



Manuals.plus /

- › **Mighty Max Battery** /
- › Mighty Max Battery YTX4L-BS Lithium Iron Phosphate Battery Instruction Manual

Mighty Max Battery YTX4L-BSLIFEPO4

Mighty Max Battery YTX4L-BS Lithium Iron Phosphate Battery Instruction Manual

Model: YTX4L-BSLIFEPO4 | Brand: Mighty Max Battery

1. PRODUCT OVERVIEW

The Mighty Max Battery YTX4L-BSLIFEPO4 is a 12V Lithium Iron Phosphate (LiFePO4) battery designed for power sport applications. This battery offers high performance, durability, and a lightweight design compared to traditional lead-acid batteries. It is maintenance-free and engineered for reliable starting power.



Image 1.1: Mighty Max YTX4L-BS Lithium Iron Phosphate Battery with key dimensions (4.44in x 2.75in x 3.25in).

Key Features:

- **High Performance:** 12V with 150 Cold Cranking Amps (CCA) for strong starting power.
- **Lightweight Design:** Up to 80% lighter than equivalent lead-acid batteries.
- **Extended Lifespan:** Offers 5 times the life of a lead-acid equivalent with over 2000 deep cycles at 80% depth of discharge.
- **Maintenance-Free:** Sealed design requires no liquid maintenance.
- **Versatile Mounting:** Can be mounted in any position or orientation.
- **Durable:** Shock and vibration resistant.

Your browser does not support the video tag.

Video 1.2: Overview of Mighty Max Battery features, highlighting durability, versatility, and performance across various applications.

2. SETUP AND INSTALLATION

2.1 Unpacking and Inspection

Carefully remove the battery from its packaging. Inspect the battery for any signs of physical damage. Ensure all terminals are clean and free from debris.

2.2 Terminal Connection

Connect the battery terminals securely. Ensure the negative terminal is on the left and the positive terminal is on the right, as indicated on the battery. Loose terminals can cause heat buildup and damage to the battery.



Image 2.1: Close-up view of a battery terminal, showing the connection point.

2.3 Mounting

The Mighty Max YTX4L-BSLIFEPO4 battery can be mounted in any position or orientation due to its sealed design. Choose a secure location within your vehicle or application that minimizes exposure to extreme heat or physical impact.

Your browser does not support the video tag.

Video 2.2: Demonstration of installing a Mighty Max YTX4L-BS battery in a motorcycle, highlighting the ease of fit and connection.

3. OPERATING INSTRUCTIONS

This battery is designed for use in various power sport applications, including motorcycles, ATVs, snowmobiles, and personal watercraft. Ensure your vehicle's electrical system is compatible with a 12V lithium iron phosphate battery.



Image 3.1: A motorcycle in motion, illustrating a typical application for the Mighty Max YTX4L-BS battery.

3.1 Initial Use

The battery typically arrives partially charged. For optimal performance and lifespan, it is recommended to fully charge the battery before its first use.

3.2 Cold Cranking Amps (CCA)

With 150 CCA, this battery provides reliable starting power even in colder conditions. However, extreme cold can temporarily reduce battery performance. Allow the battery to warm up slightly if experiencing difficulty starting in very low temperatures.

4. MAINTENANCE

The Mighty Max YTX4L-BSLIFEPO4 is a maintenance-free battery, meaning it does not require water refilling. However, proper care and charging practices are essential for maximizing its lifespan.

4.1 Charging

- **Use a Compatible Charger:** Only use a charger specifically designed for lithium iron phosphate (LiFePO4) batteries. Using an incompatible charger can damage the battery and void the warranty.
- **Avoid Overcharging/Undercharging:** Follow the charger's instructions to ensure proper charging cycles.

4.2 Cleaning

Keep the battery terminals and casing clean. Use a dry cloth to wipe away any dust or dirt. Avoid using harsh chemicals or solvents.

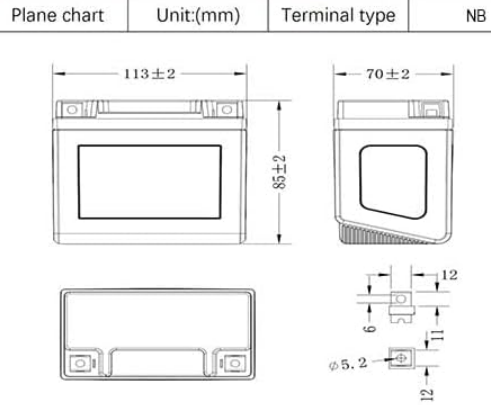
4.3 Storage

If storing the battery for an extended period, ensure it is fully charged and stored in a cool, dry place. Periodically check the charge level and recharge if necessary to prevent deep discharge.



