



INSTRUCTION MANUAL

PT6500

FM HANDHELD TRANSCEIVER

NOTE:		



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FM HANDHELD TRANSCEIVER

We are very grateful for your purchasing brand two-way radios produced by Kirisun Electronics (Shenzhen) Co., Ltd.

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 wow way radio can meet your demands for reliable communication.

PRECAUTIONS

Please observe the following precautions to prevent fire, personal injury, and radio damage.

Do not operate your radio while taking on fuel, or being charged.

Do not expose the radio for a long period to direct sunlight, nor place the radio close to heating appliances.

Do not place the radio in excessively dusty areas, humid



areas, or on unstable surfaces.

Do not modify this radio for any reason.

Refer service to qualified licensed or certificated technicians only.

Notice to the User:

- Government laws prohibit radio communication without permission in government districts.
- Illegal operation is subject to punishment by fine and/or imprisonment.
- · Refer service to the well-trained professional technicians only.

Safety

It is important that the user is aware of and understands hazards common to the operation of any radios.

Warning!

Turn off your radio before entering any area with a potentially explosive atmosphere (where the air contains gas, dust and smog, etc.), such as while taking on fuel, or while parking at a gasoline service station.

Precautions in Use

Please comply with the following attentions to avoid fire, bodily injury and damage to the radio.

• The radio is recommended to transmit for 1 minute and



receive for 4 minutes. Long time transmitting or continuous working in high power mode will make the rear side of the radio generate heat.

- Please don't disassemble or assemble the radio under any circumstances.
- Please don't expose the radio to direct sunlight for a long time; don't place the radio near any heating devices, either.
- Please don't put the radio in extremely dusty, moist or dabbling places; don't place it on any unstable surfaces, either.
- If the radio emits smoke or strange odors, turn it off and remove the battery from the radio and promptly contact your local authorized Kirisun dealer.

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UNPACKING AND CHECKING EQUIPMENT

Carefully unpack the radio. We recommend that you identify the items listed in the following table before discarding the packing material. If any damage has occurred during shipment, please contact the dealer immediately .

■ SUPPLIED ACCESSORIES

ITEM	QUANTITY
Antenna	1
Power adapter	1
Belt clip	1
Charger	1
Hand strap	1
Li-Polymer battery	1
Instruction manual	1

Antenna	Power adapter	Battery
Charger	Belt clip	Hand strap

PREPARATION

◆ CHARGING THE BATTERY PACK



Plug the power adapter into the proper AC wall outlet; and insert the cable of the power adapter into the adapter socket on the charger; then the charger indicator lights green.



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

Make sure the battery is in good contact with the charger terminals. When the red indicator lights, the charger begins to charge the battery.

After charging for about 5 hours, the red indicator turns dim and the green indicator lights indicating the battery has been fully charged.

Leave the battery in that sate of green indicator for $1\sim2$ hours before you remove it from the charger to achieve the best performance of the battery. Then you can disconnect the power adapter from the AC outlet.

Notes:

- * The battery is not fully charged in the factory. Before the initial use, please charge the new battery.
- * The KB-36A Ni-MH battery/KB-36C Li-Ploy battery of Kirisun is adaptable with this radio.
- * When you charge the battery the first time or after long time storage



(2 months), several times of charging is needed. Make sure the battery is charged at least once every three months.

- * Do not charge the battery again if it is charged fully or not in the lowpressure warning mode, otherwise, it will have bad effects on its life and performance. Remove the battery from the charger after charging.
- * When you use the KB-36A battery, and the transceiver is in the low-power warning mode, recharge the battery before use. Do not start up by force; otherwise, it will have bad effects on its life and performance.
- * There is a protection circuit in KB-36C battery, so the power will be cut off at too low power.

♦ INSTALLING /REMOVING THE BATTERY PACK



Installing the Battery Pack

Match the 3 bulges of the battery pack with the corresponding slots at the rear bottom of the radio.



Installing the Battery Pack

Then firmly press the battery pack downwards to lock it in place until a click is heard.



