

## Delta-Q 912-2400

# Delta-Q QuiQ On-Board 24V Battery Charger 912-2400 User Manual

Model: 912-2400

## 1. INTRODUCTION

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The Delta-Q QuiQ 912-2400 is an advanced, high-frequency 24V battery charger designed for on-board installation in various electric vehicles and equipment. Its sealed, passively cooled design ensures durability in challenging environments, including temperature extremes, moisture, and high vibration. This manual provides essential information for the safe and effective operation and maintenance of your QuiQ charger.

## 2. SAFETY INFORMATION

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

- Read all instructions thoroughly before using the charger.
- Ensure proper ventilation if charging in an enclosed space to prevent gas accumulation.
- Do not operate the charger if it has been damaged in any way.
- Avoid contact with battery acid. Wear appropriate protective eyewear and clothing when handling batteries.
- Keep the charger and batteries out of reach of children.
- This charger is specifically designed for lead-acid batteries (Wet/AGM/GEL). It is **not recommended** for Lithium batteries.
- Always disconnect AC power before making or breaking DC connections to the battery.

## 3. PRODUCT OVERVIEW

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The Delta-Q QuiQ 912-2400 charger is compact and robust, featuring a sealed enclosure and passive cooling. It supports both 120V and 230V input, making it suitable for worldwide use.



Figure 1: Top view of the Delta-Q QuiQ 912-2400 battery charger, illustrating its compact design with integrated heat fins and cable connections.



Figure 2: Angled view of the Delta-Q QuiQ 912-2400 charger, showcasing the durable heat sink design for passive cooling.

## Key Features:

- On-board installation capability
- Sealed, passively cooled design for durability
- Withstands temperature extremes, moisture, and high vibration
- Operates at 120V and 230V (45-65 Hz) for worldwide use
- Pre-programmed with 10 charge profiles for wet and sealed batteries
- Stores up to 10 user-selectable charge algorithms
- Output: 24 Volts, 25 Amps
- Input: 120 VAC / 230 VAC at 45-65 Hz

- Designed for Lead-acid (Wet/AGM/GEL) batteries

## 4. SETUP AND INSTALLATION

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### 4.1 Mounting the Charger

The QuiQ charger is designed for on-board installation. Mount the charger securely in a location that allows for adequate airflow around the heat fins, even though it is passively cooled. Ensure the mounting surface is stable and can support the charger's weight (approximately 11 lbs / 5 kg).

### 4.2 Connecting to AC Power

The charger includes an 8-inch AC inlet plug for connecting to a standard power outlet. Ensure the power source matches the charger's input voltage (120V or 230V) and frequency (45-65 Hz).

### 4.3 Connecting to Batteries

The charger features a 6-foot DC 12AWG/4C output cable. Connect the DC output cables to your battery bank according to the wiring diagram provided with your vehicle or equipment. Ensure correct polarity (red to positive, black to negative). The green wire is typically for interlock use; refer to specific vehicle instructions.



Figure 3: DC output cables with ring terminals for battery connection. Note the label indicating specific wiring instructions for interlock use.

#### 4.4 Battery Type Programming

The charger comes pre-programmed with 10 charge profiles. If your battery type is not among the default profiles, it is crucial to contact your supplier to have the charger programmed for your specific battery model before use. Using an incorrect charge profile can damage your batteries.

Default supported battery types include:

- Trojan XHS
- Deka 8G31
- US Battery US125
- US Battery 8V-GC
- US Battery 305HC
- US Battery L16HC

- Fullriver DC-180-8
- Fullriver 12 volts
- Fullriver DC335/400-6
- Fullriver DC224/250-6

**Important: This charger is not recommended for Lithium batteries and does not support programming for them.**

## 5. OPERATING INSTRUCTIONS

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### 5.1 Charging Process

1. Ensure the charger is securely mounted and correctly connected to the battery bank.
2. Plug the AC inlet cable into a compatible power outlet.
3. The charger will automatically detect the battery state and begin the charging cycle according to the selected charge profile.
4. Monitor the charger's indicator lights (if present) for charging status. Refer to the specific indicator guide for your charger model.
5. Once charging is complete, the charger will typically enter a maintenance or float mode to prevent overcharging.
6. Disconnect the AC power cable from the outlet before disconnecting the DC cables from the batteries.

### 5.2 Charge Algorithms

The QuiQ charger can store up to 10 user-selectable charge algorithms. Consult your vehicle or equipment manual for instructions on selecting the appropriate algorithm for your battery type and application. Incorrect algorithm selection can lead to undercharging or overcharging, reducing battery life.

## 6. MAINTENANCE

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Regular maintenance ensures optimal performance and longevity of your Delta-Q QuiQ charger.

- Keep the charger's exterior clean and free from dust, dirt, and debris. Use a dry cloth for cleaning.
- Regularly inspect all cables and connections for signs of wear, fraying, or damage. Replace any damaged components immediately.
- Ensure the heat fins are not obstructed by foreign objects or excessive buildup to maintain proper passive cooling.
- For wet cell batteries, regularly check electrolyte levels and top up with distilled water as needed, following battery manufacturer guidelines.
- Store the charger in a dry, cool place when not in use for extended periods.

## 7. TROUBLESHOOTING

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This section provides solutions to common issues you might encounter with your QuiQ charger. For problems not listed here, please contact customer support.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Charger not turning on	No AC power; Faulty AC cable; Internal fault	Check AC power source and cable. Ensure the outlet is functional. If the problem persists, contact support.
Charger not charging batteries	Incorrect battery connection; Deeply discharged battery; Incorrect charge profile selected	Verify DC cable connections and polarity. Allow time for deeply discharged batteries to be recognized. Confirm the correct charge profile is selected for your battery type.
Charger overheating	Obstructed airflow to heat fins; Excessive ambient temperature	Ensure heat fins are clear of obstructions. Move the charger to a cooler environment if possible.
Unusual noises or smells from charger	Internal component failure	Immediately disconnect power from the charger and contact support. Do not attempt to repair the unit yourself.

## 8. SPECIFICATIONS

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- **Model:** Delta-Q QuiQ 912-2400
- **Input Voltage:** 120 VAC / 230 VAC (45-65 Hz)
- **Output Voltage:** 24 Volts DC
- **Output Current:** 25 Amps
- **Compatible Battery Types:** Lead-acid (Wet, AGM, GEL)
- **Dimensions (L x W x H):** 11" x 9.7" x 4.3" (27.9 cm x 24.6 cm x 10.9 cm)
- **Weight:** 11 lbs (5 kg)
- **Cooling:** Passive (fanless)
- **Certifications:** CE, FCC
- **Manufacturer:** Delta-Q

## 9. WARRANTY INFORMATION

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The Delta-Q QuiQ 912-2400 battery charger comes with a **One Year Warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. For warranty claims or service, please contact your authorized Delta-Q dealer or the manufacturer directly. Please retain your proof of purchase for warranty validation.

## 10. CUSTOMER SUPPORT

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For technical assistance, programming inquiries, or service, please contact your product supplier or visit the official Delta-Q website for support resources and contact information.

[Visit Delta-Q Support Website](#)

