

**ARE -C2<sup>+</sup> Four Channels Smart Battery Charger** 

port

Pic 2

### **Main Features**

Compatible with the following battery types:
1) 10440, 14500, 16340, 18650, 26650 Li-ion
2) AAA, AA, C Ni-MH/Ni-Cd

Pic 1

- Support AC100-240V/50-60Hz or DC12-24V
- LCD screen for charging display
- LCD screen for battery display
- Short-circuit protection, overcurrent protection, overvoltage protection and reverse polarity protection
- Micro-computer chip controlled; digitally regulated charging to extend battery lifetime

#### **Specification Parameters**

- Supports AC100-240V/50-60Hz or DC12-24V, from external power source
- Rated output power: 6W (Ni-MH/ Ni-Cd), 16.8W (Li-ion)
- To charge the batteries, the details are as follows:
   4.2V/1.0A: 18650, 26650, 16340, 14500, 10440 (Li-ion)
   1.5V/1.0A: AA, AAA, C (Ni-MH/ Ni-Cd)
- Size: 145mm x 104mm x 38.5mm (Length x Width x Height)
- Weight: 276.5 grams (excluding charging cable)
- Operating temperature: -20°C to 50°C
- Operating humidity 5% to 90%
- Storage temperature: -20°C to 85°C

### **Safety Specification**

Compliant Standards: UL, PSE, FCC, CE, RoHS, WEEE.

### How to use

### 1. Battery Insertion

Keep the battery polarity markings in conformity with the charger markings.

\* Only charge the allowed batteries, and never charge non-rechargeable batteries.

## 2. Battery Charging and Indication

- "∞-form" port is the AC charging port, and round one is the DC charging port.(Pic 1)
- Connect to the power supply; LCD display screen will turn on. Insert the battery. The LCD screen will display the charging status and battery level.

The battery level will be displayed on the LCD screen through battery status bar, then start charging. If there is no power connected, the battery level can't be detected and displayed, even with battery inserted.

Battery level will be displayed by the battery status bar:

One flashing, four off: less than 20%

One bar constantly on, one flashing: 20% - 40%

Two bars constantly on, one flashing: 40% - 60%

Three bars constantly on, one flashing: 60%- 80%

Four bars constantly on, one flashing: more than 80%

Five bars constantly on: fully charged

- While charging, the corresponding channel will display voltage and the battery type, Li-ion or Ni-MH/Ni-Cd.
- The rated charging current of the four channels is 1A per channel. Will be less than 1A while charging.
- Four independent channels can be used separately. Therefore, it is normal for the batteries to continue charging if you exchange the fully-charged batteries position.
- Note: 1. There will be no trickle charging if Li-ion batteries are fully charged to prevent overcharging.
  - 2. There will be trickle charging of 3-5mA of Ni-MH/Ni-Cd batteries to ensure they are fully charged.

# 3. LCD Screen Display

1) The LCD screen will display for 2 seconds after connecting to the power supply (Pic 2). If there is compatible battery in the channel, the LCD screen will display charging state. If not, 2 seconds later, the LCD screen will only display the battery symbol, and then the screen will go out after 30 seconds. Single click the channel button A, B, C or D, the screen will be lit up.

2) The four channels are separately controlled by the four buttons. The battery type and battery voltage will be displayed after battery insertion. Single click the button, the screen will cycle through battery voltage $\rightarrow$ charging current $\rightarrow$ charging time. Long press any button to turn off the LCD screen. Single click the button will turn on the LCD screen again, then the battery voltage will be displayed.

# 4. Short-circuit Protection

If short circuit is detected, charging will autostop.

### 5. Reverse Polarity Protection

If the battery is inserted the wrong way around, charging will not begin and the screen will display Err until batteries are inserted correctly.

## 6. Over-charging Protection

When fully charged, the charging current on the LCD screen will be displayed 0.

Notice: It is normal for the battery temperature to be below  $55^{\circ}$ C during charging. Due to the high charging current, the battery may heat, so please be careful of scalding.

### Attention

- 1. Only intended for rechargeable Li-ion batteries, Ni-MH and Ni-Cd batteries. Other types of batteries may cause battery breach, leakage or explosion, and even cause damage to people and property.
- 2. Use the battery charger in normal working condition and cut off the power completely after usage.
- 3. Insert the battery properly.
- 4. Do not dismantle or modify the charger or use it for any other purpose.
- 5. Keep the charger out of reach of children. Children should use the battery charger only under adult supervision.

Guarantee Period: 12 months.