

Instruction Manual for Hitec CG-340 DC Field Charger

Congratulations on your purchase of the CG-340 field charger. This simple to use charger will peak charge most popular Nicad and Nickel Metal Hydride battery packs. The CG-340 is an advanced charger design capable of charging batteries of high capacity and voltage. Please read through and understand the operation of the CG-340 before attempting to use it.

CG-340 Capabilities and Specifications;

- Peak charges Nicad and Nickel Metal Hydride hobby batteries
- 12 Volt D/C, minimum 4amp input power source required
- Features the exclusive Hitec "No False Peak" circuitry
- Shuts down automatically after 120 minutes
- Wide input voltage range (9-13.9 Volts)
- Automatic Nicad trickle charge
- User adjustable charging rates
- Handy built-in wire holder
- MOS-FET drive control
- Delta Peak cutoff

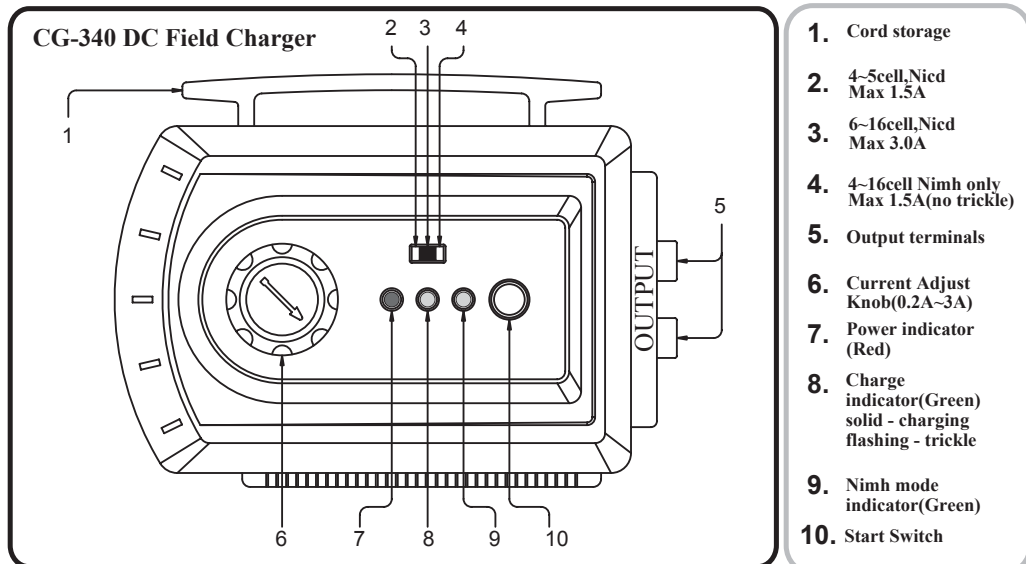
Pack Size and Charge Rates

There are three options to select from,

- 4-16 cell NiMh pack charge rate selectable from 0.2 through 1.5amps
- 6-10 cell Nicad pack charge rate selectable from 0.2 through 3.0amps
- 13-14 cell Nicad pack charge rate selectable from 0.2 through 2.3amps

- 4-5 cell Nicad pack charge rate selectable from 0.2 through 1.5amps
- 11-12 cell Nicad pack charge rate selectable from 0.2 through 2.7amps
- 15-16 cell Nicad pack charge rate selectable from 0.2 through 2.0amps

This is easily 95% of all battery packs used by today's modelers.



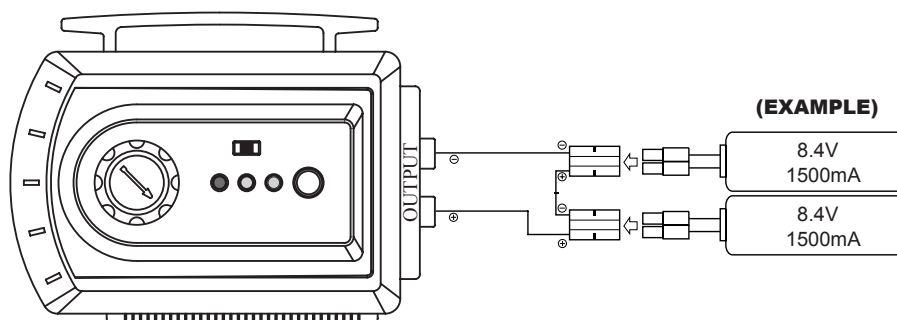
Cell Capacity Limitations

The CG-340 can charge the smallest 50ma cells up through larger motor battery cells of up to 3000ma. We do suggest for optimum performance of your high capacity 1200ma sub "c" and higher Nicad motor batteries, you use a charger capable of at least a 5amp charge rate.