Removing the Battery Pack

To remove the battery pack, use your thumb to press the belt clip, one side of your index finger to press the release button and then pull the battery away from the radio.

Notes:

- * Do not cause short-circuit or throw the battery to the fire.
- * Do not disassemble the battery by yourself.

♦ INSTALLING THE ANTENNA

Screw the antenna into the connector at the top of the transceiver by holding the Button of the antenna and turn it clockwise until secure.



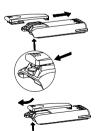
◆ INSTALLING THE OPTIONAL SPEAKER/MICROPHONE

Insert the speaker/microphone plug into the jacks of the versatile connector.



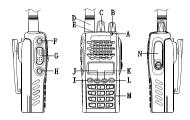
♦ INSTALLING THE BELT CLIP

Match the grooves of the belt clip with those on the rear of the battery. Then press belt clip downwards to lock it in place. Push the card by inserting your nail or tool into the groove at the upper part of the clip to remove the belt clip.





RADIO OVERVIEW



The functions of the components are as follows:

A. LED Indicator

Lights red while transmitting;

Lights green while receiving.

B. Power/Volume Switch (Knob)

Turn clockwise till a click is heard to switch on the radio.

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

Rotate to adjust the volume after turning on the radio.

C. Channel Selector

Rotate to select the channel 1-128.

D. Antenna

E. Top Button (programmable button)

It is recommended to be set as the emergency warning Button.

F. Side button 1 (programmable button)

G. 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 signals.

H. Side button 2 (programmable button)

I. Button (P1X)

Return and delete button in the menu.

J. Button

Select Button.

K. Button (23)

Select Button.

L. Button P4

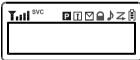
Enter and Confirm Button.

M. Numeric keypad

N. Microphone/speaker jacks

For connecting microphone/speaker.

♦ Explanation for the screen



Icon	Description
Tall	Signal intensity
svc	SVC
P	Compandor
	Disturbance Frequency
	Busy channel lockout
4	Scanning
	Key lockout
>	Signal reminder is programmed
ê	Battery capacity, flashes when the battery power goes too low



BASIC OPERATION

Sv Sv

1.Switch On

Switch on the radio by turning the Power/Volume switch clockwise

till a click is heard, then the radio will be in the state of stand by and you will hear a beep if the dealer has set it



2.Adjust Capacity

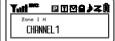
Press the button preset as canceling squelch to listen to the background noise and rotate the Power/Volume switch to adjust capacity.



3. Select Channels

Rotate the channel selector to select channels. You will hear voice from the speaker while receiving proper signals.

As shown in the above right figure: Zone 1 is the zone of current channel (8 zones from 0 to 7).



H is the transmit power of the channel, H stands for high power, M for middle power while L for low power.

CHANNEL 1 is the current channel (128 zones from 1 to 128).



4 Make a Call

To make a call, press PTT, and speak in normal voice. Please keep your mouth 3~4 cm away from the microphone.

5. Receive a Call

Release the PTT button to receive a call.

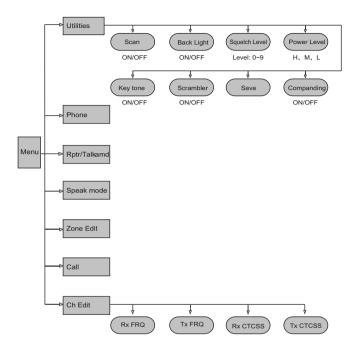
Your dealer can set CTCSS, DCS, 2 Tone signaling on your radio channels by PC software. If you select a channel that has been preset with the tone signaling, you will not hear any other calls except those from your own system.

6. Operation on menu:

press " button to enter the menu or confirm any contents; press " button to return to the previous menu or cancel the set. When entered the menu, select the sub-menu with the "channel selector", " or " ?

