UP-S4AC INSTRUCTION MANUAL

4 CHANNEL SMART AC/DC BATTERY CHARGER

Introduction

Thank you for purchasing the Ultra Power UP-S4AC for precision charging of 1-2S LiPo/LiHV batteries, 2-6S NiMH /NiCd batteries. Although simple and easy to use, please take a moment to completely familiarize yourself with the features and operation of this product by reading this instruction manual completely.

The UP-S4AC features intelligent circuitry with four independent but identical channels, which can deliver 7W per channel. The charger is designed to accurately charge up to 4pcs 1-2SLiPo/LiHV batteries, 2-6S NiMH/NiCd batteries simultaneously. The charging current can be adjusted from 0.1-1.0Amps, the battery type,cell voltage, charging current and battery capacity can be displayed on the LCD display screen.

Specification

Input Voltage: AC 100-240V / DC 7.0-17.0V

Charge Power: Max.7Wx4

Charge current: (0.1-1.0A)X4

Battery Type: LiPo/LiHV/NiMH/NiCd

Battery Cell count: LiPo/LiHV(1-2 cell) NiMH/NiCd(2-6 cell)

Indication: LCD display screen +LED light

Support Battery Port: SM/XH/Micro/MX/ JST/mCPX

Dimensions: 125X78X42mm

Net Weight: 220g

Features

1. Four independent ports can be used simultaneously.
2. Six different battery connectors for each port.
3. Support LiPo/LiHV(1-2 cell) ,NiMH/NiCd(2-6 cell) batteries.
4. LCD,LED and audible sound indicate charging status.
5. Adjustable charge current from 0.1A-1.0A each port.
6. Selectable input power: AC input or DC input.
7. Maximum protection:Battery reverse voltage protection, battery over-voltage protection,and DC input voltage reverse polarity protection.

Charge Procedures

1. Power on

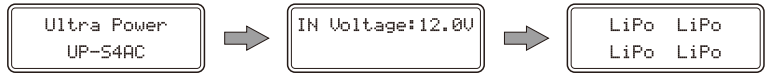
DC input way:

The DC input voltage should be within DC 7.0V-17.0V,the user can connect to a DC Power Supply or connect to a 2-4S LiPO/LiHV battery to support the power to the device.

AC input way:

The AC input voltage range is from AC 100V-240V,the user can connect the device with power cord to AC wall socket (100-240V) directly.

Once powered on, the UP-S4AC will display the device logo & type, then show the DC input voltage. Along with four LED indicators change from red color to green color, and then the charger will go into standby interface.



2. Set the charge current

In the standby page, press “SELECT” button, it will go into the default current page, the default current is 0.5A. You can press the “SETTING” button to adjust the current you want from 0.1A-1.0A, then long press the “SETTING” button to save the current, it will appear the page of “Save Setting……”, now the data is successfully saved. The device will go back to standby page once the setting is ok.

3. Set the battery type

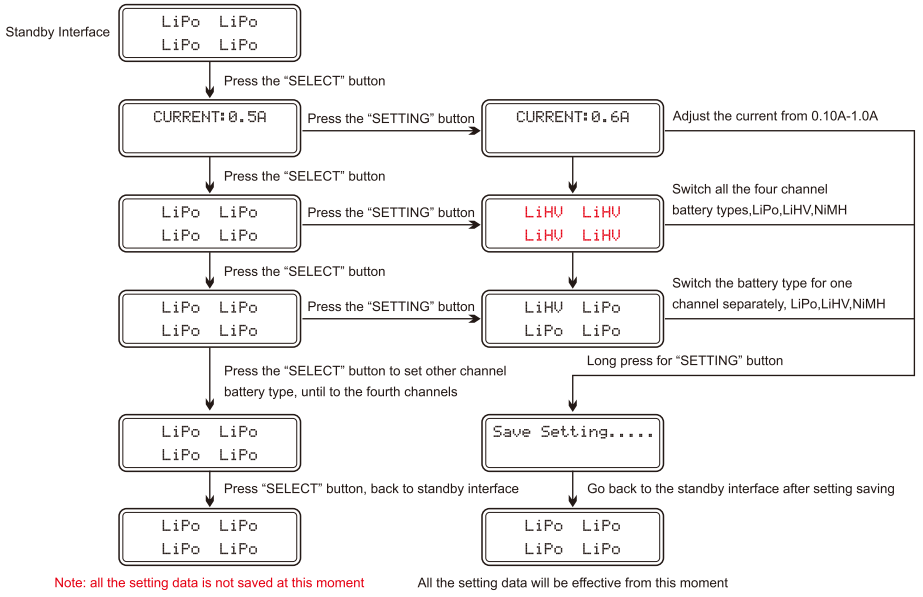
After choosing the appropriate current, press the “SELECT” button, it will enter into the battery type page, the default battery is LiPo battery.

a. If you want to switch all four batteries types , just press the “SETTING” button, all the four battery type can be chosen from LiPo, LiHV, NiMH, after setting, long press”SETTING” button, the selected battery type will be saved.

b. If you just want to switch some batteries types, please enter “SELECT” button, the first channel battery type figure will flash, press “SETTING”, then it can be chosen from LiPo,LiHV, NiMH. Press “SELECT” button to set the next channel, the same setting way with the first channel. After setting, long press “SETTING”button to save the selected type, it will appear the page of “Save Setting……”, now the battery types are successfully saved.

