

[Manuals.plus](#) /

› [Dakota Lithium](#) /

› Dakota Lithium 12V 3 Amp LiFePO4 Deep Cycle Battery Charger Instruction Manual (Model BATCHAR1)

Dakota Lithium BATCHAR1

Dakota Lithium 12V 3 Amp LiFePO4 Deep Cycle Battery Charger Instruction Manual

Model: BATCHAR1

1. INTRODUCTION

This manual provides essential instructions for the safe and efficient use of your Dakota Lithium 12V 3 Amp LiFePO4 Deep Cycle Battery Charger. This charger is specifically optimized for use with Dakota Lithium LiFePO4 batteries. Using a compatible charger is crucial for maintaining battery performance and extending its lifespan.



Figure 1: Dakota Lithium 12V 3 Amp LiFePO4 Battery Charger with alligator clips.

2. KEY FEATURES

- **Optimized for LiFePO4:** Designed specifically for Dakota Lithium iron phosphate batteries.
- **Enhanced Performance:** Ensures optimal performance and lifespan of LiFePO4 batteries, unlike standard SLA chargers.
- **Fast Charging:** Delivers 3 amps per hour, ideal for batteries up to 25Ah. A 7Ah battery can be fully charged in approximately 2.3 hours.
- **BMS Communication:** Features smart Battery Management System (BMS) communication to restart or 'wake up' a battery whose BMS has shut down due to short circuit or excessive amp draw.



3. SETUP INSTRUCTIONS

1. **Connect to Power Outlet:** Plug the charger's AC power cord into a standard 100-240V, 50/60Hz wall outlet.
2. **Connect to Battery:**
 - Attach the red (positive) alligator clamp to the positive (+) terminal of the battery.
 - Attach the black (negative) alligator clamp to the negative (-) terminal of the battery.
3. **Ensure Proper Ventilation:** If charging a battery that is still in a vehicle, ensure the charger is placed a good distance away from the battery in a well-ventilated area. Batteries can vent gas during charging, and electrical sparks should be avoided.



Figure 3: Proper connection of the charger to a battery.

4. OPERATING INSTRUCTIONS

1. **Automatic Detection:** The charger automatically detects the battery type (LiFePO4, AGM, Flooded) and voltage (12V) and begins the appropriate charging cycle.
2. **Charging Indicators:** The charger features LED indicators to show the charging status. A series of lights will illuminate progressively as the battery charges.
3. **Full Charge Indication:** Once the battery is fully charged, the LED indicator will show a solid green light, indicating 100% charge.
4. **Maintenance Mode (Float Charge):** After reaching full charge, the charger automatically switches to a maintenance (float) mode. This prevents overcharging and keeps the battery optimally charged for extended periods, making it safe to leave connected indefinitely.
5. **BMS Wake-Up:** If a LiFePO4 battery's BMS has shut down (e.g., due to short circuit or excessive discharge), the charger will attempt to restart or 'wake up' the BMS to allow charging.



Figure 4: The charger is compatible with various 12V Dakota Lithium batteries.

5. MAINTENANCE

- **Regular Cleaning:** Keep the charger and battery terminals clean and free of dirt or corrosion.
- **Storage:** Store the charger in a dry, well-ventilated area when not in use.
- **Long-Term Connection:** The charger's maintenance mode allows it to be safely connected to a battery for extended periods (e.g., during winter storage) to ensure the battery remains fully charged and optimized.

6. TROUBLESHOOTING

- **Charger Not Activating:** Ensure the charger is properly plugged into a live AC outlet and the alligator clamps are securely connected to the correct battery terminals (red to positive, black to negative).
- **Battery Not Charging:** Verify that the battery is a 12V LiFePO4 type. If the battery is deeply discharged or its BMS has shut down, the charger's BMS communication feature will attempt to revive it. However, severely damaged batteries (e.g., bulged or corroded plates) may not be recoverable.

- **Overheating:** Ensure the charger is in a well-ventilated area, especially when charging a battery in a confined space.

7. SPECIFICATIONS

Specification	Value
Model Number	BATCHAR1
Input Voltage	100-240 volts, 50/60HZ
Output Voltage	14.4 volts
Output Amperage	3.0 Amps
Recommended Battery Capacity	Up to 25Ah
Item Weight	10.8 ounces
Package Dimensions	7.36 x 4.69 x 1.89 inches
Safety Certification	UL

8. SUPPORT

For further assistance or technical support, please refer to the official Dakota Lithium website or contact their customer service. Ensure to provide your product model number (BATCHAR1) when seeking support.

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