

# UP-S6 INSTRUCTION MANUAL

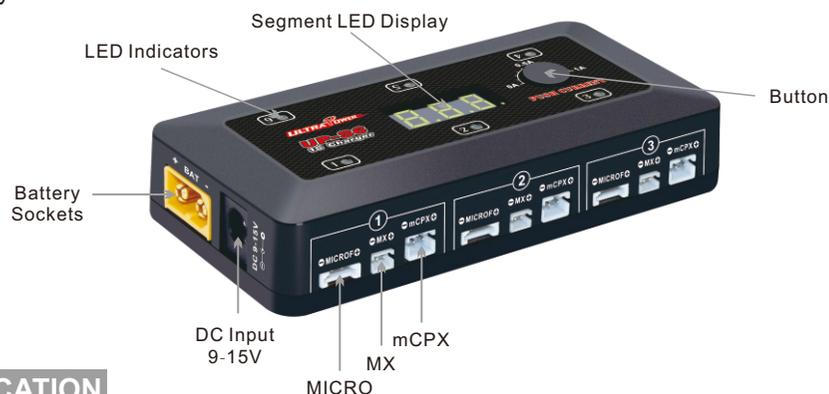
## LIPO/LIHV SMART CHARGER FOR 1S BATTERY



### INTRODUCTION

Thank you for your purchase of the Ultra Power UP-S6 for precision charging of 1S lithium 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-S6 features intelligent circuitry with six independent but identical channels delivering 4.35W per channel. The charger is designed to accurately charge up to six single cell LiPo and LiHV batteries simultaneously. Once the battery lead is connected to the proper output port, the charge current can be adjusted from 0.1-1.0 Amps, as well as a fully-powered 5V, 2.1A USB output for charging phones, tablets, or other devices. Important information is displayed via the digital LED display.



### SPECIFICATION

DC input voltage	9.0V-15.0V
Charge power	Max. 4.35W x6, ±10%
Charge current	(0.1-1.0A) x6, ±10%
Battery type	LiPo/LiHV
Battery cell count	1cell
Indication	LED light
Support battery port	Micro, MX, mCPX
Support USB charge port	5V/2.1A
Net weight	70g
Dimension	100x50x22mm



### FEATURES

- Six independent charging ports can be used simultaneously
- Three different battery connectors for each port
- LED and audible sound charge status indicators
- Adjustable charge current from 0.1-1.0A per channel
- Powered USB port for charging phones, tablets, and other devices
- Extensive safety features include: Battery reverse voltage protection, battery overcharge voltage protection, and DC input voltage reverse polarity protection.

### CHARGE PROCEDURES (Connections and Diagnostics):

1. Connect a 12V DC Power Supply, 3S or 4S LiPo battery, or AC 12V adapter to the charger using the appropriate input plug or receptacle.
2. Once powered up, the UP-S6 will go through a self-test cycle. All six channel indicator lamps will illuminate and the LED will illuminate with "888" on the display.
3. As the cycle progresses, all indicator lamps will change from red to green color and the LED will display the input voltage.
4. Next, each channel will check itself individually. This will be visually confirmed by each channel indicator lighting one by one in sequence from channel one through channel six. When all checks are successfully completed, the indicator lights will extinguish.
5. Next, the LED will display the charge current setting for each channel, this is your indication that the UP-S6 is ready for use.
6. Users can change the charge current values prior to connecting a battery to the charger. Please refer to the section titled "Charge Settings" for further details and instructions.
7. Once settings are completed, 1S batteries can be connected to the UP-S6. Once connected, batteries begin charging automatically, indicated by a flashing red LED. Frequency of the LED flash indicates the type of battery being charged (LiHV=fast flash, LiPo=normal flash).
8. During the charge process, the display will show the battery chemistry type and the voltage of the battery connected to each channel.
9. Once a battery is fully charged, the respective channel indicator lamp will change from red to green and glow solid (no flash).