4. Operation flow chart

Note: The red data can be modified when in the menu screen shown.

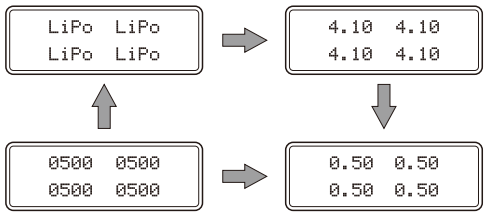


5. Connect to the battery，charging process

Please connect the battery to the right battery connector, the charger will automatically charge the batteries.

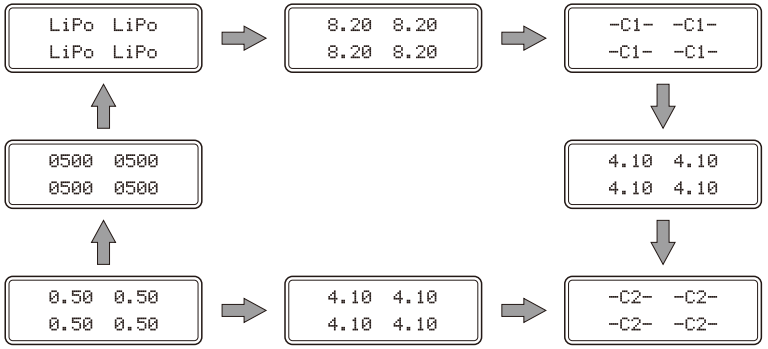
During the charging process, the LED indicators will flash in red color and the LCD screen will display relevant charging data, for different battery, different display interface.

(1) Charging 1S LiPo/LiHV battery



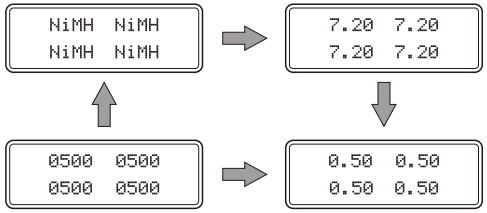
battery type -battery voltage -charging current- battery capacity of each port circularly.

(2) Charging 2S LiPo/LiHV battery



battery type -total voltage -1st cell voltage--2nd cell voltage-charging current- battery capacity of each port circularly.

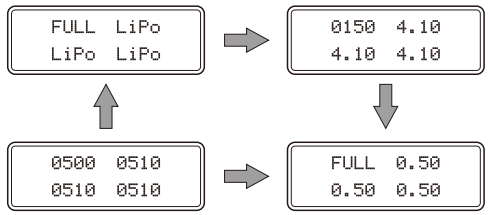
(3) Charging NiMH/NiCd battery (Note: the NiCd charging interface is the same as NiMH)



battery type -battery voltage -charging current- battery capacity of each port circularly.

Above display interface are for charging one battery type in a time, when you charge different battery types(LiPo/LiHV/NiMH/NiCd) simultaneously, the display data of each channel will be consistent with the above corresponding battery type.

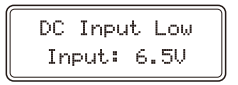
Once one battery completed charging, the LED indicator will stay in green color and the LCD screen will display: FULL-battery capacity, as below picture.



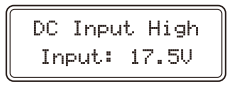
Multiple Protection Function

1. Low/High voltage protection

   When the DC input voltage lower than 7.0V,the device will stop charging and appear the error message ” DC Input Low”. When use the battery as the power source, please remove the battery as soon as possible.



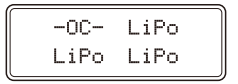
   When the DC input voltage higher than 17.0V, the device will stop charging and appear the error message” DC Input High”, at this situation, please change the input power source quickly, the continuous high voltage may burn the charger.



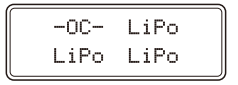
2. Battery reverse polarity protection: The device can check the battery polarity of each channel , the wrong polarity battery connected can not be charged.

3. Over-voltage protection: when the cell voltage higher 100mV than the Saturation voltage it is, the charger will stop charging and appear the error message.

   If channel 1 LiPo voltage is 4.30V, the device will appear below error message, and for this moment, the charger will stop charging for this channel, so that the battery can be protected from overcharging.



4. Over-current protection: when the charging current over 1.20A, the charger will stop charging and appear the error message like channel 1, as below.



Warning Information

Never attempt to connect two or more batteries in one channel, it can be only allowed to insert one battery into one channel, otherwise, it will cause charger broken.

Warranty and Service

We guarantee this product to be free of manufacturing and assembly defects for a period of one year from the time of purchase. The warranty only applies to material or operational defects, which are present at the time of purchase. During that period, we will repair or replace free of service charge for products deemed defective due to those causes. You will be required to produce proof of purchase (invoice or receipt). This warranty is not valid for any damage or subsequent damage arising as a result of misuse, modification or as a result of failure to observe the procedures outlined in this manual.

ULTRA POWER TECHNOLOGY LIMITED

Add: 6/F, Building D, Hui Qing Science and Technology Park, Guanguang Road, Guanlan, Longhua District, Shenzhen518110, China

www.ultrapower.hk +86-755-23283358 info@ultrapower.hk