

Deca 300300

Deca 300300 Matic 116 Traditional Electronic Battery Charger User Manual

1. INTRODUCTION

This manual provides comprehensive instructions for the safe and efficient use of your Deca 300300 Matic 116 traditional electronic battery charger. Please read all instructions carefully before operating the device to ensure proper function and to prevent damage or injury. Keep this manual for future reference.

2. SAFETY INFORMATION

Always observe the following safety precautions when using the battery charger:

- **Electrical Safety:** Ensure the charger is connected to a grounded outlet. Do not operate the charger with damaged cords or plugs. Avoid contact with water or wet surfaces.
- **Explosive Gases:** Batteries can produce explosive gases during charging. Ensure adequate ventilation in the charging area. Avoid open flames, sparks, and smoking near the battery.
- **Eye and Skin Protection:** Wear appropriate eye protection (safety glasses) and protective clothing when working with batteries. Battery acid is corrosive.
- **Children and Unauthorized Personnel:** Keep the charger and battery out of reach of children. Do not allow untrained individuals to operate the charger.
- **Battery Compatibility:** Only charge 12V lead-acid batteries (wet, AGM, gel) within the specified capacity range (5 Ah to 90 Ah). Do not attempt to charge non-rechargeable batteries or batteries with different voltages.
- **Ventilation:** Ensure the charger itself has adequate ventilation during operation to prevent overheating.
- **Disconnecting:** Always disconnect the AC power from the charger before disconnecting the battery clamps.

3. PRODUCT OVERVIEW

The Deca 300300 Matic 116 is a traditional electronic battery charger designed for 12V lead-acid automotive batteries. It features electronic control for charging current, automatic charge termination, and an automatic reset function. The charger is supplied with clamp connectors for easy attachment to battery terminals.

3.1. Charger Components



Figure 1: Front view of the Deca 300300 Matic 116 Battery Charger. This image shows the black, rectangular electronic battery charger with an integrated handle on top. The front panel features a prominent yellow and red label displaying 'MATIC 116', 'ELECTRONIC BATTERY CHARGER', '12V', 'min 5Ah', 'MAX 90Ah', and the 'deca' logo. To the left of the label are three LED indicators: a red LED (top) for error/reverse polarity, a yellow LED (middle) indicating charging ('CHARGE'), and a green LED (bottom) indicating charge complete ('OK'). Icons representing car and van batteries are also visible on the label.

The front panel includes indicator lights to show the charging status:

- **Red LED:** Indicates an error, such as reverse polarity connection or a faulty battery.
- **Yellow LED (CHARGE):** Illuminates when the battery is actively charging.
- **Green LED (OK):** Illuminates when the battery is fully charged and the charging process has terminated.

4. SETUP

Follow these steps to set up your Deca 300300 Matic 116 charger:

1. **Preparation:** Ensure the battery is clean and free of corrosion on its terminals. If charging a wet lead-acid battery, check the electrolyte level and top up with distilled water if necessary, following the battery manufacturer's instructions.
2. **Ventilation:** Place the battery and charger in a well-ventilated area.
3. **Connect Clamps:**
 - Connect the **red (+) clamp** to the **positive (+) terminal** of the battery.
 - Connect the **black (-) clamp** to the **negative (-) terminal** of the battery.

Important: Ensure correct polarity. Reverse polarity will trigger the red error LED.

4. **Connect to Power:** Plug the charger's power cord (CEE 7/16 Europlug) into a standard 230V AC, 50/60 Hz grounded electrical outlet.

5. OPERATING INSTRUCTIONS

Once the charger is set up and connected, it will automatically begin the charging process:

1. **Initiate Charging:** After connecting to the battery and power, the charger will automatically detect the battery and start charging. The yellow 'CHARGE' LED will illuminate.
2. **Monitor Charging:** Allow the charger to operate until the green 'OK' LED illuminates. This indicates that the battery is fully charged and the charger has automatically terminated the charging process.
3. **Charge Termination:** The electronic control system ensures that the battery is not overcharged. Once the 'OK' LED is lit, the charger maintains the battery at an optimal level.
4. **Disconnecting:**
 - First, unplug the charger from the AC power outlet.
 - Next, disconnect the black (-) clamp from the battery's negative terminal.
 - Finally, disconnect the red (+) clamp from the battery's positive terminal.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your charger:

- **Cleaning:** Disconnect the charger from both AC power and the battery before cleaning. Wipe the exterior of the charger with a dry or slightly damp cloth. Do not use harsh chemicals or solvents.
- **Cable and Clamp Inspection:** Periodically inspect the power cord, charging cables, and clamps for any signs of damage, fraying, or corrosion. Replace damaged components immediately.
- **Storage:** Store the charger in a cool, dry place when not in use. Keep it away from direct sunlight, moisture, and extreme temperatures.