The menu is as follows:





The operations are as follows:

Set scanning:

- 1. As shown: in CH 1, press Ps , then Utilities is shown;
- 2. Press 🗫 , then Scan is shown;
- 3. Press (P4), then enter selecting Scan

4. Select Scan On or Scan OFF with , then press to confirm it.

If can not enter that way, you have to set in PC communications;

Set back light:

- 1. As shown: in CH 1, press P₄, Utilities is shown.
- 2. Press P4 to enter select mode,
- 3. Press 💮 / 🕒 , and | Back Light | is shown,
- 4. Press Pa to select On or OFF,
- 5. Select On or OFF with , press to confirm.

Set the squelch level:

- 1. As shown: in CH 1, press \checkmark P4, Utilities is shown.
- 2. Press to enter select mode,
- 3. Press (P2)/(P3), then Squelch Level is shown,
- 4. Press (P4) to select squelch level, e.g., Level 0
- 5. Change the squelch level with \$\overline{P2}/\overline{C3}\$, then press \$\overline{P4}\$ to confirm.

Set power level (high/middle/low):

- 1. As shown: in CH 1 , press P4, utilities is shown.
- 2. Press P4 to enter select mode,
- 3. Press , then Power Level is shown,
- 4. Press (Pa) to select, e.g., Power Low
- 5. Change the power level with 1/23, then press 1/24 to confirm.

Set Companding:

- 1. As shown: in CH 1, press P4, Utilities is shown.
- 2. Press Pa to enter select mode,
- 3. Press / , and Companding is shown,
- 4. Press Pa to select Companding
- 5. Select On or OFF by 7 , press P4 to confirm.



Set saving:

- 1. As shown: in CH 1, press P4, Utilities is shown.
- 2. Press Pa to enter select mode,
- 3. Press 🏚 / 👺 , and Save is shown,
- 4. Press Pa to select Save 1: 4,
- 5. Chang the save percentage with / Pa), press Pa) to confirm.

Set scrambler:

- 1. As shown: in CH 1, press P4, Utilities is shown.
- 2. Press Pa to enter select mode,
- 3. Press , and Scrambler is shown,
- 4. Press Pa to select, e.g., Scrambler OFF
- 5. Select On or OFF by (, press P₄) to confirm.

Set key tone:

- 1. As shown: in CH 1, press P4, Utilities is shown.
- 2. Press P4 to enter select mode,
- 3. Press 😰 / 學 , and Key Tone is shown,
- 4. Press Ps to select OFF or On
- 5. Select On or OFF with , press P4 to confirm.

Set Rptr/Talkarnd:

- 1. As shown: in CH 1, press to enter select mode,
- 2. Press , and Rptr/Talkarnd is shown,
- 3. Press P4 to select the mode,
- 4. Select Repeater Mode or Talkarnd mode with / (29), press Pa to confirm.

Set speak On mode:

- 1. As shown: in CH 1, press P4 to enter select mode,
- 2. Press 🍙 / 🕲, and Speak Mode is shown,

- 3. Press P₄ to select the speak on mode,
- 4. Select with 1/23, press 1/24 to confirm.

Set zone mode:

- 1. As shown: in CH 1, press P4 to enter select mode,
- 2. Press 🍘 / 🥝, and Zone Edit is shown,
- 3. Press P4 to select the zone mode,
- 4. Select Zone No with () ress () to confirm.

Set call list:

- 1. As shown: in CH 1 , press P4 to enter select mode,
- 2. Press 🙉 🕲 and Call is shown,
- 3. Press Pa to select the call list,
- 4. Select with 🍙 / 🕲, press PTT to transmit.

Set Rx FRQ:

- 1. As shown: in CH 1, press P4 to enter select mode,
- 2. Press / , and Ch Edit is shown,
- 3. Press Ps to select Ch alias CHANNEL 1
- 4. Press , Rx FRQ is shown, enter the set of Rx FRQ, 401.660000
- 5. Set the Rx FRQ value with the keypad,
- 6. Press (*) to delete, and press (*) to confirm.

