







Welcome

Thank you for purchasing your PRONTO two-way radio. This Pronto two way radio offers you a good quality, high performance transceiver and is a very robust precision piece of equipment.

The Pronto radio has an ergonomic design and has been built with reliability very much in the forefront of the design. The transceiver is feature rich but at the same time easy to use and if looked after correctly this transceiver will give you years of reliable communication.

With all of this in mind welcome to the world of Two Way Radio

Please read this manual before using your new transceiver.

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Safety Matters

Please read the following guidelines below failure to observe the following guidelines may cause damage to the equipment.

- The use this radio must comply with regulations of the local government.
- Turn off the radio before you enter places of flammable or explosive environment.
- Do not replace or charge the battery pack in places of flammable or explosive environment's.
- Turn off the radio before you approach blast area and detonator area.
- Do not use the damaged the antenna as this will reduce the range.
- Do not place the transceiver on an unstable surface.

- Only qualified technician are allowed to maintain this two-way radio. Do not disassemble the radio by yourself.
- Do not expose the radio to direct sunlight or near direct heat.
- Keep the radio vertical and speak near the microphone during transmitting.
- Do not immerse the radio into any water.
- Do not charge the battery pack when the radio or battery pack is wet

Product Inspection

Thank you for purchasing this Pronto two-way radio. Before use, we recommend that you:

First check the package for any signs of damage;

Carefully open the package and identify the items listed below;

If any items are missing or damaged during shipment, please contact your dealer.

Items

Product Inspection

03



Radio Pronto P-4000S



AC Adapter P-AC-V1



Antenna P-Ant-V P-Ant-U



Strap P-STR-V1



Battery P-Bat-V1



Belt Clip P-BC-V1



Charger P-Chg-V1



User Manual

Get Acquainted

Battery Information

Please charge with supplied approved battery; using other batteries may cause damage or burst into flames and cause personal injury or damage the equipment supplied.

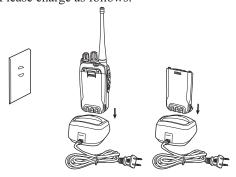
Note:

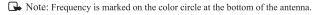
- 1. Do not short circuit the battery terminals.
- 2. Do not dispose of the battery into a fire.
- 3. Never attempt to disassemble the battery pack.
- 4. Only charge the battery between 0-45°C.
- 5. Always turn the radio off whilst charging.
- 6. Never charge the battery if the battery or radio are wet.

▲ Warning:

Conductive metals such as jewelry, key or decorating lace may result in short circuit and generate a large quantity of heat when coming into contact with the battery electrodes. Treat any battery carefully especially when placing it into pocket, wallet or other metal container.

Charging Operation Please charge as follows:





- 1. Turn off the radio. Plug the DC connector of adapter into the DC jack on the rear of the charger.
- 2. Plug the AC connector into the AC outlet.
- 3. When the charger is switched on the LED glows red for 1 second and goes out. That means the charger is ready for normal charging. If the LED flashes red, it means the charger is not ready for battery charging.
- 4. Insert the battery or radio equipped with battery into the charger. Make sure the battery has a good connection with the charger electrode.
- 5. LED glows red during charging and flashes during trickle charging because of the low battery power. After the battery has been charging for a short period of time, the charger automatically turns to normal charge mode.
- 6. The battery is fully charged when LED glows green. The charger stops charging automatically.

Cautions in Charging

- 1. The battery is not charged in factory. Please charge the battery before initial use or after long-time storage.
- 2. Repeat charging 2 to 3 times will make the battery reach its best capacity. Please replace or charge the battery if battery power is low.
- 3. When the battery power consumes quickly even if it is fully and correctly charged, that means the battery life is over and please contact your dealer and buy new Proton approved battery.

Antenna Information

• Using a stubby antenna will shorten the range of your transceiver for the best possible coverage available please use the antenna provided.

Attaching and Removing

Attaching / Removing the Battery

Attaching the Battery (Figure 1)

Match the sockets of the battery with the leading rail of the backside of the radio. Make sure the battery is well-connected to the radio horizontally.



(Figure 1)

Removing the Battery (Figure 2)

Before removing, make sure that the radio is turned off. Then unlock the battery lock by pressing the bottom following step1 as showed in the picture. Slide the battery away from the radio following step2 in the picture.



(Figure 2)

Note: Please take off the belt clip before removing the battery.

Attaching/Removing the Antenna

Attaching the Antenna: (Figure 3)

1.Insert the antenna into the connector on the top of the radio by holding the antenna at its base.

2. Rotate the antenna clockwise to fasten it.

Removing the Antenna: (Figure 4)

Rotate the antenna counter clockwise until you can remove it.

Attaching/Removing the Belt Clip

Attaching Belt Clip: (Figure 5)

To Place the screw (M2.5x9) on the back of the radio, put the clip button on, and fix it with the screw. Match the grooves of belt clip with the button, push belt clip downwards until it is locked.

Removing Belt Clip To remove screw (M2.5×5) on the back of the radio then the belt clip can be removed from the battery.

