

# User manual for D2S charger

## Specifications

Input : AC 100-240V 50/60Hz 30W  
DC 12V 500mA

Output:  $4.35V \pm 1\%$  /  $4.2V \pm 1\%$  /  $3.7V \pm 1\%$  /  $1.48V \pm 1\%$  1.0A(max)

Compatible with:

Li-ion/IMR/LiFePO4:

10340, 10350, 10440, 10500, 12340, 12500, 12650, 13450, 13500, 13650, 14350, 14430, 14500, 14650, 16500, 16340(RCR123), 16650, 17350, 17500, 17650, 17670, 18350, 18490, 18500, 18650, 18700, 20700, 21700, 22500, 22650, 25500, 26500, 26650

Ni-MH(NiCd): AA,AAA,AAAA,C,D

## Features

- Capable of charging two batteries simultaneously
- Each battery slot controls and charges independently
- Up to 1A charging speed in a single slot
- Battery type and charging current can be set manually
- Automatic selection of constant current, constant voltage, dV/ dt charging mode to charge the battery
- Automatic Identification of Lithium Ion Battery and Ni-H / Ni-CD Rechargeable Battery
- With an LCD display, the battery type and charging information can be displayed
- Comes with Bluetooth module, can connect to the phone to view battery type, charging information and set battery charging voltage and charging current
- Automatically detects battery power status and displays charging progress
- Reverse polarity protection and short circuit prevention
- Li-ion battery restoration
- Overtime charging protection

## Operating Instructions

**Connect to power source:** connect the SC2 to an external power source (wall outlet, car adapter. etc.) via its power cord. The screen will display the last two Bluetooth ID of the charger.

**Insert batteries:** The SC2 features two independently controlled charging slots. Insert batteries of supported types into each slot according to the polarity marks on the slot.

**Smart charging:** The SC2 can choose charging currents based on intelligent detection about battery types and capacities. Manual charging current selection is also available. The SC2 is compatible with:

- 3.7V Li-ion rechargeable batteries
- 3.8V Li-ion rechargeable batteries
- 1.2V Ni-MH/Ni-Cd rechargeable batteries
- 3.2V LiFePO4 batteries

When the battery is installed, the charger will automatically display the battery type and charging information and enter the charging state.

**Alarm fault:** If the battery failure or short circuit is not rechargeable, the screen displays "EE EE".

**charging current :** The default charging current of this charger is 1A when charging a single battery and 500mA when charging two batteries at the same time.

## **Key function description:**

### **Charging mode:**

**Short press SLOT key:** when charging normally, short press SLOT key to switch channel display;

**Long press SLOT key:** when charging normally, long press SLOT key to query the last two Bluetooth ID of the charger; when there is IMR battery in overdischarge state, long press SLOT key can enter activation mode.

**Short press MODE key:** when charging normally, short press mode key to switch display battery charging current and the amount of electric charge has been charged .

**Long press MODE key:** when charging normally, long press MODE key can enter setting mode;

### **setting mode:**

**Short press SLOT key:** After entering setting mode, short press SLOT key can set charging current and Lithium-ion battery charging voltage (4.3V/4.2V/3.7V).

**Short press MODE key:** after entering setting mode, short press MODE key can switch charging voltage setting option, charging current setting option or next channel setting option.

**long press mode key:** after entering setting mode, long press mode key can exit setting mode.

## **Description:**

### **setting mode:**

While charging, long press MODE to enter setup mode, set battery charging voltage and charging current, long press mode to exit setting mode (if no key operation within 8 seconds, automatically exit setting mode).

### **Charging current setting:**

After entering the setting mode, press the MODE key to switch to the charging current setting option, and set the charging current according to the SLOT; the charging current setting range is 200 mA-1000 mA.

When only one battery is charged, the default charging current is 1000mA, and the default charging current is 500mA when the two batteries are charged at the same time.

### **Charging voltage setting:**

After entering the setting mode, the MODE key can be pressed to switch to the charging voltage setting option, and then the charging voltage can be set by SLOT, and the charging voltage of Lithium-ion battery can be set to 4.3V/4.2V/3.7V。

### **Detect battery internal resistance function:**

After the battery is put on, the internal resistance of the battery will be automatically detected and displayed.

### **Calculate the battery charge capacity function:**

In the charging process, the system will automatically calculate the charged capacity of the battery and display it in real time;

### **Charging time-out protection function:**

The charger will independently calculate the battery charging time for each slot, and when the charging time exceeds 10 hours, the charger will force the charging output of the tank to be turned off, and the full electric mark will be displayed. And the heating explosion phenomenon caused by the battery quality problem is effectively prevented.

#### **Lithium-ion battery repair function:**

When the IMR battery is overplaced to 0 volts, the unchargeable battery will be displayed by placing the charger, and the SLOT key can be pressed directly to enter the repair mode at the same time, and the system will automatically identify the battery that needs to be repaired. If you can't recharge after many repairs, it is recommended to replace the problematic battery.

#### **Short-circuit and back-up protection of the battery:**

The corresponding slot displays the "EE EE" when the battery is charged back or shorted.

#### **LCD display function:**

The self-contained LCD display can display the battery type, charging mode, real-time voltage, real-time current, charged capacity, and battery internal resistance.

#### **Support for mobile phone interconnection:**

The charger has built-in Bluetooth module, which can be connected with mobile phone through Bluetooth. Mobile phone can query battery type, charging mode, real-time voltage, real-time current, charged capacity, battery internal resistance and charging curve, as well as mobile phone set charging voltage and charging current.

#### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

#### **FCC Warning**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.