

DC HOUSE 5A Smart Battery Charger

DC HOUSE 5A Smart Battery Charger User Manual

Model: 5A Smart Battery Charger

INTRODUCTION

The DC HOUSE 5A Smart Battery Charger is a versatile 9-in-1 device designed for charging, maintaining, trickle charging, and desulfating 12V LiFePO4 and lead-acid batteries. It is suitable for a wide range of vehicles including cars, boats, ATVs, motorcycles, and lawnmowers. This manual provides essential information for safe and effective use of your battery charger.



Image: The DC HOUSE 5A Smart Battery Charger highlighting its 9 versatile charging modes for various battery types.

Key Features:

- **Smart 9-in-1 Functionality:** Combines charging, maintaining, trickle charging, and desulfating for 12V LiFePO4 and lead-acid batteries.
- **0V Activation:** Automatically activates deeply discharged LiFePO4 batteries.
- **Rapid Battery Repair:** 15V pulse technology repairs and revives damaged, stratified, and sulfated lead-acid batteries.
- **Cold-Weather Charging:** Safely charges lead-acid batteries in temperatures as low as 14°F (-10°C).
- **Smart & Safe Charging:** Features 5-stage intelligent charging with current control and multiple protections (overload, short-circuit, reverse polarity).

- **Smart LCD & Dual Connect:** Provides real-time status display and flexible connection options with copper lug terminals and alligator clips.

WHAT'S IN THE BOX

Upon opening the package, please ensure all components are present and undamaged:

- 1x DC HOUSE 12V 5A Smart Battery Charger
- 1x SAE-Crocodile Clip Cable (16AWG, 23.6in)
- 1x SAE-Ring Cable (16AWG, 23.6in)
- 1x User Manual

Waterproof & Anti-Reverse Safe in All Conditions



Reverse Polarity



Overload



Short Circuit



Image: Contents of the product packaging, showing the charger unit, alligator clip cable, ring terminal cable, and user manual.

SETUP INSTRUCTIONS

Before connecting the charger, ensure the battery is clean and free of corrosion. Always connect the charger to the battery first, then to the AC power outlet.

Connection Steps:

1. **Identify Battery Type:** Determine if your battery is LiFePO4 or Lead-Acid (AGM, STD).
2. **Choose Connection Method:** Select either the SAE-Crocodile Clip Cable for temporary connections or the SAE-Ring Cable for more permanent installations.
3. **Connect to Battery:**
 - Connect the **RED (+)** clamp/ring terminal to the **positive (+)** battery terminal.
 - Connect the **BLACK (-)** clamp/ring terminal to the **negative (-)** battery terminal.

Ensure a secure connection. Avoid touching the clamps together once connected to the battery.

4. **Connect Charger to Power:** Plug the charger's AC power cord into a standard 100-240V AC wall outlet. The charger will power on and display the current battery status.



Product Parameters

Model	12V 5A	
Input Voltage AC	100-240 VAC, 50-60Hz	
Output Power	70W	
Rated DC Output	LiFePO4 battery	14.6V 5A
	AGM battery	14.4V 5A
	STD battery	14.4V 5A
	DC Power Supply	13.5V 5A
Battery Voltage		12V
Battery Type		LiFePO4, AGM, AGM
Minimum Starter Battery Voltage		0V
Protection Function		Short Circuit, Reverse Polarity, Overvoltage
Ambient Temperature		-4°F-104°F
Dimension		7.48*2.88*2.39in
Weight		1.12lb

Image: Visual guide demonstrating connection methods using SAE-Ring Cable and SAE-Crocodile Clip.

OPERATING INSTRUCTIONS

The DC HOUSE 5A Smart Battery Charger features an intelligent LCD and automatic charging modes for ease of use.

Understanding the Smart LCD Display:

The LCD provides real-time information about the charging process and battery status.

Safe Charging Below Freezing

14°F Unstoppable



For Lead-acid Batteries Only

Image: Close-up of the charger's LCD screen, detailing indicators for charging modes, State of Charge (SOC), voltage/current, low-temperature charging, battery damage, reverse polarity, and short circuit.

- **Charging Modes:** Indicates the currently selected charging mode (e.g., LiFePO4, AGM, STD).
- **SOC (State of Charge):** Displays the battery voltage and its corresponding charge level percentage.
- **Voltage & Current Indicators:** Shows the real-time battery voltage and charging current.
- **Low-Temperature Charging:** Icon illuminates when charging lead-acid batteries in cold conditions (below 14°F).
- **Battery Damage:** Icon appears if battery damage is detected.
- **Reverse Polarity:** Icon lights up if battery terminals are connected incorrectly.
- **Short Circuit:** Icon indicates a short circuit detection.