Set Tx FRQ:

- 1. As shown: in CH 1, press P4 to enter select mode,
- 2. Press 🍙 / 🕲 , and Ch Edit is shown,
- 3. Press to select

Ch alias CHANNEL 1



- 4. Press , Tx FRQ is shown, enter the set of Tx FRQ,
- 5. Set the Tx FRQ value with the keypad,
- 6. Press (*) to delete, and press (*) to confirm.

Set Rx CTCSS/DCS:

- 1. As shown: in CH 1, press Pa to enter select mode,
- 2. Press / (2), and Ch Edit is shown,
 3. Press / (Pi) to select Ch alias
- 4. Press , Rx CTCSS is shown, enter the set of Rx 401.660000

CTCSS/DCS FRQ.

- 5. Set the Rx FRQ value with the keypad,
- 6. Press (P) to delete, and press (P4) to confirm.
- 7. * Stands for the radix point, press * to convert among CTCSS, DCS and reverse DCS.

Set Tx CTCSS/DCS:

As shown: in CH 1, press to enter select mode,
 Press / 2, and Ch Edit is shown,
 Press to select Ch alias CHANNEL 1
 Press / Tx CTCSS is shown, enter the set of Tx

CTCSS/DCS FRQ.

- 5. Set the Tx FRQ value with the keypad,
- 6. Press (Px) to delete, and press (P4) to confirm.
- 7. ★ Stands for the radix point, press # to convert among CTCSS, DCS and reverse DCS

Set contact list:

- 1. As shown: in CH 1 , press Pa to enter select mode,
- 2. Press , and Contact List is shown,
- 3. Press (P4) to select,
- 4. Select the address cable of the call to be made with (P2) / (P3),
- 5. Check the alias or address code by turning the knob,
- 6. Key in the address code of the person you are calling,
- 7. Press (P4) to transmit the current contact list.

Set status:

- 1. As shown: in CH 1 , press Pa to enter select mode,
- 2. Press 🎓 / 👺 , and Status is shown,
- 3. Press P4 to select,
- 4. Select the needed status with (2) / (2),
- 5. Check the alias or address code of the status by turning the knob.
- 6. Press (P4) to select the current status.

PROGRAMMABLE BUTTON FUNCTIONS

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

None

OFF ("do not set the functions")

Scan

lone working

Contact list

Power selector

Show or hide the channel alias

Busy Channel Lockout (BCL)



Call

Key lock

Sauelch level selector

Companding

Scrambler.

Battery power

Zone

Monitoring

Cancel Squelch

Emergency Alert

Back light

Rptr/Talkarnd

Express select channel 1

Express select channel 2

Call 1, 2, 3 or 4

Channel lock

Adjust display contrast

Notes:

programmable key can be set as short press or long press.

The following functions can be programmed by the dealer:

None

Set of None

Scan

Press the button set as Scan to start scanning. When carrier wave scan is enabled. While in scanning, the radio checks every channel (any channel in any zone) and stops on the channel on which a signal is detected until that signal disappears. If interval between signal disappearing and continuing scanning has been preset, the radio will remain on that channel. Only when there are two channels added in the scan list and the scan function has been activated, the radio can

start scanning.

It can be set as: short press: scan, long press: OFF.

- 1. Press the programmable key once to start scanning (it should be effective in the channel scan list).
- 2. Press once to quit.

Notes:

there are 8 zones from 0 (default zone) to 7; and there can be as many as 128 channels in each zone. There are totally 16 scan lists; you can select any scan list. Every scan list can scan any channels in different zones (16 channels to the most).

Lone working

Press the button set as lone working to start lone working. This mode is to ensure the safety of the user while using the transceiver separately.

▲It can be set as: short press : personal working, long press: OFF.

- 1. Press the programmable key once to start personal working;
- 2. Press once again to guit.

Notes:

The lone working is connected with the automotive checking in the programming software, and will be effective when both are set.

Contact list

Enter the Contact list quickly:

- ▲ It can be set as: short press: contact list, long press: OFF.
- 1. Press the programmable key once to enter the contact list
- 2. Press again to enter the content interface of the contact list,
- 3. Select the options in the contact list with (2) / (3)
- 4 Press PTT to transmit
- 5. Press (P) to quit.



