

Web: www.onlybatterypacks.com
Email: onlybatterypacks@sbcglobal.net

Phone: (262) 246-0455 Hours: 9am-5pm CST

Address: W225 N6365 Village, Drive Suite D

Sussex, WI 53089

## NIMH BATTERY CHARGING/DISCHARGING INSTRUCTIONS

CAPACITY	STANDARD TRICKLE CHARGE	MAX PEAK CHARGE RATE	MAX DISCHARGE RATE
160mah 1/3 AAA	16mA ~ 14-16 hours	160mA	480mA
400mah 2/3 AAA	50mA ~ 7-8 hours	400mA	1200mA
730mah AAA	100mA ~ 8-9 hours	500mA	1000mA
1000mah AAA	100mA ~ 11-12 hours	500mA	1000mA
250mah 1/3 AA	25mA ~ 14-16 hours	250mA	750 mA
700mah 2/3 AA	100mA ~ 7-8 hours	500mA	1000mA
850mah FLAT	100mA ~ 10-11 hours	500mA	3 Amps
1100mah 2/3 A	100mA ~ 12-13 hours	500mA	3 Amps
1300mah 2/3 A	100mA ~ 13-14 hours	500mA	3 Amps
1500mah 2/3 A	100mA ~ 13-14 hours	500mA	30 Amps
1600mah 2/3 A	100mA ~ 16-17 hours	500mA	16 Amps
1400mah AA	100mA ~ 15-16 hours	1.0 Amp	15 Amps
1700mah AA	100mA ~ 18-19 hours	1.0 Amp	20 Amps
2000mah 4/5 A	150mA ~ 13-15 hours	1.0 Amps	30 Amps
2150mah 4/5 A	150mA ~ 14-16 hours	1.5 Amps	10 Amps
2600mah AA	100mA ~ 28-29 hours	500mA	5 Amps
2700mah A	200mA ~ 26-27 hours	1.5 Amps	10 Amps
4000mah 4/3 A	500mA ~ 9-10hours	2.0 Amps	10 Amps
2200mah 4/5 sub-C	200mA ~ 11-13hours	2.0 Amps	30 Amps
4200mah sub-C	420mA ~ 11-13hours	3.0 Amps	35 Amps
4500mah sub-C	450mA ~ 11-13hours	3.0 Amps (Repeak @ 5 Amps)	35 Amps
5000mah sub-C	500mA ~ 11-13hours	3.0 Amps (Repeak @ 6 Amps)	40 Amps
5000mah C	500mA ~ 11-12 hours	3.0 Amps	15 Amps
10000mah D	600mA ~ 14-16 hours	3.0 Amps	15 Amps

<sup>\*\*</sup>Calculate your charge time: Battery Capacity +10% / Charger output = hours charge time

## **NiMH Battery Pack Maintenance**

- 1.) If you are having trouble charging your NiMH battery pack –trickle charge at 1/10 C (capacity) to wake them up and reach full capacity. This also applies to packs that have been in storage.
- 2.) Trickle charge time listed in the chart above is for fully discharged packs.

  Always let the batteries cool to room temperature before charging. Heating your NiMH battery pack up beyond 110 F degrees indicates an overcharge condition and will lead to cell damage, loss of voltage and capacity.
- 3.) Nickel-Metal Hydride cells are more sensitive to heat than Nicads, so be sure not to overcharge them. Overcharging may cause the cells to vent and loose capacity. It is recommended that you charge with a charger that has an adjustable Delta Peak detection circuit (set to .01-.02v) eliminating the possibility of overcharging. Nickel-Metal Hydride cells will quickly get hot after the voltage starts dropping, so keep track of the time on the charger.
- 4.) NiMH vs. NiCad; Although Nicad batteries give higher average voltage numbers when tested on matching Machines, this is due to NiCads having a high initial "peak" voltage which burns away quickly within the first minute. The Nickel-Metal Hydride cells actually carry more usable voltage over the entire discharge cycle. You will notice that the NiMH cells will have more punch later in the discharge cycle than NiCads.
- 5.) Store your NiMH with some voltage left in them. Do not dead short them, or store them on a resister.
- 6.) Charging 2 packs at the same time with one charger: Both packs must be identical voltage, chemistry and mah. Both packs must be completely discharged to .85 volts per cell before charging.
- 7.) If you wish to discharge your NiMH batteries discharge to no less than .85 volts per cell. Make sure to use a discharge cutoff switch.