Smart Universal Battery Pack Charger: 8.4V - 9.6V
(Item No. 01026)

User Manual

Detailed Description

- It is a Smart Charger for Ni-MH battery packs 8.4V-9.6V (7- 8 cells).
- Rating input voltage is 100～240VAC 50/60Hz.
- Rating input current is 0.2Amp.
- Input power should not over 11W.
- Please use the charger for battery packs which have a capacity 1100-1600mAh.
- Rating output voltage is 8.4V/9.6V VDC, output voltage range is 7VDC～12VDC.
- Charge current is 600±60mA, Trickle current is 200±20mA.
- The max output power is 7.3W.
- The charger has the function of short-circuit and reverse polarity protection.
- When charging, the temperature of battery should not be over 60°C.
- Able to auto distinguish bad battery and indicate malfunction.
- Able to activate over-discharged cells.
- Current ramp-up way benefits cell capacity and life cycle.
- Unique test mode guarantees high quality.
- Cell voltage should under 1.56V/cell, while the maximal -△V Value is 5 mv/cell.
- The charger also should be operated at certain environment condition, such as when at full load & natural convection, operating temp. is -10～30°C (UL Certification), operating humidity is less than 90 %RH with a non-condensing condition, and please store at the temperature of -30～85°C, while the humidity less than 95 %RH with a non-condensing condition.

There are five stages of the charging process as shown follows:

1. Wake up stage. When the voltage of the cell is lower than 1.0V±0.1V, the charger will use pre-charge current to charge the battery.
2. Current ramp up stage. When the voltage reach to 1.0V±0.1V, charging current will ramp up from wake up current, and at the end of this stage, the current will be set to fast charge value by the MCU.
3. Constant current stage. Charge battery with fast charge current, until the condition of -△V (5mv/cell max) voltage occurred, constant current stage ends.
4. Trickle charging stage. The charger will use supplementary current to charge the battery.
5. After the trickle charging stage, the red charging light goes out and the green-light turns on. If the battery has been detected full-charged, the charger will use pulsed current to charge the battery to balance the loss of battery self-discharge.

WARNING

This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capacities, 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.

Operation Instruction:

1. Connect battery pack to output connector and plug AC power source.
2. Make sure battery polarity is connected correctly (Red wire is positive).
3. After being connected correctly to the battery pack, the red LED will be on, shows that it is charging.
4. After battery is fully charged, LED will be green and it shows the battery is fully charged.

Cautions:

1. Please don't use the charger for low capacity (under 600mAh), high capacity (over 2000mAh) or unrechargable battery packs.
2. Strongly suggest use recommended batteries by Tenergy like Tenergy brand high drain rate battery pack. We are not responsible for any damage caused by charging other brand battery using this charger.
3. Pay attention to battery surface temperature. Stop charging when it feels very hot.
4. Keep an eye on the battery pack when charge current is high. Do not charge for a long time with such big current.
5. The unit charge for Ni-MH battery packs only.