



Operating Instructions

CHARGERY 320B v1.1

Microprocessor controlled high performance rapid charger/balancer for LiPo battery packs with cell balancer.

Charge current up to 2A, 26W, for 2-3 LiPo cells



Chargery Power Co., Ltd.

Head Office

Add: Room 20B, Haihui building, Nanhai Avenue, NanShan, ShenZhen, China

Zip code: 518054

Tel: +86 755 2643 6165

Fax: +86 755 2641 2865

Email: Jasonwang3a@163.com

Web: www.chargery.com

Welcome to the CHARGER CY-320B intelligent balance charger designed especially for 2 to 3 LiPo cells. Please read the instructions carefully before using the charger.

Special Features

■ Built-in balancer for LiPo and LiFe cells

The CY-320B has a built-in individual cell balancer. LiPo batteries are automatically balanced during charging ensuring that when the battery is fully charged it is also properly balanced.

■ High power and high performance circuit

CY-320B employs the high efficiency circuit. As a result it can charge 3 series of lipo batteries with maximal current of 2.0A. and the case is only 75*44*18.

■ Input power monitor

To protect the car battery using as input power from being damaged the input voltage always monitored. If it drops the 10.0V the charging process will be ended automatically.

■ At the same time, when you use the AC adaptor or transformer as input power, if the input voltage is more than 18V the charging process will be terminated to protect the CY-320B from being damaged.

■ Reverse polarity and short circuit protection(input and output)

■ Over charge and Over current protection

■ Light and attractive AL alloy case

■ 3 LEDs display each cell in balancing

■ 1 LED indicate the charging status, RED for charging, Green for full charged.

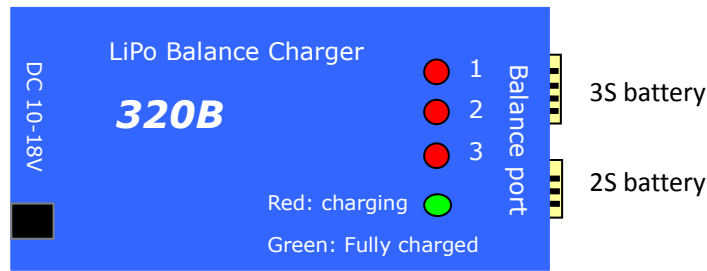
Specifications

- Applied battery type: LiPo battery
- LiPo battery count: 2~3 cells
- Input voltage: DC 10-18V, 3.0A
- Charge current: **2A**
- Balancing current: 200mA
- Balance precision: 10mV
- Dimensions: 75*44*18mm
- Weight: 70g

Operating instructions

1. Connect the DC power or AC Adapter (12V, up to 3.0A) to the CY-320B. The charging LED will on for 1 second and then OFF.
2. Connect the 2S or 3S battery pack to the CY-320B, Charging LED should be **RED**, the charger start to charge.
3. If the battery pack is un-balanced, the corresponding LED will flash, the charger is balancing the battery pack.
4. When the charging LED is GREEN, and all balance LEDs are off, the battery pack is fully charged and balanced.

While charging, the built-in balancer will monitor the voltage of each cell of the battery pack and control the charging current feeding to each cell to balance the voltage.



Warning and error message

- During charge, any cell voltage is lower than 2.7V/cell, CY-320B will charge at 100mA, the charging indicator blinks and the beeper sounds.
- When any cell voltage is between 2.7-4.2V, the charge will charge at 2.0A (Constant Current mode).
- When any cell voltage reaches 4.2V, the charger will charge at Constant Voltage mode.
- LED indicator
 - Charge LED on and then off: the charge ready to charge
 - Charge LED: **RED**, charging.
 - Charge LED: **Green**, fully charged
 - Charge LED: **RED** flash, Short circuit or Reversely Polarity Connection on input and output.
 - Balancing LED: Flash, the battery is unbalanced.
- When the battery connected to the charger, if the charge LED flash **RED**, please check the battery polarity and the battery voltage. If the battery is over discharged, the charge will not work and the **RED** led flash.

Safety information

- Never leave the charger unattended when it is connected to its power supply. If any malfunction is observed immediately terminated charging and refer to the operation instructions.
- Keep away the unit from dust, damp, rain, heat direct sunshine and vibration. Do not drop it.
- The charger and the battery to be charged should be set up on a head-resistant, non-inflammable and non-conductive surface. Never place them on a car seat, carpet or similar.
- Keep all the inflammable volatile materials well away from operating area.
- Do not connect more than one battery pack to the charger at any time.
- Do not attempt to charge the following types of battery:
 - Lead acid battery or VRLA
 - NIMH/NICd battery pack.
 - Any other types of battery except for li-ion and lithium polymer battery.
 - Battery pack, which consists of different types of cell (including different manufacturers).
 - Non-rechargeable batteries (Explosion hazard).

- Faulty or damaged battery.

Those warnings and safety notes are particularly important. Please follow the instructions for a maximum safety; otherwise the charger and the battery can be damaged violently. And also it can cause a fire to injure a human body or to lose the property.

Warranty and Service

Chargery Power Co., Ltd. as manufacture of R/C model power warrants its CHARGER charger and battery pack to be free of defects in material and workmanship. This warranty is effective for 18 months from date of purchase. If within the warranty period the customer is not satisfied with the products performance resulting from a manufacturing defect the accessory will be replaced or repaired. This warranty does not cover the damage due to wear, overloading, incompetent handling or using of incorrect accessories.



Connection diagram

