

# Delta Base and Delta S Charger Information

# Warnings:

- Do not charge battery types other than Nickel Cadmium (NiCd) and Nickel Metal Hydride (NiMH) rechargeable batteries - damage may occur if other types of batteries are charged
- Do not attempt to charge batteries at excessive fast charge currents
- Do not leave the charger unattended whilst charging
- Disconnect the battery and remove input power from the charger immediately if the charger becomes hot and allow the charger to cool down before reconnecting
- Do not allow water, moisture or foreign objects into the charger
- Do not place the battery or charger on or near a flammable surface whilst in use and keep away from carpets, cluttered workbenches etc.
- Do not cover the ventilation holes in the Delta 3 as this could cause the charger to overheat
- · Always disconnect the charger from the power source when not in use

# Operating Instructions:

Before commencing charging always double check the settings on the charger to ensure it is set correctly for the battery pack to be charged. Using the wrong settings is likely to result in damage to the battery pack being charged.

It is recommended that an absolute maximum charge rate of 2 x the capacity of the battery being charged is used, unless the cell manufacturer specifies otherwise. For example: A 500mAh capacity battery pack should be charged at an absolute maximum of 1 Amp, whilst a 2.5Ah battery pack should be charged at an absolute maximum of 5 Amps.

Never charge at a rate higher than that recommended by the cell manufacturer as this can be very dangerous.

Monitor the temperature of the battery being charged every few minutes. If the battery becomes hot to the touch, disconnect it from the charger immediately and allow to cool. Do not recommence charging until the battery and charger have been checked for compatibility, and the charger settings have been confirmed as being correct.

## OPERATING INSTRUCTIONS FOR DELTA BASE AND DELTA 3 FAST CHARGERS

Thank you for purchasing a Pro-Peak Delta Fast Charger. You've chosen one of the best, affordable, peak-detection, fast chargers available to modellers today. Please read through these Operating Instructions to familiarise yourself with your new Pro-Peak Delta Fast Charger.

These Operating Instructions cover the following Pro-Peak Delta Base and Delta 3 Fast Chargers: O-IP1501, O-IP1501/EUR, O-IP1506 and O-IP1506/EUR. Specifications, features and usage are the same for all variations unless otherwise noted.

### **SPECIFICATIONS AND FEATURES**

- Input Voltage: 110v~240v AC or 12v~14.4v DC (AC/DC Models Only)
- Output Voltage: 4.8v~9.6v (4 Cell~8 Cell) Ni-Cd or Ni-MH
- Utput Current: 0.5/1.0/2.5A Delta Base or 2.0/3.5/5.0A Delta 3
- Operating Temperature: 0~40 Degrees Celcius / 32~104 Degrees Fahrenheit
- Universal Short Circuit Protection
- AC/DC Inputs (Depending on Model)
- Cooling Fan (Delta 3 Model Only)
- Automatic Cell Type and Count Selection
- Auto-Adjusted Input Voltage 110v~240v

- User-Switchable 0.5/1.0/2.5A Charge Rates (Delta Base)
- User-Switchable 2.0/3.5/5.0A Charge Rates (Delta 3)
- Fast or Trickle Charge 4~8 Ni-Cd or Ni-MH Battery Packs
- Negative Delta (-D) Peak Fast Charge Termination
- Auto Trickle Charge Following Fast Charge
- LED Charge Indicators
- Includes Wiring Harness for Transmitter, Receiver and JST Connectors
- 12v DC Input Leads with Crocodile Clips

#### **SAFETY WARNINGS**

- If using the included wiring harness, you can use only one charge lead at a time. Uponot allow children to use the charger without adult supervision. Never attempt to charge multiple battery packs at one time.
- This charger is designed to charge 4.8v~9.6v Ni-Cd or Ni-MH battery packs ONLY. Never attempt to charge any other type of battery, such as gel cell, lead-acid, Lithium or Alkaline batteries
- Never connect the AC power and the DC power input lead at the same time and never allow the DC crocodile clips to touch or short out.
- When the charger is connected to a car battery (12v DC power source) do not start the car's engine. The engine can be running during the charging process, but starting or turning off the engine during the charging process can damage the charger and/or
- Never use the charger inside your car. Always use the charger, even when connected to your car's battery, outside of your car
- Never allow the charger to become wet. Do not use the charger if it becomes wet or otherwise exposed to water or other liquids.