7. TROUBLESHOOTING

If you encounter issues with your Deca 300300 Matic 116 charger, refer to the following table:

Problem	Possible Cause	Solution
Charger not turning on / No LEDs lit	No AC power; Faulty power outlet; Damaged power cord.	Check power connection; Test outlet with another device; Inspect power cord for damage.
Red LED is lit	Reverse polarity connection; Short circuit; Faulty battery.	Disconnect and re-connect clamps ensuring correct polarity (+ to +, - to -); Check for short circuits; Have battery tested by a professional.
Yellow 'CHARGE' LED does not light up	Battery already fully charged; Poor connection to battery terminals; Battery voltage too low or too high for charger.	Check if green 'OK' LED is lit; Clean battery terminals and re-connect clamps securely; Ensure battery is 12V and within 5-90 Ah capacity.
Battery not charging or charging slowly	Poor connection; Battery sulfation; Battery capacity too large for charger.	Ensure secure connections; Battery may be beyond recovery; Verify battery capacity is within 90 Ah maximum.

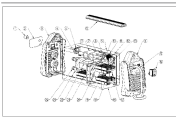

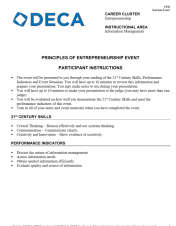
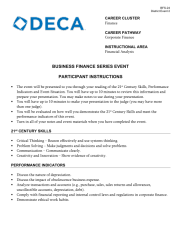
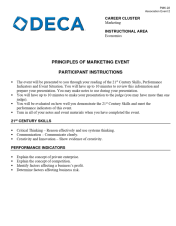

8. SPECIFICATIONS

Key technical specifications for the Deca 300300 Matic 116 charger:

- **Brand:** Deca
- **Model Number:** 300300
- **Power Supply:** 1ph - 230 V - 50/60 Hz
- **Input Voltage:** 230 Volts (AC)
- **Battery Voltage:** 12 V
- **Average Charging Current:** 4 A
- **Compatible Battery Types:** Lead-acid (wet, AGM, gel)
- **Battery Capacity Range:** 5 Ah (minimum) to 90 Ah (maximum)
- **Plug Type:** CEE 7/16 Europlug
- **Manufacturer:** Deca S.P.A.

9. WARRANTY AND SUPPORT

Information regarding specific warranty terms for the Deca 300300 Matic 116 is not available in this manual. For warranty claims, technical support, or spare parts inquiries, please contact your retailer or the manufacturer directly. Information on spare parts availability and software updates is not provided.

	<p>DECA SIL 417 1X230V-50/60HZ W/ACC. Parts List and Diagram</p> <p>Detailed parts list and electrical schematic for the DECA SIL 417 1X230V-50/60HZ W/ACC. electrical unit. Includes exploded view description, component references, and manufacturer information.</p>
	<p>DECA Integrated Marketing Campaign Events: Official Guidelines and Evaluation Criteria</p> <p>Comprehensive guide detailing DECA's Integrated Marketing Campaign (IMC) events, including Event (IMCE), Product (IMCP), and Service (IMCS) categories. Covers competition structure, written entry requirements, presentation rules, judging standards, and key skills developed.</p>
	<p>DECA Principles of Entrepreneurship Event: Participant & Judge Guide</p> <p>Official guide for the DECA Principles of Entrepreneurship Event, covering participant instructions, event situation, judge roles, and evaluation criteria for the Information Management instructional area.</p>
	<p>DECA Business Finance Series 2024: District Event 2 - Financial Analysis Role-Play Guide</p> <p>Participant and judge instructions for the DECA Business Finance Series 2024 District Event 2, focusing on a financial analysis role-play scenario involving COUNTY COURIER's building depreciation and reclassification. Includes performance indicators, 21st-century skills, and evaluation criteria.</p>
	<p>DECA Principles of Marketing Event: Participant and Judge Guidelines</p> <p>Official guidelines for the DECA Principles of Marketing Association Event 2, covering participant instructions, event situation, judge roles, and evaluation criteria. Focuses on marketing principles, competition, and 21st-century skills.</p>
	<p>DECA CLASS Booster Series Battery Chargers and Quick Starters</p> <p>Overview of DECA CLASS Booster Series battery chargers and quick starters, including models 4500 and 5000. Features and technical specifications for lead-acid batteries.</p>