Charging Process:

The charger automatically detects the battery type and initiates a 5-stage intelligent charging process:

1. **PCM Activation:** Inputs a constant pulse to activate the battery's Power Control Module (for LiFePO4).
2. **Soft Start:** Gently wakes up the battery before bulk charging begins.
3. **Bulk Charging:** Provides constant current to rapidly charge the battery to approximately 80% State of Charge (SOC).
4. **Absorption:** Provides constant voltage and intelligently reduces current until the battery reaches 100% SOC.
5. **Fully Charged / Float:** Maintains the battery at full charge with a low current to prevent overcharging.



Image: The charger connected to a lithium battery, illustrating the 5-stage charging process for activation and recharge.

Special Functions:

- **0V Activation (LiFePO4):** If a LiFePO4 battery is deeply discharged (0V), the charger will attempt to activate it automatically.
- **Lead-Acid Battery Repair:** The charger can repair sulfated or stratified lead-acid batteries using 15V pulse technology. This process typically takes about 2 hours.
- **Cold-Weather Charging:** For lead-acid batteries, the charger automatically adjusts its charging profile for optimal performance in temperatures below 14°F (-10°C).

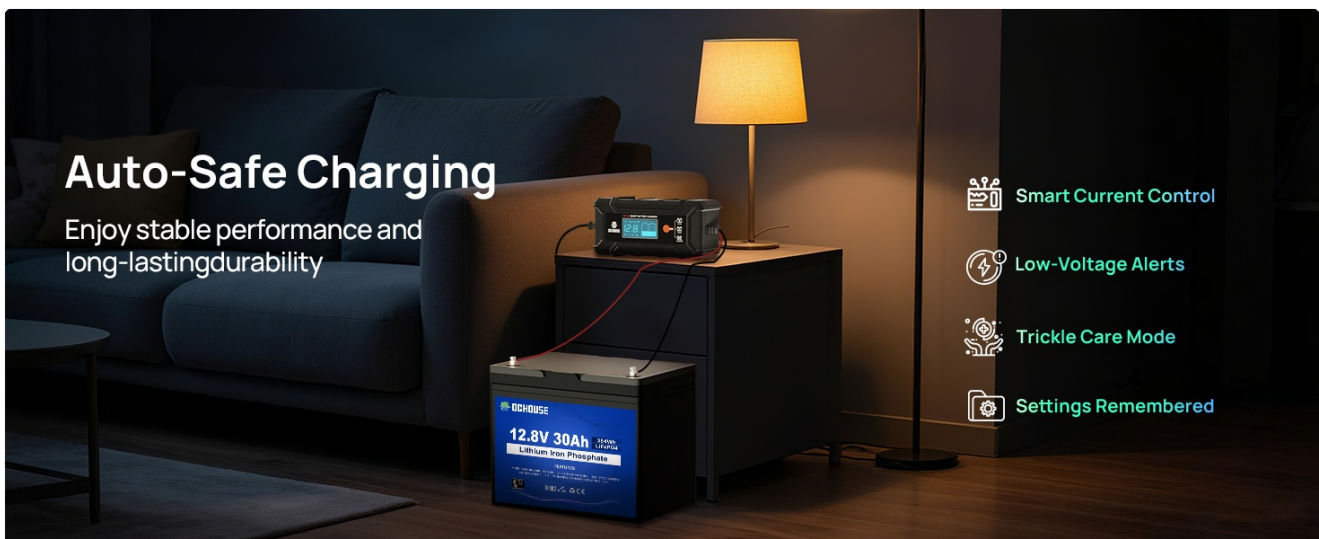


Image: The charger connected to a lead-acid battery, demonstrating its ability to repair sulfation within 2 hours using 15V pulse recovery.