In Series Charging

One of the CG-340's strong advantages is the ability to charge up to 16 cells at a time. While few modelers use such large packs, the real strength is to charge two or even three smaller packs in series at the same time.

Please use caution when charging more than one pack at a time in series. The cells must all be the same capacity and the packs must be at the same approximate voltage or "state of discharge" before the charging process begins.



Charge Rates Guidelines

There are basically two types of hobby batteries,

- Fast charge-Fast discharge. Most of these are optimized as electric motor batteries.
- Slower charge-Slow discharge. These are our transmitter and receiver batteries.

All batteries have a charge rate suggested by the manufacturer.

We suggest you follow their guidelines whenever possible.

Use the chart below as a guideline only, your results may vary.

The key issue is to not have the cells warm up to a temperature hotter than you can comfortably hold in your hand.

If the pack gets hot, your charge rate was too high.

Nicad charge recommendations for receiver, transmitter and small motor batteries

50ma	0.2amp
110ma	0.4amp
225-350ma	0.4-0.6amps
500-700ma	1amp
800-1100ma	1 - 1.5amps

Nicad charge rate recommendations for fast charge, fast discharge motor batteries

500-600ma	1.5 to 2.5amps
1200-3000ma	3amp

NiMh charge recommendations

110ma	0.2amp
270-350ma	0.5-0.7amp
500-1100ma	1-1.5amps
1650ma and larger	1.5amp

Using your CG-340

1. Connect it to a 12 Volt power source, the "Power On" LED will glow solid red.
2. Using the slide switch, select the type of pack you wish to charge.
3. Turn the rotary charge rate selector knob to the full counter clock-wise position.
4. Connect the battery to the charger.
5. To charge a NiMh pack, select the NiMh position on the slide switch. When this is done the LED will glow solid green.
6. Press the start button, the "Charging Status" LED will glow solid green indicating the charging process has started.
7. Use the rotary Charge Rate knob to select the appropriate charge rate for your battery pack.
8. When charging Nicads, the CG-340 will switch to a trickle charge mode after the battery peaks.
The "Charging Status" LED will flash green indicating the charging process is complete and the charger has gone into trickle charging mode. The battery is ready to use at this time.
9. While charging NiMh packs, the "Charging Status" LED will turn completely off when the charging cycle is complete.
When the green LED goes out, your pack is ready for use.

User Cautions

1. Never leave batteries on charge unattended.
2. Do not charge at too high a rate, if the battery gets so warm that you cannot comfortably hold in your hand, use a lower charge rate next time you charge.
3. Do not use a hot battery, let it cool to room temperature first.
4. Do not charge a hot battery, let it cool to room temperature first.
5. Do not adjust the "Charge Rate Adjustment" knob within the first 6 minutes in any charge cycle or the battery could "false peak".
6. If the charger is attached to the power source "backwards" (in reverse polarity), nothing will happen.
7. If the battery to be charged is attached to the charger "backwards" or in reverse polarity, the entire structure of the Universe as we know it will be substantially altered as time will then run backwards and it will be your fault.

The CG-340 can charge the smallest 50ma cells up through larger motor battery cells of up to 3000ma.

We do suggest for optimum performance of your high capacity 1200ma sub "c" and higher Nicad motor batteries you use a charger capable of at least a 5amp charge rate like the Hitec CG-330 and CG-335.

Warning

1. Charger can get very hot, up to 80C or 176F, at the lower right area when charging high amperage batteries.
2. Be careful not to charge fully charged batteries again.
The "no false peak" circuitry prevents the peak detection tripping mechanism for the first 6 minutes of charging.

CG-340 Field Charger Accessories

56375	Hitec Tx charge cord
57376	Hitec Rx charge cord
57377S	Pair of both Hitec Tx and Rx charge plugs
57377J	Pair of both Futaba Tx and Rx charge plugs
58307	Adapter to charge Prism, Flash and Eclipse Tx battery