Attaching External Earphone/Microphone 1. Unclose the cover of earphone/microphone jack. (No need to

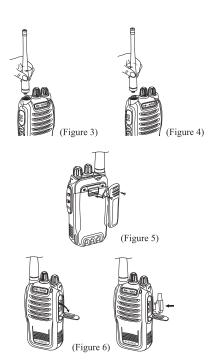
remove it.). (Figure 6)

2. Insert the earphone/microphone into the earphone/microphone jack. (Figure 6)

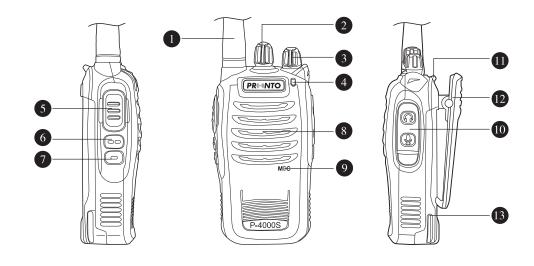
Note: The radio is not fully waterproof while using external earphone/microphone.

Attaching Hand Strap

Thread the strap into the hole at the back of the radio and fasten it.



Radio Overview



Radio

Attenna
 Helical antenna is to receive and transmit the signal.

2 Channel Selector

Rotate it to select operating channel from $1\sim16$ (15+S). When changing a channel, the radio will announce the selected channel number if the voice prompt is on.

3 Power Switch / Volume Control

Turn on/off the radio and adjust the volume. Rotate the knob clockwise until a click sounds to turn on the radio; rotate it further to adjust the volume. Rotate it counter-clockwise until a click sounds to turn off the radio.

4 LED Indicator

LED glows red during transmitting; glows green during receiving; flashes when battery power is insufficient; flashes green during scanning.

5 PTT Key

To transmit, press down [PTT] key and speak into the mic release it receive.

- 6 Mid Key: programmable key
 The default setting is power management.
- 7 Left key: programmable key
 The default setting is conversation management.
- Speaker
- Microphone
- MIC-SP Jack/ Data Port
 To connect the earphone/microphone or data cable.
- Strap HoleTo be used with hand strap.
- Belt Clip
 Stable the radio for easy carry.
- B Li-ion Battery

Basic Operation

Turn On/Off

Rotate the Power Switch/Volume Control knob clockwise until a "click" sounds to turn on the radio and you will hear channel annunciation.

Rotate the Power Switch/Volume Control knob clockwise until a "click" sounds to turn off the radio.



Adjusting Volume

You can adjust volume by rotating it after the radio turns on.



Selecting Channel

Rotate the channel knob to select operating channel from $1{\sim}16$, according to the numbers and symbols on the bottom of channel selector knob or channel annunciation. Also can base on the voice prompt to select.



Making a Call

To make a call, hold down [PTT] key and speak into the microphone with normal voice. Please keep the microphone 2.5cm-10cm away from your mouth.

in:

- 1. Hold down [PTT] key and LED glows red, the radio begins to transmit.
- 2. If the battery power is insufficient, the radio cannot transmit.

Receiving a Call

Release [PTT] key when receiving a call.

Programmable Functions

The following functions are programmable

Emergency Alert

When this function is activated the radio alarm sounds and the LED light glows, at the same time it sends a emergency signal to users on the same channel, the receiving radios will receive the alarm tone signal.

High/Low Power Switching

Press the programmed power key to switch the power in high and low.(P-4460 Tx power is no more than 0.5W which is not be switched.)

VOX

VOX allows you to transmit with your normal voice without pressing [PTT] key. When LED glows red, it means the radio start the transmitting and send the voice out.

Base on different environment, you could set the level and delay time of VOX button on the VOX & Scan menu of the programming software. Default is off.

Scan

It is one way to hear all channels communication, and the default is off. When scan function is on, turn the channel switch to No.16, LED flashes green, and the radio would stop scanning and stay at the busy channel for your further communication.

• Time Scan

The radio stops scanning on the busy channel for a certain period, which could be set by software, and it would start scanning again whether the channel is still busy or not.

• Carrier Scan

The radio would stop scanning when carrier channel is found, and would stay at this channel until the signals disappears.

 Receiving recover time [second]
 It is the time between the radio stopping receiving and restarting scanning.

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- Transmitting recover time [second]
 It is the time between the radio stopping transmitting and restarting scanning.
- Reply channel
 It is the channel that when you press [PTT] key
 during scanning, the signal would be sent to, which
 could be set by software.
- Priority channel scan
 Any programmed channel could be set as priority channel. When the radio stops scanning on non-priority channel, it would still check the priority one from time to time. If there is any signal on the priority channel, it would stay in it.

CTCSS/CDCSS

CTCSS/CDCSS are sub-audio signaling that can avoid unwanted conversations on the same channel. If they are set, the radio could only receive calling from same channel with same signaling in available communication context. Or it could get all callings from same channel; CTCSS\CDCSS could be set through button CTC\DCS coding on Channel Information menu of the programming software. You could also ask the local dealer to help on setting.

