Introduction

Thank you for purchasing *puxing* Series Radio. The Series radios provide cost effective communications for businesses,they are the perfect communications solution for all of todays fast-paced industries. Please read this guide carefully so you know how to properly operate the radio before use.

Caution:

1) When use VOX by earpiece, press the PTT key to exit.

2) If use PTT/VOX earpiece, It is not allowed to switch to VOX directly during PTT call. Because it will transmit without ending.

   Please switch to PTT to return to normal.

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

18 Main technology data

Main technology data

Frequency Range	134–176MHz 400–480MHz
Operating Temperature	-20℃ + 50℃
Number Of Channel	16
Channel Spacing	25KHz
Operating Voltage	7.4V DC
Size	110mmX50mmX35mm(without antenna)
Weight	About 226.7g(with battery)
Output Power	< 5W
Modulation Distortion	≤ 5%
Spurious Radiation	≤ 7.5uW
Sensitivity	≤ -120dBm
Co-channel Rejection	≥ -8dB
Audio Distortion	≤ 5%

CONTENTS

- Before use this transceiver may need get local government authorization.
- DO NOT operate the transceiver without a proper antenna attached, as this may damage the transceiver and may also exceed exposure limits
- Refer service to qualified technicians only.
- Turn off the transceiver while taking on fuel or while parked in a gasoline service station.
- Do not expose the transceiver to long periods of direct sunlight, nor place it close to heating appliances.
- If it appears that the transceiver diffuses peculiar smell or smoke, please shut off its power immediately, then contact with the nearest dealer.
- Don't keep the transceiver transmitting too long .It may be too hot to hurt body or damage the transceiver itself.
- Please turn off the transceiver before entering the inflammable and explosive environment.

CHECK EQUIPMENT

Welcome to use our transceiver. Please check if any damage to the packing box before use. Carefully unpacks the transceiver. We recommend that you identify the items listed in the following table. If any items are missing or have been damaged during shipment, please inform the seller.

SUPPLIED ACCESSORIES

ANTENNA	Li-ion BATTERY	CHARGER
ADAPTOR	BELT CLIP	USERS' MANUAL

CHARGING THE BATTERY PACK

The battery pack is not charged at the factory; charge it before use.

Initially charging the battery pack after purchase or extended storage will not bring the battery pack to its normal operating capacity. After repeating the charge/discharge cycle two or three times, the capacity will increase to best status. You should charge or change the battery pack if the battery's power is weak.

CAUTION:

- Use the original battery pack only. It is likely to explode or hurt your body if you use other battery.
- Don't short-circuit the terminals or put it in fire. Don't attempt to open the unit.
- The ambient temperature should be between 0℃ to 40℃ while charging is in progress. Charging beyond this range may not fully charge the battery.
- Always switch OFF the transceiver equipped with a battery pack before charging. Using the transceiver while charging, it will interfere with correct charging.
- Don't cut off the power or take off the battery during the charging process or else it will interfere with correct charging.
- The battery pack life is over when its operating time decreases even though it is fully and correctly charged. Replace the battery pack.
- Don't recharge the battery pack if it is already fully charged or it will short the life of the battery.
- Don't charge the battery pack or transceiver while it is wet. Please wipe up it first to avoid danger.

Charging Operation

If the transceiver indicator displays 🔲 , it means the battery pack is out of power , please charge it. Please always use the original charger. The charger's indicator shows the charging status below.

INDICATOR DISPLAY	STATUS
RED	CHARGING
GREEN	COMPLETED

Please charge the battery pack as follow:

- Put the DC plug of the transformer into the DC socket of the charger unit.
- Connected the supplied transformer to the AC jack
- Slide the battery or the transceiver with a battery pack into the charger.
- Make sure the battery pack contacts are in contact with the charging terminals, and the charger LED is on, it begins to charge.
- After charging the supplied battery pack for 4 hours, remove it or the transceiver equipped with it from the charger. The charger light turns to green automatically after charging is completed.

CAUTION:
- It is abnormal in case of the charger glisteningly before sliding the battery pack into the charger.
- Don't replace the battery pack until the indicator light is stable.
- Make sure contact well, LED indicates red when it is charging, if LED always blinking the battery pack is damaged or over the environment temperature.