Power select

Rotate the "channel selector" to enter the "power level" menu quickly. There are high, middle and low levels.

▲It can be set as: short press: power select, long press: OFF.

1. Press the programmable key once, Zone 0 L Will be shown, CHANNEL 1

2. Press it again, Zone 0 M CHANNEL 1

will be shown,

3. Press it a third time,

Zone 0 H w

will be shown.

Busy Channel Lockout (BCL)

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

Press the PTT button, if the channel is busy, the radio with BCL function active will make warning sound and prohibit transmitting. To stop the warning sound, please release the PTT button and the radio returns to receiving mode.

 \blacktriangle It can be set as: short press : Busy Channel Lockout, long press: OFF.

- 1. Press the programmable key once, BCL none will be shown.
- 2. Select the character you need with , e.g.: BCL none

BCL carry?

BCL carryPL?

3、Press ✓P₄ to confirm.

Key lock

Press the key programmed as "key lock" for one second to lock/unlock the keys for the transceiver.

▲ It can be set as: short press: key lock, long press: OFF.

- 1. Press the programmable key once, CHANNEL will be shown,
- 2. Press it again, CHANNEL will be shown.

Squelch level Selector

Enter the "Select squelch level" rapidly, 0~9 levels are available with the channel selector.

 ${\color{red}\blacktriangle}$ It can be set as: short press: Select squelch level, long press OFF.

- 1. Press the programmable key once, Level 2 will be shown,
- 2. Select squelch level with 🏵 / 學 , e.g.: Level 3

Level 4

Level 5

3. Press P4 to confirm.

Companding

Enter the Companding mode when press the key programmed as "Companding",

- ▲ It can be set as: short press: Companding, long press: OFF.
- Press the programmable key once to open the Companding mode,
 Zone will be shown,
 CHANNEL 1
- 2. Cancel the mode by pressing it again, Zone will be shown.



Scrambler

Press the key programmed as "scrambler" to prevent any third party to hear you talking on the phone.

▲ It can be set as: short press: scrambler, long press: OFF.

1. Press the programmable key once to open the scrambler mode,

CHANNEL 1 will be shown,
2. Cancel the mode by pressing it again.

CHANNEL 1

will be shown.

Battery volume checking

Display the battery power.

▲ It can be set as: short press: battery power checking, long press: OFF

- 1. Press the programmable key once: the battery power will be shown.
- 2. Press again: close the display.

Monitoring

Press the programmed as "monitor trigger" to hold out CTCSS, DCS, 2Tone and DTMF signal, and you can hear the signals can not be heard in normal operation, press the key again to return to normal operation.

▲It can be set as: short press: monitor, long press: OFF.

1. Press the programmable key once to start monitoring,

Moni Moment ON will be shown.

2. Press again: stop monitoring, Moni Moment OFF will be shown.

Cancel squelch

Press the key, no matter what the signal or carrier wave is (including

optional signal), squelch will be cancelled.

- ▲It can be set as: short press: cancel squelch, long press: OFF.
- 1. Press the programmable key once to start squelch constantly,
- 2. If you do not press it, the squelch will still work.

Emergency Alert

If press the top key programmed as "Emergency Alert", you can give the warning ring according to the programming software, or send your identity or background music to your companion or the system. ?It can be set as: short press: emergency alert. long press: OFF.

- 1. Press the programmable key once to start alert,
- 2. Press it again to stop the alert.

Back light

Turn on/OFF the back light.

▲It can be set as: short press: back light, long press: OFF.

- 1. Press and hold on this key, the back light is on,
- 2. Release it to recover the normal mode.

Rptr/Talkarnd

When press the key programmed as "Rptr/Talkarnd", the next transmission will be at the same frequency as at which it is received.

▲It can be set as: short press: Rptr/Talkarnd, long press: OFF.

