

METCO

3. Operating Manual attachment Specification of Smart Li-ion Charger

Description (Model RL03-20YO Charger)

RL03-20YO is a smart charger specially designed for Li-ion battery packs composed of 3 cells in series.

Electrical Specifications:

1. Input: 100~240VAC, 50/60 Hz, Output: 12.6V 2A DC.
2. Charger output : The charger is preset by factory for charging 3 cells Li-ion battery pack. Its charging mode:
 - (1) Constant current (CC) mode: at beginning of charging, an 2.0A_{dc} (I_{ave}) constant charging current to charge the pack until the pack voltage reaches to 12.6V±0.1V.
 - (2) Constant Voltage (CV) mode: the output will keep 12.6V±0.1V constant through the end of charging.
 - (3) In addition, the charger also terminates the charging process when
◇ the pack temperature Temp(max) > 40°C
3. LED Signals :
 - (1) One “ Power” LED (RED) : it will light up whenever the power is applied.
 - (2) One “ Status “ LED (dual color – RED/ GREEN) :
 - ◇ Quick charge: “Status “ LED turns “ RED “
 - ◇ Charge complete:” Status “ LED turns “ GREEN “
 - ◇ It flashes “ GREEN “ means the battery’s temperature is higher than 40°C

Mechanical Specification

1. Dimension : 120*60*35 mm.
2. Weight : 230g approx.
3. The charger is designed to use together with the battery pack built in the 10KΩ (resistor data measured on 25 °C) Thermistor °
4. Charger output cable:4-pin Connector GTC M8-4P, Pin (1) for “-”, Pin (2) for “NC” ,Pin (3) For “+”,and pin (4) for “T”, Cable length: 910±50 mm °
5. AC socket : Standard 3-p oblong
6. AC cable : Option

Operation procedures:

1. Plugs the AC input plug into the charger input socket, and then plug the AC plug into the AC power outlet. The LED indicator will turn flashing red as the charger passes the power on test.
2. Connect the Li-ion battery to the charger output cable. The LED indicator will turn to constant red, and the charging starts. If the LED is still flashing red, please check the battery connection, and repeat the step.
3. The “Status” indicator will stay RED until battery pack is fully charged and when complete the “Status “indicator will turn “GREEN “.
4. In order to maintain a proper “Abnormal Stopping” function of the charger, it is recommended to reset the timer of the charger’s microprocessor by unplug-replug the AC power when a new set of battery is going to be charged.
5. In case of problems, please check battery and connects, then repeat above steps. If problem persist, please contact the METCO for assistance.

Check before Proceeding:

1. Make sure battery pack is compatible with RL03 before connecting to battery pack.
2. The 3wires and the 4-pin connector of the output cable are pre-set at the factory. Do not swap their connections which may cause serious hazards.
3. RL03 charger is designed for use only with Li-ion battery packs that are built-in the 10KΩ Thermistor and is not recommended for use with other battery packs.
4. RL03 is designed for use only in temperatures of 40degree C.
5. RL03 is a precise tool and should be kept away from high power EMI radiating devices.
6. If RL03 is removed from power source you must wait 15 seconds for charger to reset before charger is reconnected and charging can continue.
7. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
8. WARNING: Against recharging non-rechargeable batteries”