

## CH-UN2420

(Manufacture part# H02400015-US-D1)

### User Manual

#### Warning

1. Please read the following instruction carefully to make sure you understand this charger before use.
2. Improper using of this charger will cause batteries badly damaged and other damage.
3. Subject to change without prior notice, please check our website: [BatterySpace.com](http://BatterySpace.com) for the latest information.



Alligator clip connector adapter



70C Temperature sensor

### ACCESSORIES

1. Product description:

**CH-UN2420** is an universal fast smart charger. It is designed for NiMH / NiCd batteries.

2. Features:

- 2.1. The charger can cut-off power automatically by negative delta V IC when battery pack is fully charge.
- 2.2. Worldwide input AC power from 100-240VAC, 50-60Hz, USA AC plug.
- 2.3. Built in IC to cut off power automatically when battery is fully charge.
- 2.4. Intelligent charger designed for any 19.2V-24V (16 -20 cells) NiMH / NiCd Battery pack **with capacity >= 1.5Ah**
- 2.5. Protection: Short Circuit / reverse polarity / over-current
- 2.6. Smart LED Displays: It can tell you if the battery is fully charged.

3. Operations:

- 3.1. Make sure your AC supply source is 100-240V and the battery pack **match with description 2.4**
- 3.2. Connect the charger to the AC outlet.. LED **Flashing Red** → **Solid green** → LED Off
- 3.3. Connect charger to battery
  - For battery which have temperature sensor terminal, Connect battery's temperature sensor terminal (BEC female connector) to charger's BEC male connector ( See picture 3.5.1 & 3.5.2)
  - For battery which does not have temperature sensor terminal I, MUST connect temperature sensor to charger's BEC male connector and locate Thermistor end into battery pack's heat shrink tube ( See picture 3.6.1 & 3.6.2)
  - LED **Solid red** indicates charging
  - LED **Solid green** indicates " Fully Charged" / "temperature sensor

detected"

3.4. Troubleshooting:

- If battery pack is still not fully charged after LED charger turns **Solid green**. You may reset charger by unplug AC charger cord and charge battery pack again.
- No LED - Charging circuit is open (possible cause - thermistor open). Once thermistor reset (cool down). charging resume (**RED** on)

3.5 Charging picture1: How to charge battery pack which come with a temperature sensor terminal by not using the included temperature sensor connector accessories

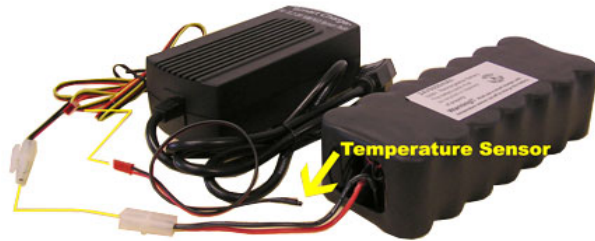


Picture: 3.5.1



Picture: 3.5.2

- 3.6 Charging picture 2: How to charge battery pack which does not come with a temperature sensor terminal by included temperature sensor connector accessories



Picture: 3.6.1



Picture: 3.6.2

4. Technical Specification:

Rating Input power: 100-240 VAC 50/60Hz Auto-switching

Output Voltage: 19.2-24VDC Auto detecting

Output Current: 1.5A, Constant Current

Operating temperature: 0°C ~ 40°C

Safety protection: Short Circuit / reverse polarity / over-current

Dimension (LxWxH): 147mm(5.8")x 69mm(2.7")x51mm(2.0")

Weight: 15 OZ. (426 grams)

Notice:

- 4.1. Only charge NiMH / NiCd battery pack with capacity > 1500 mAh. Don't use the charger for lower capacity NiMH / NiCd battery pack.
- 4.2. Only charge NiMH / NiCd battery pack with voltage 19.2V-24V (16 -20 cells). Don't use the charger for lower or above voltage battery pack which may cause battery to explode.
- 4.3. Don't remove the case to prevent from electric shock
- 4.4. Unplug the charge from AC outlet while not use.
- 4.5. Always place the charger in well-ventilated , dry environment and indoor use only
- 4.6. The charger's temperature sensor connector (**BEC male connector**) must be attached firmly to battery pack. **If you don't connect the temperature sensor to battery pack, we are NOT liable for over charging the pack and damage the pack.**
- 4.7. If you have any question, please email [sales@batteryspace.com](mailto:sales@batteryspace.com) or call 510-525-2328