- 1. Press the key once, Rptr/Talkarnd will be shown,
- 2. Press P4 to enter,
- 3. Press very / we to select the character you need: e.g.:

 Repeater Mode or Talkarnd Mode .
- 4. Press P4 to confirm.

Instantly select the channel

Shift to the channel you selected instantly, so that you can communicate at the channel you are used to.

KITISUN



- lacktriangle It can be set as: short press: instantly select channel 1, long press: OFF.
- 1. Press the key once to instantaneously select the channel, e.g.: CHANNEL 15
- 2. Press again to return.

Call 1, 2, 3, or 4

Press the side button programmed as Call 1, 2, 3, or 4 to transmit the specified code stored in the contact list. Release "Call" button, and speak to the microphone to call with the PTT button still pressed.

▲It can be set as: short press: Call 1, long press: OFF.

1. Press the key once to make a call (within the current channel), and will quit automatically after the call.

Channel Annunciation

Select or delete the voice annunciation function.

Adjust display contrast

You can adjust the display contrast as per your need.

▲It can be set as: short press: display contrast, long press: OFF.

- 1. Press the key once, Contrast will be shown,
- 2. Press / to select the character you need,
- 3. Press (P4) to confirm.

Manual programming

The dealer can open the manual programming rights of channel frequency set, CTCSS, DCS.

Basic operations of programmable keys:

You can set the programmable keys with the "key set" in PC software, as follows:

▲ It can be set as: short press: display channel frequency, channel alias and channel No., long press: OFF.

- 1. Press the key once, display the channel alias, e.g.: CHANNEL 1,
- 2. Press it again, the channel frequency will be shown, e.g.:

 401.66500
- 3. Press it a third time, the channel alias will be shown, e.g.: CH 1

▲It can be set as: short press: Zone, long press: OFF.

- 1. Press the key once, Zone No will be shown,
- 2. Select zone No. with / L.
- 3. Press (P4) to confirm.

▲It can be set as: short press: channel lock, long press: OFF.

1. Press the key once to perform channel lock, then you can not

choose the channel, CHANNEL 1 will be shown.

2. Press it again to cancel channel lock, CHANNEL 1 will be shown.

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 VOX gain level to proper sensitivity.

Programmable Functions (programmed with PC)

♦ Time-out Timer (TOT)



TOT timer:

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

The radio is set with a continuously transmitting limit. If the radio is continuously transmitting longer than the time preset by the dealer, the radio will stop transmitting and warning

TOT forbidden period:

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

During the period, if the PTT key is pressed, there will be a warning tone, and transmitting is forbidden.

TOT pre-warning:

The pre-warning will sound before the TOT action.

After the sound of the warning, the timer will take action when the transmitting time has gone beyond the limit.

TOT reset:

The time delay from releasing the PTT key 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.

Battery Saving

The dealer can set the type of this function by programming.

If the battery saving function is on, 10 seconds after the radio hasn't receive any signals or no operation is being acted, the radio enters battery saving mode. When a signal is received or any operation occurs, it exits battery saving mode automatically.

The types include: 1: 1, 1: 2, 1: 4 and OFF.

The automatic battery saving function decreases the power consumption.

♦ Channel Annunciation

The dealer can turn on or turn off this function by programming.

While switching to another channel, you can hear the voice annunciation of the current channel number.

♦ 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 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.

USER RESOLUTION

♦ Busy Channel Lockout (BCL)

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

Press the PTT button when the channel is busy, the radio with BCL function active will make warning sound and prohibit transmitting. To stop the warning sound, please release the PTT button and the radio returns to receiving mode.

The dealer may provide the following two lock mode:

Carrier wave: it will be locked if there is any Carrier wave;

Carrier wave+ CTCSS/DCS: transmitting is permitted if there are matched CTCSS/DCS in the channel

♦ Receiving Squelch Mode

The dealer may set the condition under which to turn on the speakers:



- 1. CTCSS/DCS and audio squelch: only when the CTCSS/DCS and optional signaling are patchable.
- 2. Audio squelch: once the optional signaling is matchable.
- 3. CTCSS/DCS squelch: when the CTCSS/DCS is matchable.
- 4. Carrier wave squelch: once there is any Carrier wave.
- 5.CTCSS/DCS and audio squelch: when the CTCSS/DCS is matchable, or when optional signaling are matchable.