## CHARGER SETTING

The UP-S6 allows independent settings for charge current as well as battery chemistry. “Short-press” the button to change the charge current and “long-press” the button for changing battery chemistry (LiPo or LiHV).

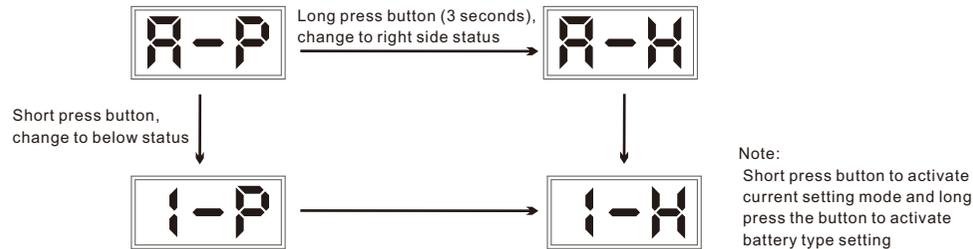
NOTE: Both settings can be changed while the battery is charging.

## SETTING THE CHARGE CURRENT

The UP-S6 allows for the charge current to be set from 0.1A-1.0A as indicated in the picture below. Please note that the value will apply to all six channels. Short-press the button to change the charge current at the desired amperage.



## BATTERY TYPE (Chemistry) SETTING



1. The UP-S6 allows charging of both LiPo and LiHV batteries. Long-press the button to activate the display as shown in the illustration.
2. The LED will display default setting “A-P” which confirms that the battery chemistry selecting mode has been activated.
3. The first letter (position “A”) represents which channel is being set. The indicator may read A, 1, 2, 3, 4, 5, or 6, whereas A=all channels and individual numbers correspond to the respective channel.
4. The second letter (position “P”) represents battery type and will toggle between “P” and “H”, with “P” meaning LiPo and “H” indicating LiHV.
5. Short press the button to toggle between channels and long press the button to select the chemistry.

If you wish to change specific channels one by one, short press the button to choose the appropriate channel. The last letter of the LED display will indicate the charge current setting for the chosen channel. You must long-press the button to change the battery chemistry (if desired). After setting one channel, you may short-press the button to advance to the next channel.

If you wish to change settings for all six channels at once, simply short press the button and select “A” for all channels, then long-press the button to select the appropriate chemistry.

After all settings are complete, wait for 3 seconds and 2 beeps which indicate that the settings have been confirmed in the UP-S6 memory. The UP-S6 defaults to the last chosen settings when powered up the next time.

## ERROR MESSAGES

For “input voltage too low”, the LED will display an E-1 message. For “input voltage too high” an E-2 will be displayed by the LED.

E-1	input voltage too low
E-2	input voltage too high

Other errors corresponding to specific channels are indicated by a flashing channel indicator lamp and a blank LED screen.

## SAFETY PROTECTION

Input voltage too low protection	If DC input with battery and cell voltage lower than 3.3V, UP-S6 will stop charging and make reminder warning.
Polarity protection	If the battery connected with wrong polarity, UP-S6 can not start charging.
Over voltage protection	if detect the battery over voltage, UP-S6 will stop charging and keep flashing.

## WARNING

1. Never attempt to connect 2 or more batteries in one channel, it can be only allowed to insert one battery into one channel, otherwise, it will cause charger broken.
2. Never attempt to connect both DC jack and battery socket simultaneously, otherwise, it will cause battery burned.

## 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, For any repair or replace service, please contact your dealer in the first instance, who is responsible for processing guarantee claims. 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: 4/F, Building C, Ai Li Ji Industry Park, Juling old Village, Da Shui Keng, Guanlan,

Longhua District, Shenzhen518110, China

Tel: +86-755-23283358 Fax: +86-755-29183296

Email: info@ultrapower.hk Web: www.ultrapower.hk

