

Proster PST091

Proster PMR446 Two-Way Radio User Manual

Model: PST091

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1. INTRODUCTION

Thank you for choosing the Proster PMR446 Two-Way Radio. This device is designed for reliable and efficient communication, featuring 16 channels, VOX hands-free operation, and a built-in LED flashlight. It is suitable for various applications, including construction sites, warehouses, and outdoor activities. This manual provides essential information for the safe and effective use of your radio.

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the radio. Failure to do so may result in injury or damage to the device.

- **Battery Safety:** Use only the specified rechargeable Lithium-Ion battery. Do not short-circuit, incinerate, or disassemble the battery pack. Do not expose to extreme temperatures.
- **Antenna:** Do not operate the radio with a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn may result.
- **Interference:** Turn off your radio in areas where two-way radios are prohibited, such as hospitals or aircraft.
- **Explosive Environments:** Do not operate the radio in potentially explosive atmospheres unless it is certified for such use.
- **Water Resistance:** This device is **not water resistant**. Avoid exposure to rain, splashes, or submersion.
- **Cleaning:** Use a soft, damp cloth for cleaning. Do not use harsh chemicals or solvents.

3. PACKAGE CONTENTS

Carefully unpack the box and ensure all items are present and in good condition. If any items are missing or damaged, contact your retailer.

- Proster Two-Way Radio (x5)
- Li-ion Battery Pack (x5)
- USB Charger (x5)
- Earpieces (x5)
- Belt Clip (x5)
- Sling/Lanyard (x5)
- User's Manual (x2)



Figure 3.1: All components included in the Proster Two-Way Radio package.

4. PRODUCT OVERVIEW

Familiarize yourself with the main parts of your Proster Two-Way Radio.



Figure 4.1: Key features and design aspects of the Proster Two-Way Radio.

Key Features:

- **Ergonomic Design:** Comfortable grip for extended use.
- **Rugged Design:** Built for demanding environments.
- **Extreme Temperature Ready:** Operates from -20°C to +60°C.
- **Built-in LED Flashlight:** Provides emergency light in dark conditions.
- **PMR446 Frequency:** License-free operation in the UK and European areas.
- **16 Channels:** For seamless communication.
- **CTCSS/DCS Codes:** 50 CTCSS tones and 105 DCS codes to avoid interference.
- **VOX Hands-Free:** Voice-activated transmission.
- **Rechargeable Battery:** 1500mAh Li-ion battery for long-lasting use.

5. SETUP

5.1. Battery Installation and Charging

1. Ensure the radio is turned off.
2. Align the battery pack with the battery compartment on the back of the radio.
3. Slide the battery pack into place until it clicks securely.
4. To charge, place the radio into the USB charging dock. Connect the USB charger to a power source. The indicator light on the charger will show charging status.
5. A full charge typically takes approximately 3 hours and provides 10-12 hours of frequent use.



Long-Lasting Power for All-Day Use

1500

1500mAh Rechargeable Battery
Supports 10-12 hours of continuous use

Fast Charging
Fully charged in just 3 hours (USB compatible)

Low Battery Alert
Never run out of power unexpectedly

Figure 5.1: Charging the Proster Two-Way Radio.

5.2. Antenna Attachment

The antenna is fixed and non-removable. Do not attempt to remove or replace it.

5.3. Earpiece Connection

Insert the earpiece plug into the audio jack on the side of the radio. Ensure it is fully inserted for proper audio transmission and reception.

6. OPERATING INSTRUCTIONS

6.1. Power On/Off and Volume Adjustment

- **Power On:** Rotate the Power/Volume knob clockwise until you hear a click. The radio will announce the current channel.
- **Power Off:** Rotate the Power/Volume knob counter-clockwise until you hear a click.
- **Volume Adjustment:** Rotate the Power/Volume knob to increase (clockwise) or decrease (counter-clockwise) the listening volume.

6.2. Channel Selection

Rotate the Channel Selector knob to choose one of the 16 available channels. The radio will announce the selected channel number.