◆ DTMF signaling

The dealer can set this function by programming.

There are 4 systems of which the parameters can be set, e.g.: group call ID No.. * and # sound. etc.

After set a DTMF code in the "code sequence", select DTMF system in the "DTMF code", then select the correspondent DTMF code cable in the "user's resolution" and transfer it with PTT. Set a DTMF code in the "decoding sequence", add the sequence into the decoding cable in "DTMF decoding", then select the correspondent decoding cable. The dealer may also set the "decoding replay".

2TONE signaling

The dealer can set this function by programming.

There are 4 systems of which the parameters can be set, e.g.: the duration of the first and the second tone, the duration of the long tone and audio spacing, etc. Select the audio frequency $(3106.0 \sim 288.0 hz$ step size 0.1 hz) in "encoding sequence", and whether the tones sent are long or two tones, select 2TONE system in "2TONE List", then select the correspondent 2TONE code cable in the "user's resolution" and transfer it with PTT. Select the audio frequency ($3106.0 \sim 288.0 hz$ step size 0.1 hz) in "decoding sequence", and whether the tones received are long or two tones, then select the correspondent decoding cable in the "user's resolution". The dealer may also set the "decoding replay".

◆ 5TONE signaling

The dealer can activate or inactivate this function by programming. 5-Tone has 9 encoding formats: CCIR1, CCIR2, ZVEI1, ZVEI2, SVEI3, EEA, EIA, USER DEFINED 1, and USER DEFINED 2. The last tow formats are user defined.

1) 5-Tone Decoding

The decoding template is 5-tone decoding. If the decoding template matches the encoding template, decoding succeeds.

When receiving proper 5-tone signaling, squelch will be activated according to the "RX Squelch Mode" defined by the user. You can receive the call and LED flashes orange.

After the radio decoding succeeds, the radio will work according to the decoding call response set by the dealer.

2) 5-Tone Encoding

Encoding template consists of at least one and at most three encoding sequences, and each decoding sequence can be set with 5-Tone, and DTMF. If it is set with 5-Tone, you need to program its content.

If the PTT ID on the channel you select has been set with 5-Tone, 5-Tone signaling will be transmitted when making a call.

Or transmit 5-Tone signal by pressing the Call 1/2/3/4 button,, which can be set by the dealer.

◆ Transmit beginning/ending signaling (PTT ID)

The identify signal of transmit beginning/ending are used to maintain or disconnect some repeaters or phone system.

- "Transmit beginning" is used to connect routine repeaters and auxiliary facilities. If the ID transmitted is matchable with that of the repeaters, the repeaters and auxiliary facilities are available.
- "Transmit ending" is used to disconnect routine repeaters and auxiliary facilities. If the ID transmitted is matchable with that of the repeaters, the repeaters and auxiliary facilities are disconnected.





■ Problems and troubleshooting

No.	Problems	Solution
1	No display after switched on.	A. Battery power may be insufficient. Recharge or replace the battery pack. B. The power switch may be broken, replace the switch. C. CPU may be broken, replace the IC. D. Regulator tube Q45 may be broken, replace the IC.
2	Phase locked loop unlocked	A. Phase locked loop Crystal Oscillator X1 may be broken, replace it. B. Oscillator tube may be broken, replace it. C. Phase locked loop IC2 may be broken, replace the IC.
3	Cannot transmit.	A. The frequencies of both users are not the same, select the same frequency channel again. B. The CTCSS/DCS signaling of both users are not the same, set it with PC. C. Beyond the efficient communication range.
4	No signal	A. Make sure the antenna is well connected. B. Low sensibility, trimming "computer test mode". C. HF amplifier may be broken, replace it. D. The squelch level is too high, which makes the squelch unable to switch on, reset it by PC. E. Mixer tube Q19 may be broken, replace the tube. F. Frequency Modulation IC4 may be broken, replace the IC.
5	The transmitting red light is on, but no voice is heard	A. Power-amplifier tube no power output, replace the tube. B. Replace the microphone if it is broken. C. Operational Amplifier IC14 may be broken, replace it.

