

# User Manual

Of

Smart Charger (6 A) for 51.8V ( 14 cells )  
Li-Ion Battery Pack (110V, Standard Female  
Plug)



AA Portable Power Corp (<http://www.batteryspace.com>)

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## WARNING

### Wiring precautions

If failure or error of this instrument could result in a critical accident of the system, install an external protection circuit to prevent such an accident.

In order to prevent instrument damage or failure, protect the power line and the input/output lines from high currents by using fuses with appropriate ratings.

#### **Power supply**

In order to prevent instrument damage or failure, supply power of the specified rating.

In order to prevent electric shock or instrument failure, do not turn on the power supply until all of the wiring is completed.

#### **Never use the instrument near inflammable gases**

In order to prevent fire, explosion or instrument damage, never use this instrument at a location where inflammable or explosive gases or vapour exist.

#### **Never touch the inside of the instrument**

In order to prevent electric shock or burns, never touch the inside of the instrument. Only authorized service engineers can touch the inside of the instrument to check the circuit or to replace parts. High voltage and high temperature sections inside the instrument are extremely dangerous.

#### **Never modify instrument**

In order to prevent accident or instrument failure, never modify the instrument.

#### **Maintenance**

In order to prevent electric shock, burns or instrument failure, only authorized service engineers may replace parts. In order to use this instrument continuously and safely, conduct periodic maintenance. Some parts used in this instrument have a limited service life and may deteriorate over time.

## Introduction

AA Portable Power Corp (<http://www.batteryspace.com>) specialized in the research & Development of the intelligence battery charger in the long terms.

The series battery charger is based on MCU technology, with pulse charging mode, the charging voltage has temperature compensation automatically. It could be used in the various electric cars the field of tourism, railway, mine, post and telecommunication .

## Main Feature

- INPUT
  - AC input voltage 90 to 130 VAC , single phase
  - Input frequency 47 to 63 Hz
  - Efficiency 72%(min)at rating power, 115Vac 60Hz
- OUTPUT
  - CCCV charging mode
  - Cut-off voltage: 58.2VDC
  - 6 A current Max.
  - Charge terminal: 14AWG wire [Standard female Tamiya plug.](#)
    - ◆ Do not detach [Standard female Tamiya plug](#) from charger
  - **Included** one pcs connector adaptor, convert from Standard Male Tamiya plug to alligator Clip
    - ◆ Must plug Standard Male Tamiya end to the Standard Female Tamiya plug of the charger with correct polarity.
    - ◆ Must plug Clip end to the connector of the battery pack with correct polarity
      - Red Clip = Positives
      - Black Clip = Negative
    - ◆ Warning: Wrong polarity will damage the charger, and Batteryspace.com are not responsible for the damage or losses caused by misusing
- CHARGE
  - The Battery range is between 6AH to 60AH
  - Reverse Polarity Protection
  - Short Circuit Protection
  - No trigger voltage requirement
- Built in cooling fan to ensure charger long service life
- **Included** 1 pcs replacement 5A 250V fuse
- Dimension (LxWxH): 210mm(8.3")x 174mm(6.9") x 76mm(3.0")
- Weight: 4.9lb (2222 grams)

## How to use

1. Turn on: Make sure the pack voltage is suitable for charger. Then connect to the pack with correct polarity.
2. Check the voltage of the AC input is suitable for the input voltage of the charger or not.
- 3 The charger start ramp charging after auto-testing in 1 minute
4. Indicating LED signification
5. Power indicating and battery test LED:
  - Green LED = Fully charged / Correct Polarity Connection
  - Red LED = Charging / Wrong polarity Connection
  - Orange LED = 90% fully charged.
6. Turn off: After Battery is fully charged, must disconnect the AC power supply before disconnect battery

## Operation environment

- ◆ Above the sea-level  $\leq 2000\text{m}$ .
- ◆ Ambient temperature  $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$
- ◆ Ambient humidity  $5\% \sim 70\% \text{RH}$
- ◆ Storage temperature  $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$
- ◆ Without conductive dust
- ◆ Without explosive dust
- ◆ Without corrosive gas and steam damaged to metal and isolator
- ◆ keep away from rain and snow
- ◆ Mounting slop  $\leq 5$  degree

## Maintenance and service

- ◆ The charger must be set at ventilated, dry and dust-less place to prevent the reduction of the performance of the charger.
- ◆ For technical support, please contact us via [sales@batteryspace.com](mailto:sales@batteryspace.com).