

Defabee P3648

Defabee P3648 36V/48V Smart Battery Charger User Manual

Model: P3648 | Brand: Defabee

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1. SAFETY INFORMATION

Please read and understand all safety instructions before operating the Defabee P3648 Smart Battery Charger. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Ventilation:** Ensure adequate ventilation during charging. Do not operate the charger in a confined area or obstruct its cooling vents.
- **Battery Type:** This charger is designed for 36V and 48V Lithium (LiFePO4) and Lead-Acid (AGM, GEL, EFB, MF, Flooded, VRLA, SLA) batteries. Do not attempt to charge other battery types.
- **Connection:** Always connect the charger to the battery terminals correctly (positive to positive, negative to negative) before plugging the charger into an AC power outlet. Disconnect from AC power before disconnecting from the battery.
- **Water Exposure:** Do not expose the charger to rain, moisture, or operate it in wet conditions.
- **Damage:** Do not operate the charger if it has been dropped, damaged, or if the power cord or battery cables are compromised. Contact customer support for assistance.
- **Children:** Keep the charger and batteries out of reach of children.
- **Sparks:** Avoid creating sparks near the battery during connection or disconnection, as batteries can produce explosive gases.

2. PRODUCT OVERVIEW

The Defabee P3648 is a versatile 36V/48V smart battery charger and maintainer, designed for a wide range of applications including golf carts, cars, and boats. It features intelligent identification of voltage and battery type, a 9-stage smart charging process, and multiple safety protections.

Key Features:

- Dual Voltage Compatibility: Supports 36V and 48V batteries.
- Multi-Chemistry Support: Charges Lithium (LiFePO4) and Lead-Acid (AGM, GEL, EFB, MF, Flooded, VRLA, SLA) batteries.
- Variable Amperage: Offers multiple charging current selections (5A, 10A, 18A for 36V; 5A, 8A, 13A for 48V).
- 9-Stage Smart Charging: Optimizes battery power precisely and gently for extended battery life.
- LCD Display: Provides real-time charging status, voltage, current, temperature, and battery percentage.
- Repair Mode: Dedicated mode for attempting to restore old, idle, or stratified batteries.
- Safety Protections: Includes over-charging, reverse polarity, short circuit, and temperature protection.
- Built-in Cooling Fan: Ensures efficient heat dissipation during operation.

Product Components:



Figure 2.1: Defabee P3648 Smart Charger with key features like 36V/48V selection, automatic charging, 4 mode options, multiple protection, LCD display, mode button, built-in cooling fan, temperature compensation, and wide application.



Figure 2.2: Front panel of the Defabee P3648 Smart Charger displaying the LCD screen and current selection buttons for 36V (5A, 10A, 18A) and 48V (5A, 8A, 13A) modes, along with a Repair mode.



Figure 2.3: Included accessories: 2M power cord, 1M clip cable with alligator clips, and a 3-Pin (Delta-Q) plug for specific golf cart models.



Figure 2.4: Detail of the pure copper cables and all-inclusive alligator clips for secure battery connection.



Figure 2.5: Illustration of the built-in dual cooling fan system, designed to maintain optimal operating temperature and extend charger lifespan.

3. SPECIFICATIONS

Feature	Specification
Model	P3648
AC Input	100V-240V~ 50/60Hz
Output Voltage	36V / 48V
Output Current (36V)	5A, 10A, 18A

Feature	Specification
Output Current (48V)	5A, 8A, 13A
Minimum Starting Voltage	2.0V
Max Power and Load	650W
Product Dimensions	9.1 x 2.6 x 4.4 inches
Product Weight	Approximately 2.6 lbs (4.6 lbs with package)
Compatible Battery Types	Lithium, LiFePO4, Lead-Acid (AGM, GEL, EFB, MF, Flooded, VRLA, SLA)
Supported Battery Capacity	20AH-400AH
Safety Certification	UL (Specification Met)
Included Connectors	3-Pin (Delta-Q) Plug, Alligator Clips

4. SETUP

Follow these steps to set up your Defabee P3648 Smart Battery Charger:

- Unpack:** Carefully remove all components from the packaging. Verify that all items listed in the 'Product Components' section are present.
- Placement:** Place the charger on a stable, flat surface in a well-ventilated area, away from direct sunlight, heat sources, and moisture.
- Connect to Battery:**
 - For golf carts with a 3-Pin (Delta-Q) receptacle: Insert the 3-Pin plug into the golf cart's charging port.
 - For other batteries: Connect the red alligator clip to the positive (+) terminal of the battery and the black alligator clip to the negative (-) terminal of the battery. Ensure a secure connection.
- Connect to AC Power:** Plug the AC power cord into the charger's input interface, then plug the other end into a standard 100V-240V~ 50/60Hz AC power outlet.