LITHIUM IRON PHOSPHATE STARTING BATTERY - CYLINDRICAL BATTERY

Model: YTX4L-BSLIFEPO4



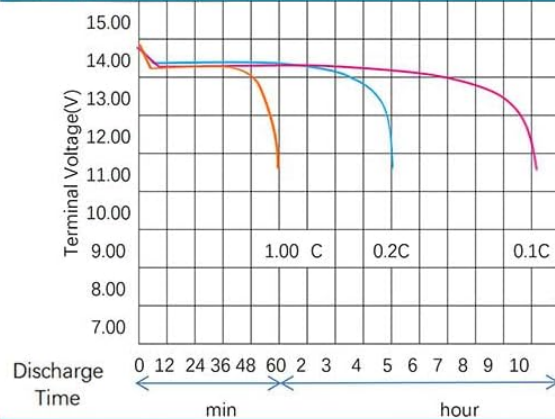
Parts:

Cover	Container Bottom	Terminal	Positive Plate	Negative Plate	Separator	Electrolyte	Seal Glue
ABC	ABC	Cu	LiFePO4	C	PP or PE	LiPF6 + Carbonic acid esters	Epoxy Resin

Parameter Chart:

Volts	12.8		V
Power(25°C)	10 hours rate	25.6	Wh
Appx.Dimension	L±2	113	mm
	W±2	70	mm
	H±2	85	mm
Weight (Approx)	0.37		Kg

Discharge Current 25°C



Retention of Charge Storage @25°C

Month	Retention (%)	Directly Mounted	
		Constant Volts	14.4 V
6	74%	Limit Current	0.625 A
		Charging Hours	0.5-1 H
		Constant Volts	14.4 V
12	50%	Limit Current	0.625 A
		Charging Hours	1-2 H

Max. Discharge Current (Short Pulse)	Cell surface temperature less than 60°C ;when Soc>50%less than 10S and soc<50%less than 3S;		CA	75 A
		Factory Standard (Table test)		CCA

★The above are average and data obtained from the first 3 charge/discharge cycles. These are not minimum values.

Residual Capacity(25°C)

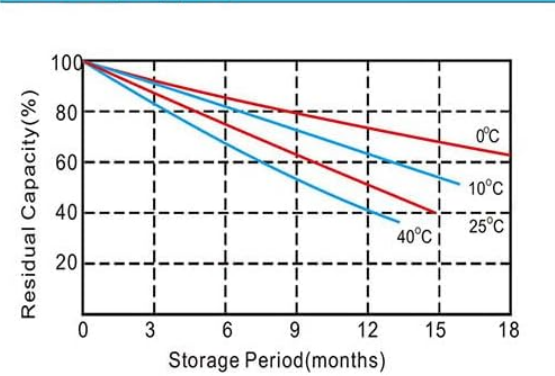


Image 4.1: Mighty Max Battery showing warning labels and general product information.

5. TROUBLESHOOTING

If you encounter issues with your Mighty Max YTX4L-BSLIFEPO4 battery, consider the following common troubleshooting steps:

- **No Power/Weak Start:**

- Check battery charge level. Recharge if low.
- Inspect terminal connections for tightness and corrosion. Clean and tighten if necessary.
- Verify the charger is compatible and functioning correctly.

- **Battery Not Holding Charge:**

- Ensure the charging system of your vehicle is working properly.
- Confirm no parasitic drains are present in your vehicle's electrical system.

- **Unusual Odor or Swelling:**

- Immediately disconnect the battery and contact customer support. Do not attempt to use or charge a damaged battery.

For persistent issues, refer to the warranty information or contact Mighty Max Battery customer support.

6. SPECIFICATIONS

Detailed technical specifications for the Mighty Max YTX4L-BSLIFEPO4 battery:

Specification	Value
Model Number	YTX4L-BSLIFEPO4MP20611
Voltage	12 Volts
Battery Cell Composition	Lithium Ion (LiFePO4)
Battery Capacity	3 Amp Hours
Cold Cranking Amps (CCA)	150 CCA
Case Dimensions (L x W x H)	4.44 x 2.75 x 3.25 inches
Weight	0.82 pounds (per battery)
Polarity	Negative on Left, Positive on Right
Reusability	Rechargeable
Recommended Uses	Power Tool (general category, includes power sports)

WE ARE A U.S. COMPANY — AND PROUD OF IT.



Headquartered in New Jersey and built by a team of hard-working Americans, our roots run deep across the country. From coast to coast, we create jobs and power up communities every step of the way.

POWERING AMERICAN GROWTH

From logistics to support, our continued investments in operations helps us deliver fast and reliable power in the US and beyond.



AMPED-UP QUALITY

U.S. based quality control and packaging production ensures every battery is tested, protected, and powered to the max.

While our products are made abroad, our U.S.-based team carefully oversees testing, safety, quality, and packaging to ensure they meet the high standards our customers expect.



Proudly U.S.-Based | Globally Manufactured | Tested to U.S. Standards

Are You Powered To The Max?



Image 6.1: Technical diagram and parameter chart for the YTX4L-BSLIFEPO4 battery, including dimensions and performance data.

7. WARRANTY AND SUPPORT

7.1 Warranty Information

This Mighty Max Battery YTX4L-BSLIFEPO4 comes with a Full One Year Manufacturer's Warranty. This warranty covers defects in materials and workmanship under normal use.

7.2 Customer Support

For any questions, technical assistance, or warranty claims, please contact Mighty Max Battery customer support. Refer to the product packaging or the official Mighty Max Battery website for current contact information.