- Never leave the charger connected to a power source when not in use.
- Never leave the charger unattended when the charger is in use.
- Never place the charger on a carpeted surface during use.
- Always disconnect the battery pack from the charger if the battery pack becomes unusually warm or hot.
- Avoid using the charger in direct sunlight. Direct sunlight can cause the charger to
- Always check the battery pack's polarity & condition before connecting it to the charger.
- If using the charger to charge a transmitter battery pack, you must remove the battery pack from the transmitter first. Do not attempt to charge the battery pack while still in the transmitter.
- Always allow the battery pack to cool before recharging it.

#### **USING YOUR DELTA FAST CHARGER**

IMPORTANT If charging from a 12v DC power source (such as a car battery), the charger will charge only 4~7 cells. To charge up to 8 cells, the charger must be connected to a 14.4v power source (such as a dedicated power supply). An 8 cell battery pack peaks at more than 12 volts, therefore, if the input voltage is less than 12 volts, the battery pack will never peak

1) If charging from an AC power source, plug the AC input connector into your AC power source. If charging from a DC power source, first plug the DC input adapter lead into the matching socket in the end of the charger, then attach the two crocodile clips to your DC power source. Attach the red (+) crocodile clip to the positive (+) terminal on your DC power source, then attach the black (-) crocodile clip to the negative (-) terminal on your DC power source. Once connected to a power source, the LED will blink RED once, then go out.

WARNING Never connect the charger to an AC power source and a DC power source at the same time. Use only one power source at a time.

2) Select a charge rate using the charge rate selection switch on the side of the charger (Delta Base) or on the end of the charger (Delta 3). Use the guide below to determine the appropriate charge rate.

harness, first plug the wiring harness into the charger output lead, then plug your battery into the desired wiring harness lead. The battery begins charging as soon as it's plugged into the charger output lead. When the battery is charging, the LED will glow RED. IMPORTANT If the connector on your battery is different from the connector on

3) Plug your battery into the charger output lead. If you are using the included wiring

the charger output lead, you will need to change the connector on the output lead. If you do, double-check that the polarity is correct when you install your new connector.

- 4) When the battery pack is charging, the LED will glow RED. When the charging process is completed, the LED will glow GREEN, indicating that the battery pack is fully charged and the charger is in Trickle Charge Mode.
- 5) When the charging process ends (LED glows GREEN), unplug your battery pack from the charger, then unplug the charger from your power source.

We recommend choosing a charge rate for Ni-MH battery packs that is close to the battery packs' rated mAh capacity (e.g., charge a 2000mAh Ni-MH battery pack at no more than 2 amps). For Ni-Cd battery packs, we recommend choosing a charge rate that is 1~3 times the battery packs' rated mAh capacity (e.g., charge a 1400mAh Ni-Cd battery at 2~4 amps). Note that not all Delta Fast Chargers can output the charge rates shown. Choose the nearest charge rate your model charger supports, bearing in mind the above recommendations.

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100-900mAh — 0.5A~1.0A 1000mAh — 2.5A 1200mAh — 2.5A 1400mAh — 3.5A 1600mAh — 5A	100-900mAh 0.5A- 1000mAh 1A 1200mAh 1A 1400mAh 1A	Sample average charge
1800mAh——5A	1800mAh 1A	time for a 1600mAh battery
2000mAh——5A	2000mAh 2A	charged at:
2400mAh——5A	2400mAh 2A	1.0 Amp is ~96 minutes
2800mAh——5A	2800mAh 3A	2.0 Amps is ~48 minutes
3000mAh——5A	3000mAh 3A	3.5 Amps is ~27 minutes

IMPORTANT Battery packs may be charged at different rates depending on the manufacturer's suggestions. The table above is for general reference only.

# **WARRANTY AND SERVICE INFORMATION**

Your Pro-Peak Delta Fast Charger is guaranteed to be free of workmanship and component error for a period of 1 year starting from the original time of purchase. Warranty claims must be accompanied by an itemized sales receipt that shows the purchase date. This warranty does not affect your statutory rights.

In that Pro-Peak has no control over the final use of this product, by installing and using the product, the user accepts all liability resulting from or included with the installation and use of this product. In no instance will the liability cost of the charger exceed the original purchase price of the charger.

# **WEEE (Waste Electrical and Electronic Equipment)**



Electrical equipment marked with the crossed wheelie bin symbol must not be discarded in the standard household waste. Instead, it should be taken to a suitable specialist disposal location or your dealer.













