



# Mach 1<sup>®</sup> Speed Charger<sup>™</sup> For AA & AAA Size NiMH Batteries

PLEASE READ THE INFORMATION AND FOLLOW ALL INSTRUCTIONS THOROUGHLY BEFORE USING THIS PRODUCT.

## Introduction

This Mach 1 Speed Charger is a highly advanced and fully automatic battery charger which is compatible with all AA and AAA size NiMH batteries commonly used in today's digital cameras, MP3, CD players, 2-way radios, radio controlled cars, motorized toys and other electronic devices.

The Mach 1 Speed Charger features microprocessor controlled NeoTherm<sup>®</sup> active pulse speedcharging to charge your battery up to 7 times faster than other standard chargers. Not only will it charge the battery safely and reliably, it will prolong battery life. Unlike the other "60 minute" chargers, the Mach 1 will not overheat the batteries and damage them. The Mach1 Speed Charger actually prolongs battery life. 1 to 4 batteries can be charged at a time, each with a dedicated LED indicator to show the charge status of that cell.

Flexible power input allows you to use the Mach 1 Speed Charger from home or overseas with its 100V-240V AC Universal Power Supply, or on the road using the included 12V DC Cigarette Lighter Adapter.

## Charging Your Batteries

Plug-in either the AC Adapter or the DC Cigarette Lighter power adapter, and connect the other end of the power adapter cable to the power input jack on the end of the Mach 1 AA/AAA Speedcharger unit.

Insert any combination 1 to 4 AA and/or AAA NiMH rechargeable battery cells to be charged into any of the 4 charging locations on the charger unit, observing the direction of the battery as indicated by the diagrams. Only one AA or AAA size NiMH battery cell may be installed into any single charging location.

## The LED Indicators

Once the battery has been inserted into the Mach 1, the LED above it will indicate the status of the battery being charged. The Mach 1 contains an internal cooling fan which will run continuously as long as there is at least one battery being charged on the unit.

**LED On** – The battery at that location is being "Speed charged". Once the LED turns Off, the battery at that location has completed "Speed charging" and is trickle charged for the next 2-3 hours. The cell is now ready for use, but may be left in the charger during the trickle charge to achieve a completely full charge.

**LED Flashing** - If an indicator LED is flashing above one or more of the cells being charged, this is an indication of an ERROR condition. The battery below the flashing LED is either faulty or at the end of its life and should be replaced, as it is no longer useable.

**LED does not turn on** – If the LED will not come on after a cell is inserted at that location, the voltage of that battery has dropped to a very unhealthy low level. The battery should be replaced.

The battery cell(s) being charged may be safely removed at any time without harm to the cell or the charger unit. Once charging is complete, promptly remove the cell(s) and unplug the Mach 1 charger.

## Notes:

- This Mach 1 charger is designed for use with NiMH (Nickel Metal-Hydride) AA and AAA cells only. Do not charge NiCd (Nickel Cadmium) or any type of cells other than NiMH in this charger.
- The Mach 1 charger unit is designed for use in normal room temperature environments. In cases where the air temperature may rise near or above 85° F, the internal microprocessor will adjust the rate of charge to assure the safe charging of the cells, resulting in increased charge times.
- It is normal for the charger, AC adapter, or the battery cells to become warm during charging.
- Do not install a AAA cell **and** a AA cell into any one charging location at the same time.
- Batteries will self discharge when not in use. Batteries can be kept fresh if you recharge them every 2-3 months.

## Approximate Charge times\*

700 mAh AAA	30 minutes
1600 mAh AA	55 minutes
1800 mAh AA	60 minutes
2000 mAh AA	65 minutes

\*Actual charge times will vary depending on the cell's discharge level, capacity and condition. Longer charge times will occur when this charger is used in temperatures above 85° F.

**Trouble Shooting Tips:**

- Batteries should be replaced when run time becomes short.
- If the LED status indicator does not light up when the charger unit is properly plugged into a power source, and a discharged battery is correctly installed, make sure that the AC socket or cigarette lighter has power and that the battery cell is not defective.
- Use a clean dry cloth when necessary to keep the metal contacts of both charger and battery clean.

**Cautions:**

- For use with AA and AAA size NiMH batteries ONLY! Use with other type batteries voids warranty, may cause damage to the charger/ battery and possibly cause injury to the user.
- Do not leave any battery cell connected to the charger for prolonged periods. Remove the battery promptly after charge is complete.
- Unplug the charger when not in use.
- Do not use, place or store the charger where it may come into contact with water or moisture.
- Always replace frayed or damaged wire and broken plugs immediately.
- Use this charger with the power adapters included in the package only.
- No user serviceable parts, opening chassis will void warranty.
- Charger needs proper ventilation. Make sure charger vents are not being blocked and there is no problem with circulation.
- Do not use if charger fan is not operating.
- Charge only NiMH batteries on this charger.
- Batteries are not charged as shipped. Must be charged prior to first use.

The following statement is required in the state of California pursuant to the settlement of an action brought by the Mateel Environmental Justice Foundation against multiple electronics and appliance manufacturers

**WARNING:** Handling the cord on this product will expose you to lead, a chemical known to the state of California to cause birth defects or other reproductive harm. **Wash hands after handling.**

- Batteries may leak or explode causing personal injury if inserted improperly, disposed of in fire, mixed with other battery types, or short circuited.
- Use only NoMEM PRO or other proper NiMH compatible charger to recharge NoMEM PRO batteries.

**Specifications:**

- AC Adapter: 100 – 240VAC, 50 / 60Hz
- Power Input: 11-16 VDC @ 2A
- Charge Method: Neotherm Charging Technology
- Charge Rate: Variable, Continuously Adjusted via Microprocessor

**Limited 3 Year Warranty**

This limited warranty starts from the date of original purchase and expires three years thereafter. If, during this period, any part, because of manufacturing defects or workmanship fails to function properly under normal use will be repaired at no charge for parts and labor or, at our option, the product will be replaced. The following is excluded: damages from delay or loss of use of equipment, or damaged batteries, malfunctions resulting from misuse, tampering, unauthorized repairs, modifications, or accident.

Package the unit and its accessories carefully using ample padding material to prevent damage in transit and ship it prepaid and insured to:

LENMAR ENTERPRISES, INC.  
4035 Via Pescador  
Camarillo, CA 93012

When sending in product for service, your package should include evidence of date and place of purchase. Enclose \$7.50 for shipping and handling for addresses in the Continental U.S. For outside the U.S., freight will vary depending upon ship to address. See [lenmar.com](http://lenmar.com) for details.

*For additional questions, comments or to explore other Lenmar battery solutions, visit our web site at: [www.Lenmar.com](http://www.Lenmar.com) or call us at 805/384-9600*