6	Receiving green light is on, but no voice is heard	Replace the speaker if it is broken. Audio power amplifier IC9 may be broken, replace it. Switch Tube Q48 may be broken, replace it. Operational Amplifier IC6 may be broken, replace it.
7	Abnormal programmi ng	A. Make sure the wires are well connected. B. Abnormal output of the RS-232 serial port of the computer, check the computer. C. Abnormal connection of MIC and SPK jack, check the jack.

■ Major Specifications

Model	PT6500		
Frequency	(1) 136~174	(2) 400~470	
(Mhz)	(3) 450~520	(5) 350~400	
Modulation	16KΦF3E/11KΦF3E		
Number of Channels	128		
Channel Spacing	25 kHz/12.5kHz		
MF	1st MF: 51.65MHz 2nd MF: 450kHz		
Working Voltage	7.5V cathode Grounding		
Working Temperature	-25℃~+55℃		
Antenna Impedance	50 Ω		
Microphone Impedance	2.2k Ω		
Battery (Standard) Model	Model: KB-36C,Li-poly	battery DC 7.4V,1750mAh	
	time of use: 8 hours (5: 5: 90 period)		
Dimensions (WxHxD)	56X120X35mm		
Weight	413 (with battery and a	antenna)	





■ Status setting (by the dealer)

Model:	Serial No.:	

A) Channel setting:

Channel	Receiving	Transmitting	CTCSS/DCS	CTCSS/DCS	Power	Band	Scan	BCL
No.	frequency	frequency	decoding	encoding		width	-ning	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
128								

B) Optional function:			
2. 1 Time-out timer (TO	T):		
15~600 s			
2. 2 Squelch level: 1~9			
2. 3 Voice annunciation: On ☐ Off ☐	:		
2. 4 Battery saving:			
Off \(\Ballet \)	1. 2	□ 1: 4 □	
C) Auxiliary functions butt			
•	on ooung	Side button1	
Top button		Side button'i	
None		None	
Voice reporting selector		Voice Reporting Selector	
Rptr/Talkarnd		Rptr/Talkarnd	
Call1/2/3/4		Call1/2/3/4	
Lone Working		Lone Working	
Emergency Alert		Rewind	
Cancel Emergency Alert		Scanning	
Rewind		High/low Power Shift	
Scanning		Squelch Level Adjuster	
High/low Power Shift		Monitoring Open/Cancel	
Squelch Level Adjuster		Squelch Open/Cancel	
Monitoring Open/Cancel		Lock Key	
Squelch Open/Cancel		Companding	
Lock Key		Scrambler	
Companding		Battery Capacity	
Scrambler			
Battery Canacity	П		

Side button2

None	
/oice Reporting Selector	
Rptr/Talkarnd	
Call1/2/3/4	
one Working	
Rewind	
Scanning	
High/low Power Shift	
Squelch Level Adjuster	
Monitoring Open/Cancel	
Squelch Open/Cancel	
₋ock Key	
Companding	
Scrambler	
Battery Capacity	



DECLARATION OF CONFORMITY

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 have been performed.

Description of equipment: FM Handheld Transceiver

Model No.: PT6500

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

- (1). ETSI EN301489-1 V1.6.1(2004-12)
- (2). ETSI EN301489-5 V1.3.1(2002-08)
- (3). ETSI EN300086-1 V1.2.1(2001-03)
- (4). ETSI EN300086-2 V1.1.1(2001-03)
- (5). EN60950: 2001+A11: 2004

Shenzhen, 10 Dec 2007

Place and date of issue

WenLiang, Fu

General Manager

Signature

Kirisun Electronics Co., Ltd