6.3. Transmitting and Receiving

- **To Transmit:** Press and hold the Push-To-Talk (PTT) button on the side of the radio. Speak clearly into the microphone, holding the radio approximately 5-10 cm from your mouth. Release the PTT button to stop transmitting.
- **To Receive:** Ensure the PTT button is not pressed. The radio will automatically receive signals on the selected channel.

6.4. VOX Function (Hands-Free Operation)

The VOX function allows you to transmit by speaking into the microphone without pressing the PTT button.

1. Turn the radio OFF.
2. Adjust the Channel Selector to channels 1-5. These channels correspond to VOX sensitivities from low (Channel 1) to high (Channel 5).
3. Hold down both the PTT button and the Squelch (MONI) button simultaneously.
4. While holding these buttons, turn the radio ON.
5. Release the buttons once the radio powers on. The VOX function is now activated.
6. To deactivate VOX, repeat the steps or simply turn the radio off and on normally.

Make Communication Easy and Efficient



Figure 6.1: Hands-free communication using VOX and earpiece.

6.5. Monitor Function (Squelch)

Press and hold the MONI (Monitor) button to temporarily disable the squelch function. This allows you to hear weak signals or monitor a channel for activity without the squelch filtering. Release the button to re-enable squelch.

6.6. LED Flashlight

Press the dedicated flashlight button (if available, or refer to specific model controls) to turn the LED flashlight on or off. This is useful for illumination in dark environments.

6.7. Sub-Codes (CTCSS/DCS)

The radio supports 50 CTCSS tones and 105 DCS codes. These sub-codes help filter out unwanted conversations from other users on the same channel. To communicate, both radios must be set to the same channel and the same CTCSS/DCS code. Programming of these codes typically requires specific software and a programming cable (not included).

7. MAINTENANCE

7.1. Cleaning

Wipe the radio's surface with a soft, damp cloth. Do not use abrasive cleaners, solvents, or harsh chemicals, as these can damage the casing and electronics.

7.2. Battery Care

- Recharge the battery when the low-battery alert sounds.
- Avoid overcharging or completely draining the battery for optimal lifespan.
- If storing the radio for an extended period, charge the battery to about 50% and remove it from the radio. Recharge every few months.

7.3. Storage

Store the radio in a cool, dry place away from direct sunlight, extreme temperatures, and humidity. Keep it away from dust and corrosive agents.

8. TROUBLESHOOTING

If you experience issues with your radio, refer to the following table for common problems and solutions.

Problem	Possible Cause	Solution
Radio does not power on	Battery is dead or not installed correctly.	Charge the battery or ensure it is properly installed.
Cannot transmit or receive	Incorrect channel selected. Battery is low. Out of range. VOX is active.	Verify both radios are on the same channel. Recharge battery. Move closer to the other radio. Deactivate VOX if not intended for use.
Poor audio quality / Static	Weak signal. Interference. Volume too low/high.	Move to an open area. Check for sources of interference. Adjust volume. Use Monitor function to check for weak signals.
VOX not working	VOX sensitivity too low. VOX not activated correctly.	Increase VOX sensitivity (Channels 1-5). Follow activation steps precisely.

9. SPECIFICATIONS

Feature	Specification
Frequency Range	PMR446
Transmitting Power	≤0.5W
Channel Number	16 Channels
Sub-Codes	50 CTCSS Tones / 105 DCS Codes
License	License-free (UK and European areas)

Feature	Specification
Antenna	Fixed, non-removable
Channel Spacing	12.5 kHz
Supply Voltage	3.7 V
Battery Capacity	1500mAh Li-ion
Frequency Stability	± 2.5 ppm
Working Temperature	-20 °C ~ +60 °C
Dimensions (W x H x D)	57 x 170 x 35 mm (approx.)
Weight (with antenna & standard battery)	140g (per unit)
Talking Range Maximum	1.5 Kilometer (open terrain)
Water Resistance Level	Not Water Resistant
Model Number	PST091

10. WARRANTY AND SUPPORT

Proster products are designed for reliability and performance. For warranty information or technical support, please refer to the documentation provided with your purchase or visit the official Proster website. Keep your proof of purchase for warranty claims.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question