



UNO CHARGER MANUAL

1. Overview

UNO series smart battery charger can be used only while the vehicle is parked and turned off. Onboard solar and like charging systems must be disconnected while charging, Power supply spec of 10A or 16A AC must be used. For safe operation one must satisfy the requirements for temperature resistance and anti vibration .

2. Functions

- 1) Up to 95% efficient
- 2) Robust battery protection
- 3) Wide working temperature range
- 4) Extended life cycle durability
- 5) Automotive vibration tolerance

3. Protection features

- 1) Output over voltage protection
- 2) Output over current protection
- 3) Output short-circuit protection
- 4) Output polarity protection
- 5) Charger over temperature protection
- 6) Battery over temperature protection

4. Installation attention items

- 1) Charger has smart temperature regulation
- 2) Ensure charger air ventilation area is not blocked. Blocking charger fan and cooling area may cause charger to overheat.
- 3) Keep charger clean from excess dust and Debra as to not influence its ability to dissipate heat.
- 4) Charger position should be out of direct contact with water.
- 5) Consult your local electrician or power company for any questions regarding your supply voltage and current capabilities.
- 6) For safety the charger power cord is to be used with a grounded outlet.
- 7) If an extension cord is used make sure that it meets charger supply specifications

- 8) Makes sure connection to battery is capable of charger output
- 9) Charger should be mounted vertically on a flat surface with 10cm of space around all sides to ensure proper cooling
- 10) If battery is damaged do not charge and disconnect charger immediately
- 11) Do not dismantle or disassemble charger. This may result in a dangerous electric shock
- 12) Avoid damaging wiring. If wires are damaged in any way stop using charger

5. Indicator States

- 1) Red indicator flashes every second - Battery is < 80%
- 2) Yellow indicator flashes every second - Battery is > 80%
- 3) Green indicator flashes every second - Battery is 100%
- 4) Green indicator is solid on - Battery is fully charged

Fault Indication

- 1) Red indicator flashes every three seconds - Battery is abnormal, Disconnect
- 2) Yellow indicator flashes every three seconds - Power input is abnormal, Disconnect
- 3) Green indicator flashes every three seconds - Charger is abnormal, Disconnect

Common Faults and Solutions

1. Input power is abnormal - Check input line and outlet to make sure it meets charger spec.
2. Abnormal chargers - Charger may have overheated. Unplug and access installation
3. Battery abnormal - Battery short, Battery V to low

7. Working Environment and Input Characteristics

Working Temperature	-40C - +60C
Storage Temperature	-40C - +90C
Relative Humidity	5% - 95%
Heat Dissipation Method	Forced Air
Input Voltage	AC 90V - 264V ±20%
Input Frequency	45Hz-65Hz

Company has final explanation right on changes to this document regardless of prior notice.