

Motorola PMNN4544A

Motorola PMNN4544A IMPRES Li-Ion Battery User Manual

MODEL: PMNN4544A | BRAND: MOTOROLA

1. OVERVIEW

The Motorola PMNN4544A IMPRES Li-Ion battery is a high-capacity, submersible power source designed for select Motorola two-way radios. Utilizing IMPRES technology, this battery, when paired with an IMPRES charger, offers advanced features such as automatic, adaptive reconditioning and end-of-life display. This system is engineered to maximize talk-time and optimize battery cycle life automatically, ensuring reliable performance for your communication needs.





Figure 1: Motorola PMNN4544A IMPRES Li-Ion Battery

Key Features:

- **Chemistry:** Lithium Ion (Li-Ion) for reliable power.
- **Capacity:** 2450mAh (Typical), 2300mAh (Minimum) for extended operational time.
- **Voltage:** 7.4V.
- **Durability:** IP68 rated, indicating high resistance to dust and water ingress.
- **Dimensions:** Approximately 112.35 x 51.65 x 23.4 mm (H x W x D).
- **Operational Time:** Approximately 22/17 hours (Digital/Analogue – DP4000e Series) and 17/12 hours (Digital/Analogue – DP4000 Series).
- **IMPRES Technology:** Enables automatic reconditioning and optimized battery life when used with an IMPRES charger.

2. SETUP AND INSTALLATION

Before initial use, ensure the battery is fully charged. This battery is designed for easy attachment and removal from compatible Motorola two-way radios.

Battery Installation:

1. Align the battery with the battery compartment on the back of your compatible Motorola radio.
2. Slide the battery upwards until it clicks securely into place. Ensure there is no gap between the battery and the radio body.
3. To remove, locate the battery release latch (if present on your radio model), press it, and slide the battery downwards to detach.



Figure 2: Motorola PMNN4544A battery with an attached belt clip (belt clip may be sold separately or included depending on package).

Unboxing and Features Video:

Video 1: This video demonstrates the unboxing of a Motorola battery, showcasing its physical appearance and features. It provides a visual guide to the product's design and components.

3. CHARGING

The Motorola PMNN4544A battery is an IMPRES battery, designed to be charged with compatible IMPRES chargers (e.g., WPLN4232A, WPLN4232, WPLN4137, WPLN4226). Using an IMPRES charger optimizes battery life and performance.

Charging Procedure:

1. Connect the IMPRES charger to a power source.
2. Insert the PMNN4544A battery into the charging slot of the IMPRES charger. Ensure the battery is seated correctly.
3. Observe the charger's LED indicator:
 - **Red Light:** Indicates the battery is currently charging.
 - **Green Light:** Indicates the battery is fully charged.
4. Once fully charged, remove the battery from the charger.



Figure 3: Motorola PMNN4544A battery placed in a compatible IMPRES charger. The charger's LED indicates charging status.

Charging Demonstration Video:

Video 2: This video demonstrates the charging process of a similar Li-ion battery, showing how to properly insert it into a compatible charger and observe the indicator lights.

4. OPERATING

The PMNN4544A battery is designed to seamlessly integrate with compatible Motorola two-way radios, providing reliable power for communication. Ensure the battery is fully charged before extended use to maximize talk-time.

Compatibility:

- XPR3300 Series
- XPR3500 Series
- XPR7350 Series
- XPR7550 Series
- DP4400, DP4400e, DP4600, DP4600e, DP4800, DP4800e

For optimal performance, always use the battery with radios and chargers specified as compatible by Motorola.

Battery Details Video:

Video 3: This video provides an introduction to the relevant details of a PMNN4409 battery, offering insights into its features and specifications, which are largely similar to the PMNN4544A.

5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your Motorola PMNN4544A battery.

Care and Storage:

- **Temperature:** Store batteries in a cool, dry place, ideally between 15°C and 25°C (59°F and 77°F). Avoid extreme temperatures, as they can degrade battery performance and life.

- **Charging:** Always use an original Motorola IMPRES charger for best results. Avoid overcharging or deep discharging the battery.
- **Cleaning:** Keep battery contacts clean using a dry, lint-free cloth. Avoid using harsh chemicals or abrasive materials.
- **Disposal:** Dispose of old or damaged batteries according to local regulations. Do not incinerate or puncture batteries.

6. TROUBLESHOOTING

If you encounter issues with your PMNN4544A battery, consider the following common troubleshooting steps:

- **Battery Not Charging:**
 - Ensure the charger is properly plugged into a working power outlet.
 - Verify that the battery is correctly seated in the charger.
 - Check for any debris or corrosion on the battery and charger contacts. Clean if necessary.
 - If using an IMPRES charger, check the charger's error indicators.
- **Short Battery Life:**
 - Ensure the battery is fully charged before use.
 - Check the battery's age; Li-Ion batteries degrade over time.
 - Verify that the radio settings (e.g., transmit power, backlight usage) are optimized for battery conservation.
 - If using an IMPRES system, the charger may indicate if recalibration or replacement is needed.
- **Battery Overheating:**
 - Immediately remove the battery from the radio or charger.
 - Allow the battery to cool down in a well-ventilated area.
 - Do not use the battery if it shows signs of swelling, leakage, or damage. Contact support.

7. SPECIFICATIONS

Feature	Detail
Model Number	PMNN4544A (Also known as PMNN4544)
Item Model Number (Manufacturer)	6543830668
Battery Chemistry	Lithium Ion (Li-Ion)
Voltage	7.4V
Capacity (Typical)	2450 mAh
Capacity (Minimum)	2300 mAh
Ingress Protection (IP) Rating	IP68 (Submersible)
Dimensions (H x W x D)	112.35 x 51.65 x 23.4 mm (approx. 2 x 4 x 1 inches)

Feature	Detail
Item Weight	4.8 ounces
Operational Time (Digital/Analogue – DP4000e Series)	22/17 hours (approx.)
Operational Time (Digital/Analogue – DP4000 Series)	17/12 hours (approx.)
Recommended Use	Two-Way Radios

8. WARRANTY AND SUPPORT

This Motorola PMNN4544A IMPRES Li-Ion battery is covered by Motorola's standard warranty. For specific warranty terms and conditions, please refer to the documentation included with your purchase or visit the official Motorola website.

Customer Support:

For technical assistance, troubleshooting, or warranty claims, please contact Motorola Customer Support through their official channels. You can typically find contact information on the Motorola website or in your product's packaging.

Online Support: Visit the official Motorola website for FAQs, support articles, and contact options.

Phone Support: Refer to your regional Motorola support contact numbers.