- Don't carry the transceiver by the antenna or microphone directly.
- Use a soft, clean, dry cloth to clean the transceiver.
- Please cover the speaker/microphone jacks with the supplied cover when the transceiver is not in used.
- The keypad, knobs and case will become dirty after long use; you can use the soft detergent and cloth to clean it.

INSTALL/REMOVE BATTERY

The average use time of the battery pack is 10 hours.

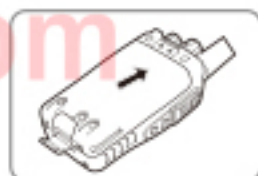It calculated as 5% TX time, 5% RX time and 90% standby time.

⚠ CAUTION

◆ Don't short circuit the battery charger contacts or threw the battery into fire.

◆ Don't disassemble the case of the battery.

Match the top of the battery pack with the corresponding grooves on the radio.

Push the battery onto the bottom of the radio, buckle the safety lock.

To remove the battery pack, lift the safety lock and pull the battery pack away from the radio.

INSTALL ANTENNA

Antenna

Hold the radio, screw the antenna into the connector on the top of the radio. Hold the antenna and turn it clockwise until being tight.

Note:

Don't use the antenna as handle, keychain or speaker/microphone hook, it will damage the antenna and affect the function of the radio.

INSTALL BELT CLIP

When necessary, you can install the belt clip to the back of the radio.

Note:

belt clip

Without installing the belt clip, the installing area will become hot due to continuous communication or put in hot environment.

You should remove the belt clip first before disassemble the battery pack.

> ⚠ **Caution**
>
> ◆ Please don't use glue to fix the screws of belt clip, otherwise it may ruin the housing!

INSTALL SPEAKER/MICROPHONE

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

Note:

The radio is not entirely waterproof when use the speaker/microphone.

Speaker/Microphone

INSTALL THE COVER OVER THE SPEAKER/MICROPHONE JACKS

If not use a speaker/microphone, please use the screw to install the cover over the speaker/microphone jack.

Speaker/Microphone Jack

ANTENNA

LED INDICATOR
Lights red while transmitting.
Lights green while receiving.
Flashing red if the battery voltage become low while transmitting.

SPEAKER

CHANNEL SWITCH
Rotate to select a channel from 1 to 16.
Emergency call

POWER SWITCH/VOLUME CONTROL
Turn clockwise to switch on the transceiver. Rotate to adjust the volume. To switch off the transceiver, turn counterclockwise fully.

MICROPHONE

PTT(push to talk) BUTTON
Press this key, then speak into the microphone to call. Release it to receive.

SIDE 2 KEY/SIDE 3 KEY
Both of them are programmable function keys.

SPEAKER/MICROPHONE JACK

BATTERY PACK

NOTE: Side 2 key and side 3 key can be programmable by software. They can be programmed as follow:

1. NONE,
2. MONITOR,
3. SCAN ON/OFF,
4. HIGH/LOW POWER,
5. TALK AROUND,
6. REVERSE,
7. PRIORITY SCAN,
8. VOX ON/OFF,

BUSY CHANNEL LOCKOUT

This function can prevent other two way radio from disturbing.There are two choices for customer to select in the programming software.

- ◆ **CARRIER:** It is not allowed to transmit or make other operation while the radio is receiving.
- ◆ **CTCSS/DCS:** While receiving signal, the radio is not allowed to transmit when the CTCSS/DCS received is different; and it is allowed to transmit if both carrier and CTCSS/DCS are the same.

VOX SENSITIVITY

You can use programming software to select the level of the VOX sensitivity (1-9 levels).

TX POWER

You can choose the high power or low power for each channel by programming software.

SQUELCH LEVEL

You can use programming software to adjust the squelch level (0-9 levels).

BEEP SETTING

You can hear a beep sound when turn on the radio or press a key. You can use programming softw-

are to open or close this function.

Channel annunciation

when turn on the radio it will report the current channel,using programming software to set Chinese-English report and turn off.