DTMF (PTT ID/ANI)

Base on the requirements if TX and RX, you could enter DTMF code (8 bit max, made of 1234567890ABCD*#) through "PTT ID" on the Features of programming software, then the DTMF code would be sent under set situation, such as at the beginning of TX or after TX is over. Default is off. You could also use the software to set the DTMF code.

The default setting is DTMF off.

Voice Prompts

This radio's voice prompt could be set as off, Chinese, English and "BEEP"; default is English, which could let you know the working state of the radio.

Busy Channel Lock

When BCL is on, it would avoid jamming other radios when using same channel. When the shared cannel is used by other radios, the radio would just "Du, du, du..." when pressing [PTT] key, you could stop pressing to cancel it.

When the channel is not used, you could push to talk again.

25KHz/12.5KHz

The default setting is 12.5 KHz. You can decide whether the channel works as 12.5 KHz through "W/N" item in "Channel Information" menu. (Only 12.5kHz channel spacing shall be allowed for P-4460)

Squelch

Through set squelch level to decide how strong the signal is to unmute the speaker. The lower the squelch level the stronger the background noise to unmute the speaker, the larger the talk range and the weaker the Rx anti-interference ability.

The default setting of this function is level4. You can set through "Squelch Level" option in "Optional Feature". Setting range is 0~9. Selecting "0" causes the squelch open. The higher the squelch level, the harder to open the squelch.

Time out Timer (TOT)

Time out timer is used to prevent someone from using the same channel for a long time, and protect itself from damage after long time transmitting.

If continuous transmission time is beyond the setting time, the radio would stop the transmitting and "Beep" all the time, then you have to stop pressing PTT key, and repress it for talking again.

Default setting is 180 seconds. You can change it to Max 5 Minutes through the TOT in the Optional Function menu of programming software.

Battery Save

If there is no signal or connection (no pressing on keys or turning switch), the radio would lower its power consumption. When there is no signal on the channel or no operation for over 5 seconds, the energy saving function of battery will be on automatically; when signal is received or with operation, the radio would quit the saving mode.

The default setting is intelligent save; you can set it through "save scale" item in "Optional Feature" menu of the software.

Care and Maintenance

Questions and Answers

Problem	Solution		
No Power	The battery power may be insufficient. Please charge or change a fully charged battery.		
The battery power consumes quickly after charge.	• The battery life is finished. Please change for a new battery.		
Can not communicate with other members.	 Please check if your frequency and CTCSS/CDCSS are the same with other members in your group. Maybe you are too far away from other members. Please check if you are within communication range. 		
Voices of non-group members are heard on the channel.	Please change CTCSS/CDCSS, and change those of your members, too.		
No sound or very low sound are received by partner when transmitting	 Please check if the volume turns to its highest level. Ask your local dealer to check if the MIC is in good condition. 		
The noise is always heard on the channel.	You may be too far away from other members and cannot receive. Please get close to your members and try again.		

Care and Maintenance

Maintenance

Your radio is a product with excellent design and technology, please treat it with care. These recommendations can help you use the radio effectively.

- Keep the radio dry. Rain, moisture or other liquid may cause damage to the radio.
- Do not throw, hit or vibrate the radio. Brutal treatment may damage the inner IC or other elements.
- Do not hold the radio by the antenna or external MIC.
- Please use the original or standard antenna. Unapproved antenna or modifications of accessories may cause damage to the radio.



All recommendations above also refer to you battery, charger and accessories. If any of them works abnormally, please send it to the nearest service center.

- Use lint-free cloth to clean the dust or stains on the radio.
- Cover the earphone/microphone pad when not using the radio for a long time.
- Use mild detergent(not corrosive chemicals) and cloth to clear the casing, control knob and keyboard after long-time use

Appendix

Appendix 1: Specification

Item	Pronto P-4000S
Frequency Range	VHF: 136~174MHz UHF: 400~470MHz PMR: 446.00625~446.09375MHz
Channel Capacity	16(15+S)
Channel Spacing	25.0/12.5kHz,12.5kHz(PMR446)
Frequency Stability	≤ ± 2.5ppm
Operating Temperature °C	-25°C∼+55°C
Antenna Impedance	50 Ω
Operating Voltage	DC6.6~8.4V

Item	Pronto P-4000S		
RF Output Power	UHF:4W/1W VHF:5W/1W PMR446:≤0.5W		
Audio Distortion	≤ 5%		
Sensitivity	0.2uV(≥18dB)		
Max Audio Output Power	≥700mW		
Dimension (H \times W \times D)	105×60×33mm		
Weight (with antenna & battery)	225g		
Li-ion Battery	1600mAh		

Appendix 2: Frequency Chart (Used to record the frequency.)

Model: Serial number:

Channel	Tx Frequency	Tx CTCSS/CDCSS	Rx Frequency	Rx CTCSS/CDCSS	Optional Signaling
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					