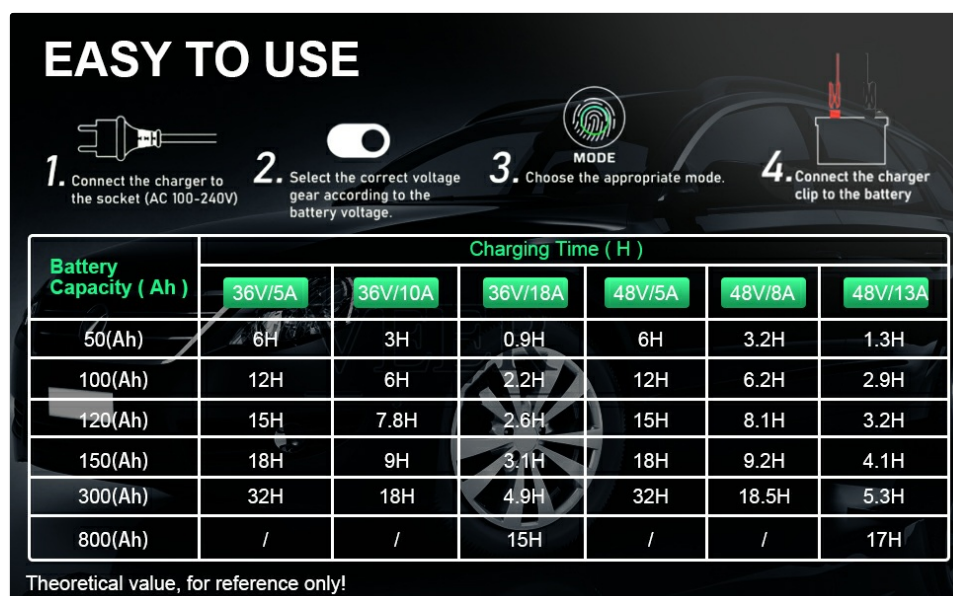


Figure 4.1: Visual guide for connecting the charger: 1. Connect to AC socket, 2. Select voltage, 3. Choose appropriate mode, 4. Connect to battery.

5. OPERATING INSTRUCTIONS

Once the charger is properly connected to the battery and AC power, follow these steps to begin charging:

1. **Power On:** Flip the red power switch on the side of the charger to the 'ON' position. The LCD screen will illuminate.
2. **Select Voltage:** Use the '36V' or '48V' button on the charger's front panel to select the correct voltage for your battery. The selected voltage will be displayed on the LCD.
3. **Select Charging Mode/Amperage:** Press the 'MODE' button repeatedly to cycle through the available charging current options and the 'REPAIR' mode. Choose the appropriate amperage based on your battery's capacity and desired charging speed. The selected mode will be displayed.
4. **Start Charging:** The charger will automatically begin the 9-stage charging process. The LCD will show real-time charging status, including voltage, current, temperature, and battery percentage.
5. **Charging Completion:** When the battery is fully charged, the LCD indicator will display 'FULL'. The charger will then switch to float/maintenance charging to prevent overcharging.
6. **Disconnect:** First, unplug the AC power cord from the wall outlet. Then, disconnect the charger from the battery (either the 3-Pin plug or the alligator clips).