TIME OUT TIMER (TOT)

TOT is used to prevent any user from using a channel for a long time. It will damage the radio if transmit for a long time.

CTCSS/DCS

You can use the programming software to set the CTCSS/DCS for each channel. There are 50 groups of CTCSS and 105 groups of DCS for you to select.

WIDE/NARROW BAND

You can use the programming software to set the wide/narrow band for each channel.

EMERGENCY CALL

In case of emergency, press emergency key the radio will sound alert tone and also send alert.

BATTERY SAVE

This function can decrease power consumption when no signal is received. and no operation is performed.

You can use programming software to open or close this function.

END ROGER

It's prompting signal transmit finshed. You can use programming software to open or close this function.

SQUELCH TALL ELIMINATION

It can elimianate the end roger beep.For wearing headphone users,tail elimination is very clearly.You can use programming software to set this function.

LOW BATTERY WARNING

Low battery warning alerts you that the battery should be recharged or replaced. While transmitting or receiving, the LED will blink red if the battery is low. it will remind "Low Voltage" at interval 30 seconds, if turn off the voice function, sound "DU DU DU" prompt.

CABLE CLONE

Step:

1. Use cable to connect Master unit to slave unit, and turn on the slave unit. Press and hold programmable Side Key 2 to turn ON master unit, LED flash Orange twice into clone statue.
2. Press PTT of Master unit to transmit the data and Slave unit begin to receive data from Master unit
3. During cable cloning Master unit blink red and Slave unit blink Green
4. When cloning completed, slave unit restart automatically.
5. Switch to next slave unit and power on, press side key 2 of master unit to clone.
6. Power off master unit to exit.
    ◆ During data transmission, if no data received 3 seconds Master unit flash Red (0.5s ON, 0.5S OFF)

PTT ID TRANSMIT MODE

1. Press PTT to send.   2. Release PTT to end.   3. Both.   4. OFF
    ◆ OFF: Press PTT or release it will not send ANI code.
    ◆ PRE-ONLY: Press PTT to send the ANI.
    ◆ POST-ONLY: Release PTT to send the ANI.
    ◆ BOTH: Both press and release PTT to send ANI.

THE SIDE KEY CAN BE PROGRAMMED THE FUNCTIONS AS FOLLOW,

1. NONE	2. MONITOR	3. SCAN ON/OFF	4. HIGH/LOW POWER
5. TALK AROUND	6. REVERSE	7. PRIORITY SCAN	8. VOX ON/OFF

side key 2 and side key 3 can be programmable.

1) NONE

◆ No function to be set

2) MONITOR

◆ If press the monitor key, it can detect if the channel is busy, it can ignore all the interference codes temporarily and receive weak signal.

3) SCAN ON/OFF

◆ Scan ON: The radio will scan from the current channel.

◆ Scan OFF: To press the side key again.You can exit.

4) HIGH/ LOW POWER

◆ Press the key to switch High/Low Power Switch.

5) TALK AROUND

◆ Talk around allows you to communicate directly with other radios without the repeater. When using talk around, the transmitting frequency is same with receive frequency.
Press talk around key (programmed key) to enter this function and press it again to exit.

6) REVERSE

◆ Transmitting frequency can reverse with receiving frequency.Codes will reverse too.

◆ Press frequency reverse key (programmed key) to enter this function and press it again to exit.

7) PRIORITY SCAN

◆ Set priority channel: open the programming software, and select the priority channel (1-16 optional). Suppose channel 6 was selected.

◆ Programming side key: program one of the side key to be priority channel function.
Press the programmed side key to enter the priority scan mode, the radio will scan like this: 6-1, 6-2, 6-3···.

◆ Turn off PRI: press PRI on/off key to exit

8) VOX ON/OFF

Radio will transmit when detects voice, without press PTT key.

Use VOX earpiece or radio micphone to talk hands-free, operation as follows:

◆ Programming the VOX ON/OFF key.

◆ Press the side key to open this function.

◆ To communicate by earphone you should plug the earphone before turning on the radio.

◆ Speak to VOX earpiece or radio micphone to send the voice.

◆ Press this side key again to exit