable to transmit.

7.6 Clear Tail Tone

When using the channel set with CTCSS/DCS, the after sound in talking ending can be eliminated.

7.7 Remote Kill

The dealer can activate or inactivate this function by programming.

When the transceiver receives the call of remote killing code, it enters remote killed mode, in which it cannot transmit, or cannot transmit and receive unless it receives remote reviving order or is programmed by PC software.

7.8 CTCSS/DCS

The dealer can set CTCSS/DCS tones on radio channels, which enable 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 transceiver, 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

7.9 DTMF

The dealer can activate or inactivate this function by programming.

1) Receiving Signals

Only when the transceiver receives programmed DTMF code (3~10 digits), the squelch will be activated. Usually every transceiver has a unique code. Calls from the transceivers whose codes are not programmed will not be heard.

The dealer can also program group code on the transceiver. When receiving the signal with proper DTMF code, squelch will be activated, and call can be received and LED flashes orange.

To manually deactivate the squelch, press monitor key or the side button set as instantaneous monitor.

The dealer can program that squelch turns off after a certain time and LED turns dim.

If DTMF auto Transpond has been programmed, the calling transceiver will receive confirming signal.

If DTMF signal Call Alert has been programmed, it rings when receiving the proper code.

2) Transmitting Signals

You can transmit the preset DTMF PTT ID code by pressing PTT button. Or you can also transmit DTMF code by pressing the side button CALL1 or CALL2 if DTMF signal has been programmed on the channel.

If the selective signaling on the channel is programmed as

DTMF, and the loudspeaker is not mute and "Carrier Wave + Selective Signaling" has been activated, press PTT



transmit. After releasing PTT button indicator flashes orange and then you can talk to other transceivers until the effective time expires when the indicator turns dim.

7.10 KDC 1200

The dealer can activate or inactivate this function by programming.

1) Receiving Signals:

When receiving the signal consisting of your ID and fleet code, squelch will be activated, and call can be received and LED flashes orange.

To manually deactivate the squelch, press monitor key or the side button set as instantaneous monitor.

2) Transmitting Signals:

If the PTT ID or Call1/Call2 on the channel you select has been set with KDC1200, KDC1200 signal will be transmitted when making a call.

7.11 2-Tone

The dealer can activate or inactivate this function by programming.

1) Receiving Signals:

When receiving proper 2-Tone, squelch will be activated, and call can be received and LED flashes orange.

To manually deactivate the squelch, press monitor key or the side button set as instantaneous monitor.

The dealer can program that squelch turns half active some time after the signal disappears.

If auto Transpond has been set, the calling transceiver will receive confirming signal.

If signal Call Alert has been set, it rings when receiving the proper 2-Tone code.

2) Transmitting Signals:

If 2-Tone has been set on the channel you can transmit 2-Tone by pressing the side button CALL1 or CALL2. The dealer can set it.

After transmitting the signal, indicator flashes orange and you can talk to other transceivers until the effective time expires when the indicator turns dim.

7.12 5-Tone

The dealer can activate or inactivate this function by programming.

5 Tone has 7 coding formats: CCIR, ZVEI1, ZVEI2, DZVEI, EEA, PZVEI, and EIA.

1) Receiving Signal

When receiving proper 5 tone signal, squelch will be activated, and call can be received and LED lights orange.

To manually deactivate the squelch, press monitor key or the side button set as instantaneous monitor.

The dealer can program that squelch turns half active some time after the signal disappears.

If auto transpond has been set, the calling transceiver will receive confirming signal.

If call alert has been set, it rings when receiving the proper 5 Tone signal.

2) Transmitting Signal:

If the PTT ID on the channel you select has been set with 5 Tone, 5 Tone signal will be transmitted when making a call. Or transmit 5 Tone signal by pressing CALL1 or CALL2 button, which can be set by the dealer.

7.13 Transmitting Beginning/Ending Signaling

- 1) Transmitting Beginning/Ending signaling is used to join in or disconnect from some repeaters and telephone.
- 2) Transmitting Beginning signaling is used to join in the conventional repeater and its relevant auxiliary equipments. If the ID being transmitted matches with the repeater's ID, it can use the repeater and its auxiliary equipments.
- 3) Transmitting Ending signaling is used to disconnect with the conventional repeater and its relevant auxiliary equipments. If the ID being transmitted matches with the repeater's ID, it can disconnect from the repeater and its auxiliary equipments.

