

Lithium Polymer Balance Charger NR-BLIC-03 (Mains supply)

NR-BLIC-03 is a smart Balance Charger which works on directly mains supply from 110V AC to 240V ac, 50-60Hz. from the NEX Robotics. It can charge 2 cell and 3 cell lithium polymer battery packs. It can charge NR-BLiPo-3-500, NR-BLiPo-2-500, NR-BLiPo-2-1300, NR-BLiPo-3-1300, NR-BLiPo-3-1800 and NR-BLiPo-3-2650 and any other Lithium Polymer Batteries from NEX Robotics unless specified.

In multi-celled Lithium Polymer battery pack, it is possible for the individual cells to develop differences in there charge levels. Since Lithium Polymer batteries are very sensitive to overcharging, it is important that cells inside the battery pack should be kept at the equal levels when charging. NR-BLIC-03 balance charger form the NEX Robotics does this by monitoring individual cell voltages of the battery pack and it adjusts the rate of charge to the individual battery to do balance charging.

Please note that Lithium Polymer batteries can catch fire or explode if not charged or handled correctly. So take necessary precautions while charging the battery.



Specifications

- Power: 110V AC to 240V AC, 50-60Hz
- Charge method: Balance Charging
- Batteries Supported: Lithium Polymer, 2 cell and 3 cell battery packs
 - NR-BLiPo-2-500 (3 Cell, 11.1V, 500mAh, Charging time: 1Hour. 20 Mins.)
 - NR-BLiPo-3-500 (3 Cell, 11.1V, 500mAh, Charging time: 1Hour. 20 Mins.)
 - NR-BLiPo-2-1300 (2 Cell, 7.4V, 1300mAh, Charging time: 2Hours)
 - NR-BLiPo-3-1300 (3 Cell, 11.1V, 1300mAh, Charging time: 2Hours)
 - NR-BLiPo-3-1800 (3 Cell, 11.1V, 1800mAh, Charging time: 2Hours. 50 Mins.)
 - NR-BLiPo-3-2650 (3 Cell, 11.1V, 2650mAh, Charging time: 3Hour. 40 Mins.)
 - Any other battery on the NEX Robotics website with mentioned support.
- Maximum Charge current: 650mA
- Connectors for battery charging: 4 pin for 3cell and 3 pin for 2 cell battery packs
- Power input: 12V to 15V DC
- Indicators: One LED per cell
- Dimensions: 75mm x 50mm x 25mm
- Accessories: Mains wire

Battery Charging Status Indication

NR-BLIC-03 battery charger has 3 LEDs. Each LED indicates status of single battery.

Condition	LED Status
Power On	Orange (For 1 Second)
Stand By	Green
Charging	Red
Battery Full	Green
Fault	Red Flashing

Table 1: Battery charge status indication LEDs

Instructions for Use:

Connect Battery charger to the mains supply. All the 3 LEDs of the charger will be orange for 1 second and afterwards will become green. Now connect 2 cell or 3 cell lithium polymer battery in its corresponding socket. For battery charge status indication refer to table 1.

Two cell and three cell battery packs from the NEX Robotics has different types of connectors. These batteries will go only in the correct type of connector of the Battery Charger.

Important:

Never ever allow battery to discharge below 3.1V per cell i.e. 6.2V for 2 cell battery packs or 9.3V for 3cell battery packs. After this critical value battery voltage falls very rapidly. Battery charger will not charge any deep discharged battery pack and it will indicate fault condition. This is done for the safety reasons.

Caution:

Battery charger can only charge Lithium polymer battery
Never leave charger unattended when it is connected to the power socket.

Warning:

- Do not charge 2 cell and 3 cell batteries at the same time.
- Charge batteries which can handle 650mA charging current.
- If battery is hot or slightly warm allow it to cool down completely before charging.
- Do not open battery packs and modify them. Modified packs will not have matched impedance, which can lead to dangerous situations.
- Always charge batteries in open space of at least 10feet x 10feet on the concrete floor.
- Do not charge battery near flammable liquids.
- While charging put batteries away from children.