



PARAGON N70



OPERATING INSTRUCTIONS

Please keep for future reference

Thank you for purchasing this Paragon N70 charger. We are sure you will be pleased with its performance and features. In order to ensure that you obtain the maximum benefit from its operation, please read the instructions carefully.

SPECIFICATIONS

Input Voltage	11 ~ 15V DC
Battery Type & Cells	4~7 Nickel Cadmium cells 4~7 Nickel Metal Hydride cells
Charge Rate (Fast)	1A, 2A & 4A User selectable
Charge Rate (Trickle)	0.1~0.2A (Pulsed)
Charge Termination	Delta Peak

FEATURES

- Short Circuit Protection
- Reverse Polarity Protection on both Input and Output
- Size: 110(W) x 60(L) x 23(H)mm
- Weight: 135g (inc. leads)

INPUT POWER

Connect the charger's red alligator clip to the positive (+) terminal on the power source and the black alligator clip to the negative (-) terminal. The orange power LED will glow.

If the leads are incorrectly connected with reverse polarity, the fuse will blow. Correct the polarity and replace the fuse with a **10A** automotive fuse, available from all car accessory shops.

BATTERY CONNECTIONS

Connect the supplied charge lead to the charger by clamping the bare ends of the lead into the output connectors, ensure correct polarity (+ = red, - = black).

OPERATION

- Connect the battery to be charged to the charge lead from the charger, the **GREEN** trickle charge LED will glow. If when the battery is connected all three LEDs glow, disconnect the battery immediately, as the battery has been connected in reverse. If the battery is left connected for any length of time the charger may suffer damage.

- Press the start button and hold down for 3 seconds, quick charge will commence and the **RED** fast charge LED will glow.
- When the battery is fully charged, the peak circuitry will terminate the fast charge, the **RED** LED will go out, whilst the **ORANGE** and **GREEN** LEDs will remain lit.

The battery should now be fully charged. This can be confirmed by touching the battery, it should be warm. If the battery is still at ambient temperature, the charge process can be repeated, this may be necessary for some older packs, or any that have not been charged for some time. An increase of temperature is a reliable indicator that the battery has accepted a full fast charge.

NOTE

Most receiver or transmitter packs should be charged at the 1A setting. The leads used on most of these packs are not capable of passing high currents without overheating and possibly melting.

When charging 4 cell battery packs, use only the 1 and 2A settings, not the 4A setting, as the charger itself may overheat when charging 4 cells at 4A.

SAFETY PRECAUTIONS

The Paragon N70 charger is designed to charge Nickel Cadmium (NiCad) and Nickel Metal Hydride (Ni-MH) battery packs of 4.8 to 8.4 volts (4~7 cells). **It is intended to charge batteries of between 300 and 3000 mAh capacity.**

The inbuilt Delta Peak Auto-Cut circuitry will automatically reduce the charge rate from that set, down to a 100~200mA pulsed trickle charge, when the battery is fully charged.

- Place the charger on a firm, level surface for charging.
- **DO NOT** cover charger.
- Take great care over battery polarity, and observe the battery manufacturer's recommendations.
- NiCad/NiMH cells become warm to the touch when charged. **If the pack feels HOT to the touch, disconnect it at once.**
- Connect the input leads to the 12v supply first, **THEN** connect the battery to be charged.
- **ALWAYS** disconnect the NiCad/Ni-MH battery when **NOT** charging, as they may discharge themselves if left connected.

- **DO NOT** allow the input crocodile clips to touch each other or the case of the charger when the NiCad/Ni-MH battery is connected as this may cause a short circuit.
- Avoid short circuits.
- If NiCad/Ni-MH packs are severely overcharged they may become very **HOT**. For this reason it is always best to place the pack on an insulated heat resistant surface for charging.
- The charger must **ONLY** be used in completely dry conditions.
- **DO NOT** disassemble the charger.
- **NEVER** leave the charger unattended whilst charging.
- **DO NOT** fast charge batteries immediately after use while they are still warm. Allow to cool to ambient temperature before charging.

FAILURE TO OPERATE

- Ensure that both the supply and charge leads are firmly connected.
- Check that the fuse has not blown.

www.LogicRC.com

Logic RC Limited
14 Hartham Lane
Hertford
SG14 1QN
United Kingdom