Maintain your battery with trickle charging

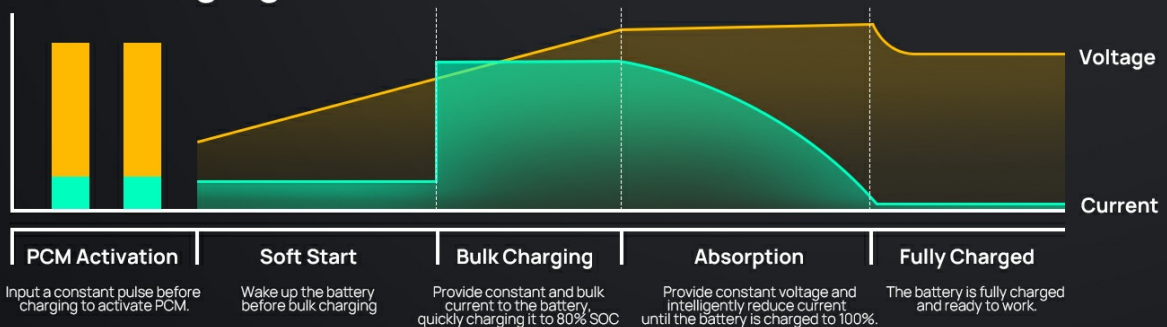


Image: The charger shown operating in a snowy environment, indicating its safe charging capability for lead-acid batteries even at 14°F.

MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your DC HOUSE battery charger.

- **Cleaning:** Disconnect the charger from both the AC outlet and the battery before cleaning. Use a soft, dry cloth to wipe the exterior. Do not use abrasive cleaners or solvents.
- **Cable Inspection:** Regularly inspect the charging cables, clamps, and ring terminals for any signs of damage, fraying, or corrosion. Replace damaged cables immediately.
- **Storage:** Store the charger in a cool, dry place when not in use. Avoid extreme temperatures and direct sunlight.
- **Battery Terminals:** Keep battery terminals clean and free of corrosion for efficient charging.

TROUBLESHOOTING

If you encounter issues with your DC HOUSE 5A Smart Battery Charger, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Charger does not power on / LCD is blank.	No AC power, faulty outlet, or internal issue.	Check AC power connection. Try a different outlet. Ensure the charger is properly plugged in.
"Reverse Polarity" icon illuminated.	Battery clamps/terminals are connected incorrectly.	Disconnect from AC power and battery. Reconnect RED (+) to positive (+) and BLACK (-) to negative (-).
"Short Circuit" icon illuminated.	A short circuit is detected in the battery or cables.	Disconnect immediately. Inspect cables and battery for damage. Do not use if a short circuit persists.
"Battery Damage" icon illuminated.	The charger has detected a severely damaged or unchargeable battery.	Attempt battery repair function if applicable (for lead-acid). If the issue persists, the battery may need replacement.

Problem	Possible Cause	Solution
Battery not charging or charging slowly.	Poor connection, incorrect mode, or severely discharged/damaged battery.	Ensure secure connections. Verify the correct battery type is selected (if manual selection is available, though this model is automatic). Allow time for 0V activation or repair cycle.

If the problem persists after attempting these solutions, please contact DC HOUSE customer support.

SPECIFICATIONS

Detailed technical specifications for the DC HOUSE 5A Smart Battery Charger:

Feature	Specification
Model	12V 5A Smart Battery Charger
Input Voltage AC	100-240 VAC, 50-60Hz
Output Power	70W
Rated DC Output (LiFePO4 battery)	14.6V 5A
Rated DC Output (AGM battery)	14.4V 5A
Rated DC Output (STD battery)	14.4V 5A
Rated DC Output (DC Power Supply)	13.5V 5A
Battery Voltage	12 Volts (DC)
Battery Type Compatibility	LiFePO4, AGM, STD (Lead-Acid)
Minimum Starter Battery Voltage	0V
Protection Functions	Short Circuit, Reverse Polarity, Overvoltage
Ambient Temperature Range	-4°F to 104°F (-20°C to 40°C)
Dimensions (D x W x H)	2.88" x 7.48" x 2.39" (7.3cm x 19cm x 6.1cm)
Item Weight	1.12 Pounds (0.51 kg)
Current Rating	5 Amps
Battery Charge Time	2 Hours (for repair function)

WARRANTY INFORMATION

The DC HOUSE 5A Smart Battery Charger comes with a **1-Year Warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by misuse, accident, unauthorized modification, or improper installation. Please retain your proof of purchase for warranty claims.

CUSTOMER SUPPORT

For technical assistance, warranty claims, or any questions regarding your DC HOUSE 5A Smart Battery Charger, please contact our customer support team.

You can find contact information and additional resources by visiting the official DC HOUSE store on Amazon: [DCHOUSE Store](#)