9-Stage Smart Charging Process:

The Defabee P3648 employs a sophisticated 9-stage charging algorithm to ensure optimal charging and battery longevity:

1. Battery Desulfation
2. Soft Start Charging
3. Bulk Charging
4. Absorption Charging
5. Trickle Charge
6. Battery Test
7. Recondition Charging

- 8. Float & Maintenance Charging
- 9. Small Current to Maintain Charging

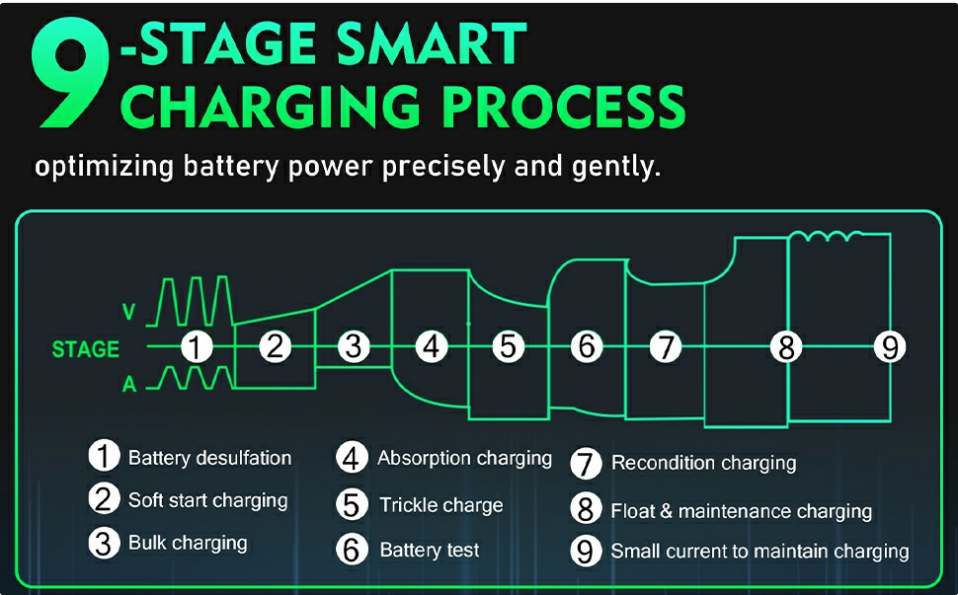


Figure 5.1: Detailed diagram of the 9-stage smart charging process, optimizing battery power precisely and gently.

Battery Type Selection:

The charger automatically identifies the battery voltage and type. You can also manually select the battery type (AGM/Lead, LiFePO4, Lithium) or activate the Repair mode using the mode button.



Figure 5.2: Battery type selection interface, allowing choice between AGM/Lead, LiFePO4, Lithium, and Repair modes.

Product Operation Video:

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This video demonstrates the features and operation of the Defabee P3648 Smart Battery Charger, including its components, voltage selection, and charging modes.

6. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your Defabee P3648 Smart Battery Charger:

- **Cleaning:** Disconnect the charger from both AC power 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 AC power cord and battery cables for any signs of damage, cuts, or fraying. If any damage is found, discontinue use and contact customer support.
- **Storage:** Store the charger in a cool, dry place when not in use. Avoid extreme temperatures and high humidity.
- **Ventilation:** Ensure the cooling vents remain clear of dust and debris to prevent overheating.

7. TROUBLESHOOTING

If you encounter issues with your Defabee P3648 Smart Battery Charger, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Charger does not power on.	No AC power, power switch off, faulty power cord.	Check AC outlet, ensure power switch is ON, inspect power cord.
Charger not charging battery.	Incorrect battery connection, wrong voltage selected, battery too deeply discharged, faulty battery.	Verify correct polarity, select correct voltage, try Repair mode, test battery with another device.
LCD displays an error code.	Specific error condition (e.g., reverse polarity, short circuit, overheating).	Refer to the charger's display for the specific error. Disconnect, resolve the issue (e.g., correct polarity), and reconnect. If error persists, contact support.
Charger gets hot during operation.	Normal operation, obstructed ventilation, high ambient temperature.	Ensure vents are clear. If excessively hot or an overheat error occurs, disconnect and allow to cool in a well-ventilated area.

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

8. WARRANTY & SUPPORT

For warranty information, technical support, or service inquiries regarding your Defabee P3648 Smart Battery Charger, please refer to the warranty card included with your product or contact Defabee customer service directly.

Defabee Customer Service:

- Visit the official Defabee website for contact details.
- Refer to your purchase documentation for specific support contacts.

When contacting support, please have your product model (P3648) and purchase date available.

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