8 TROUBLESHOOTING

No.	PROBLEM	SOLUTION
1	The transceiver cannot be switched on or no display after switched on.	<ul style="list-style-type: none">■ Battery pack may not be installed properly. Remove the battery pack and install it again.■ Battery power may be insufficient. Recharge or replace the battery pack.
2	The battery power consume quickly after charging.	<ul style="list-style-type: none">■ The battery life is finished, please replace it with a new battery pack.
3	Cannot talk to or hear other members in your group.	<ul style="list-style-type: none">■ The frequency or CTCSS/DCS signaling is not identical and please reset it.■ Not receive the correct DTMF, KDC 1200, 2-Tone and 5-Tone signaling or the effective time expires.■ Beyond the transceiver efficient communication range.
4	Other voices from non-group members are heard on the channel.	<ul style="list-style-type: none">◆ Change the CTCSS/DCS tone, and make sure change the tone on all transceivers in your group.◆ Please set DTMF, KDC1200, 2-Tone or 5-Tone selective signaling on the channel.

No.	PROBLEM	SOLUTION
5	Communication range is too short.	<ul style="list-style-type: none"> ◆ Make sure the antenna is well connected. ◆ Make sure the antenna is the original supplied one. ◆ Check if the battery power is in the normal state. ◆ Ask your local dealer to adjust the squelch level.
6	Unable to transmit.	<ul style="list-style-type: none"> ◆ Make sure the PTT button has been pressed completely. ◆ Battery power may be insufficient. Recharge or replace the battery pack. ◆ Transmitting frequency has not been set on the channel and the transceiver has been remote killed.
7	Noise is too loud.	<ul style="list-style-type: none"> ◆ Battery power may be insufficient. Recharge or replace the battery pack. Beyond the efficient communication range. ◆

9 Technical Specifications

SPECIFICATIONS	PT6200		
Frequency (MHz)	(1) 136~174	(2) 430~470	(4) 470~512
		(3) 400~440	(5) 350~390
RF power	5W/1W	4W/1W	
Spurious and harmonics	≤ -70dB		
Frequency stability	±2.5ppm		
Maximum frequency deviation	±5KHz(W)/± 2.5KHz(N)		
Receiver sensitivity	≤ 0.25uV		
Adjacent channel selectivity	> 70dB(W)/60dB(N)		
Intermodulation reject ratio	> 65dB		
Maximum AF output power	≥ 500mW		
Number of channels	16		
Battery (Standard)	DC 7.2V		
Dimension (W × H × D)	56mmx120mmx35mm		
Weight	332g(With battery and antenna)		

10 Settings (by the Dealer)

Model: _____ Serial No.: _____

1) Channels List

Channel	Tx Fre	Rx Fre	CTCSS/DCS Decode	CTCSS/DCS Encode	Band	Opt Signa	SPK Unmute
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

2) Optional Functions

Time-out Time (TOT)

15-600s

Squelch Level

1-9

VoiceAnnunciation

Chinese English

Male Female

Battery Saving

Open Close

Beep

Open Close

3) Auxiliary Function Button Settings

Side Button 1 Side Button 2

None (No function) None (No function)

Key Lock Key Lock

Key Lock and Backup Key Lock and Backup

Monitor Monitor

Instantaneously Monitor Instantaneously Monitor

Scan Scan

Scan + Temporarily Delete Scan + Temporarily Delete

Cancel Squelch Cancel Squelch

Instantaneously Cancel Squelch Instantaneously Cancel Squelch

Temporarily Delete Temporarily Delete

CALL 1 CALL 1

CALL 2 CALL 2

Scrambler Scrambler



CE Versions of the PT6200 which display the "CE" symbol on the serial number seal, comply with the essential requirements of

the European Radio and Telecommunication Terminal Directive 1999/5/EC.



This warning symbol indicates that this equipment operates in non-harmonised frequency bands and/or may be subject to licensing condition in the country of use. Be sure to check that you have the correct version of this radio or the correct programming of this radio to comply with national licensing requirement.



DECLARATION OF CONFORMITY

CE 0678 0

We, Kirisun Electronics(Shenzhen) Co., Ltd.
6/F, Bldg. H-2, East Industrial Zone Of Overseas
Chinese Town, Shenzhen 518053, 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 Suits measurement has been performed.

Description of equipment: FM Handheld Transceiver
Model No.: PT6200

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

- (1). EN 60950
- (2). EN 301489-1/-5
- (3). EN 300086-1/-2

Shenzhen, 28 Feb
2006
Place and date of issue

WenLiang, Fu
General Manager

Signature

Kirisun Electronics(shenzhen) Co., Ltd