

Ultimate Speed ULGD A1 Set

Ultimate Speed ULGD A1 Car Battery Charger User Manual

Model: ULGD A1 Set | Brand: Ultimate Speed

1. INTRODUCTION

This manual provides comprehensive instructions for the safe and efficient use of your Ultimate Speed ULGD A1 12V/24V Car Battery Charger. This intelligent microprocessor-controlled device is designed for charging and maintaining 12V or 24V batteries with capacities ranging from 20 Ah to 300 Ah, suitable for cars, motorcycles, and trucks.

The kit includes the ULGD A1 charger and a connection cable for fixed battery mounting with cable lugs and a plug, ensuring optimal charge maintenance without sulfate formation.



Image 1: Front view of the Ultimate Speed ULGD A1 Car Battery Charger, showing the display and control buttons.

2. SAFETY INSTRUCTIONS

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

- Ensure the charger is used in a well-ventilated area.
- Do not expose the charger to rain or wet conditions.
- Disconnect the charger from the power supply before making or breaking connections to the battery.
- Avoid short-circuiting the charging cables.
- Wear eye protection and gloves when working with batteries.
- Keep out of reach of children.

- Do not charge frozen batteries.
- This charger is protected against reverse polarity, short circuits, and overloads. However, always ensure correct connection.

3. SETUP AND CONNECTION

Before connecting the charger, ensure the vehicle's ignition is off and all electrical consumers are switched off. Identify the positive (+) and negative (-) terminals on your battery.



Image 2: The Ultimate Speed ULGD A1 charger with its included cables, including battery clamps and the fixed mounting cable.

3.1 Connecting to the Battery

1. Connect the red (+) charging clamp to the positive (+) terminal of the battery.
2. Connect the black (-) charging clamp to the negative (-) terminal of the battery. For vehicles, it is often recommended to connect the negative clamp to the vehicle chassis away from the battery and fuel line.
3. Alternatively, use the included connection cable for fixed mounting on the battery. Connect the cable lugs to the battery terminals and then plug the charger into this fixed connection.

3.2 Connecting to Power Supply

1. Once the charger is securely connected to the battery, plug the charger's power cord into a standard 220-240 V ~ 50-60 Hz electrical outlet.
2. The charger will power on, and the LCD display will illuminate.

4. OPERATING INSTRUCTIONS

The Ultimate Speed ULGD A1 features intelligent microprocessor control for fully automatic charging.

4.1 Selecting a Charging Program

- The charger offers 8 selectable charging programs to optimize charging for different battery types and conditions.
- Use the "MODE" button on the charger to cycle through the available programs. The LCD display will show the selected program, voltage value, and charge status.
- The charger automatically detects whether a 12V or 24V battery is connected.
- **Standard Charging:** For typical charging of 12V or 24V batteries.
- **Pulse Charge:** This program is designed for revitalizing deeply discharged batteries. It can be used for 12V batteries with an existing voltage of > 2V.
- **Winter Charging Mode:** Activates for low ambient temperatures (for both 12V and 24V batteries) to ensure efficient charging in cold conditions.
- **Power Supply Programs:** Two dedicated programs are available to provide power during battery changes, preventing loss of vehicle settings.

4.2 Charging Process

Once a program is selected, the charger will automatically begin the charging process. The LCD display will provide real-time information on the charging progress.

The charger is designed for long-term connection, providing optimal charge maintenance without sulfate formation, which extends battery life.

4.3 Disconnecting the Charger

1. Unplug the charger from the electrical outlet first.
2. Disconnect the black (-) charging clamp from the negative (-) battery terminal or vehicle chassis.
3. Disconnect the red (+) charging clamp from the positive (+) battery terminal.
4. If using the fixed mounting cable, simply unplug the charger from the fixed connection.

5. MAINTENANCE AND STORAGE

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

- **Cleaning:** Disconnect the charger from all power sources and batteries before cleaning. Wipe the exterior with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.
- **Storage:** Store the charger in a cool, dry place, away from direct sunlight and extreme temperatures. Ensure cables are neatly coiled and not kinked.
- **Inspection:** Periodically inspect the charging cables and clamps for any signs of damage, wear, or corrosion. Do not use the charger if any part is damaged.

6. TROUBLESHOOTING

If you encounter issues with your Ultimate Speed ULGD A1 charger, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Charger does not turn on.	No power from outlet; loose connection; internal fault.	Check power outlet with another device. Ensure power cord is fully plugged in. Verify battery connections.

Problem	Possible Cause	Solution
Charger not charging.	Incorrect program selected; battery too deeply discharged (below 2V for 12V); reverse polarity; short circuit; overload.	Select appropriate charging program. For very low voltage batteries, ensure it's above 2V for 12V batteries. Check for correct polarity. Inspect cables for short circuits. Allow charger to cool if overloaded.
LCD display shows error.	Specific error condition (e.g., reverse polarity, short circuit).	Refer to the charger's display for specific error codes or indicators. Disconnect and reconnect ensuring correct procedure. The charger has built-in protection against reverse polarity, short circuits, and overloads.
Charger gets warm during operation.	Normal operation; high charging current.	This is normal. Ensure adequate ventilation around the charger. If it becomes excessively hot, disconnect and allow to cool.

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

7. TECHNICAL SPECIFICATIONS

Feature	Specification
Model Number	ULGD A1 Set
Operating Voltage	220-240 V ~ 50-60 Hz
Charging Current (12V)	Max. 10 A
Charging Current (24V)	Max. 5 A
Battery Capacity Range	20 Ah - 300 Ah
Ambient Temperature	-20 °C to +50 °C
Material	Plastic
Dimensions (L x W x H)	Approx. 22.2 x 10.4 x 5.8 cm
Weight	Approx. 805 g
Cable Length (Power)	Approx. 2.20 m
Cable Length (Charging)	Approx. 1.80 m





8. WARRANTY AND SUPPORT

The Ultimate Speed ULGD A1 Car Battery Charger typically comes with a **3-year warranty**, as indicated on the product packaging. Please retain your proof of purchase for warranty claims.

For technical support, warranty claims, or further inquiries, please contact the manufacturer or your point of purchase. Detailed contact information can usually be found on the product packaging or the manufacturer's official website.

Please note that software updates and spare parts availability information is not explicitly provided in the product data.

Related Documents

	<p>Ultimate Speed ULGD 5.0 A1 Car Battery Charger - User Manual and Instructions</p> <p>Comprehensive user manual for the Ultimate Speed ULGD 5.0 A1 car battery charger. Learn about its features, safety instructions, operation, maintenance, and warranty.</p>
	<p>Ultimate Speed ULGD 5.0 E4 Car & Motorcycle Battery Charger Manual</p> <p>Comprehensive operating and safety instructions for the Ultimate Speed ULGD 5.0 E4 car and motorcycle battery charger. Learn about intended use, equipment, technical specifications, charging characteristics, and important safety precautions.</p>
	<p>Ultimate Speed ULGD 5.0 C1 Car & Motorcycle Battery Charger Manual</p> <p>Comprehensive operating and safety instructions for the Ultimate Speed ULGD 5.0 C1 car and motorcycle battery charger. Learn about intended use, package contents, equipment, technical specifications, charging characteristics, and safety precautions.</p>
	<p>Ultimate Speed ULGD 5.0 E4 Car & Motorcycle Battery Charger Manual</p> <p>User manual and safety instructions for the Ultimate Speed ULGD 5.0 E4 car and motorcycle battery charger. Learn about intended use, scope of delivery, technical specifications, charging characteristics, and safety precautions.</p>